UNDERSTANDING SOCIAL ORGANISATION AND DELIVERY OF INTEGRATION FOR NCDs PROGRAMMES IN BIHAR, INDIA: AN INSTITUTIONAL ETHNOGRAPHY

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Abstract

In the health systems literature, integration has been proposed as a management strategy to increase access to services, improve patients' satisfaction, enhance quality of care, reduce costs, and increase organizational efficiency. Empirical literature shows that availability of qualified and motivated staffs, drugs supply, and adequate infrastructure are key barriers for success of integrated programme low income setting. Understanding these barriers and related institutional process can bring new perspective and insight on integration. This dissertation examines the implementation of integrated NCDs and mental health programmes in Bihar from health workers' standpoint. The study employs Institutional ethnography (IE) to guide this inquiry, a methodology that begins with the everyday experience of participants (health workers and managers in the integrated programmes) and then moves outwards to examine the social organization of programmes as they are implemented within the health system. Data collection was conducted in four sites in Bihar state (West Champaran, East Champaran, Vaishali, and Patna) and included 27 in-depth interviews with health workers and managers, 12 observations at three-district hospital and an analysis of 48 documents (guidelines, file notes, meeting notes and letters). Analytical writing, textual analysis and mapping were used as iterative and reflexive processes to map institutional relations in the integrated NCDs and mental health programmes. The study shows that integrated programmes are implemented in the decentralised health care context, where district administrators have limited authority. The analysis of institutional texts shows the principles of accountability, transparency and administrative govern institutional processes of staff recruitment and drug procurement and in turn, influence care pathways and service delivery. Some of integrated programme staffs were removed from the NCDs and mental health programmes and deployed in other priority programmes which negatively impacted NCDs and mental health service delivery at district hospital. Sometime staffs are forced to work in emergency ward without having proper skill and knowledge, which undermines the safety and quality of services. The study recommends that central government should give more autonomy to district authority to manage the institutional task of staff recruitment and drug procurement. The policy maker should develop human resource policy to provide better work condition to health workers working at the district hospital.

Key Words: Integrated Programme, Health Services, NCDs, Mental Health, Institutional Ethnography, Bihar, India

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Abbreviations

BBC	British Broadcasting Corporation
BMGF	Bill and Melinda Gates Foundation
BMSILC	Bihar Medical Service Infrastructure Limited Corporation
CCM	Chronic Care Model
CS	Civil Surgeon
DHS	District Health Society
DFID	The Department for International Development
DMHP	District Mental Health Programme
DHAP	District Health Action Plan
DPM	District Programme Manager
DPC	District Planning Coordinator
GoB	Government of Bihar
GoI	Government of India
INR	Indian Rupee
JD	Job Description
MoHFW	Ministry of Health and Family Welfare
NCCP	National Cancer Control Programme
NCDs	Non-Communicable Diseases
NELP	National Leprosy Elimination Programme
NHM	National Health Mission
NHSRC	National Health System Resource Centre
NMHP	National Mental Health Programme
NPCDCS	National Programme for Prevention and Control of Cancer, Diabetes, CVD and Stroke
NPHCE	National Programme for Health Care of the Elderly
NPM	New Public Management
NRHM	National Rural Health Mission
NUHM	National Urban Health Mission
PCI	Project Concern International
SHSB	State Health Society Bihar
SPIP	State Programme Implementation Plan
ToR	Term of Reference
UNDP	United National Development Programme
UNICEF	United Nations International Children's Emergency Fund
USD	US Dollar
WHO	World Health Organisation
WB	World Bank
IAS	Indian Administrative Services
OECD	Organisation for Economic Co-operation and Development

Chapter 1

Introduction

1.1 Rationale for study

This study aims to examine implementation of integrated NCDs and mental health programme at district hospitals in Bihar. This study takes up the health workers' standpoint to understand how the services are organised and delivered at the district hospital and to discover the institutional processes that shapes the programme implementation. I adopted Dorothy Smith's (2005, 2006) institutional ethnography method to guide this inquiry**.** Beginning with the health worker's experience, this study explores how the implementation of integrated programmes is conceptualised, delivered and implemented at district hospitals in Bihar (India).

In the era of health care reform, efforts to integrate programmes with health system in low-middle-income countries have focused on improving access to care and healthcare outcomes while reducing cost at the same time (Rankin & Campbell, 2009). Integrated approach to deliver health services has been considered as a means to achieve cost effective, more efficient health system (Armitage, Suter, Oelke, & Adair, 2009; Atun, De Jongh, Secci, Ohiri, & Adeyi, 2010; Suter, Oelke, Adair, & Armitage, 2009) through improving effective communication and internal process (Coddington, Ackerman, & Moore, 2001). Scholars argued that integrated health care strategies improves benefits, improve quality of care, organisational performance and patient level outcomes(Armitage et al., 2009; Evans, Baker, Berta, & Barnsley, 2013; Strandberg-Larsen & Krasnik, 2009; Suter et al., 2009).

Despite growing recognition for the integrated approach, there are various challenges in delivery integrated health services especially in low resource setting. Empirical studies on health system integration shows that integrated approach has either

positive, or negative or no outcome on the health system (Armitage et al., 2009). Amo-Adjei et al (2014) on their study on TB-HIV integration reported that integration of HIV and TB programmes has improved clinical synergy and reduced duplication of services in the service delivery. However, they also highlighted that the integration has resulted in an increase workload of front-line workers. Studies on leprosy programme integration in India reported that integration of leprosy programme with general health system resulted in an increase in new case detection (Parkash et al, 2003; Rao et al, Bhuskade et al, 2002) but caused a decline in follow up, monitoring of treatment completion (Rao et al, 2002), and adherence to the treatment protocol (Parkash et al, 2003). Atun et al (2010) in their review on the "integration of targeted health interventions" reported that integration may have unintended consequences due to the dynamic and complex nature of the health system.

Health systems in low-middle income countries suffer from various challenges and are not adequately prepared to provide quality and accessible health care to its citizens. The shortage of trained and motivated health workers has been considered as one of the barriers for delivery of integrated health services (Legido-Quigley et al., 2013; Uwimana & Jackson, 2013; Watt et al., 2017) in low income setting. Uwimana et al. (2013), in their study on the integration of tuberculosis and HIV prevention services, reported lack of training of health workers was a major challenge for integration increasing uptake of health services in South Africa. Absence of qualified health workers reported to be a barrier in implementing mental health programmes at provincial and district levels (Marais et al 2015).

Scholars have reported that availability of trained and qualified staff, strong leadership, better logistics supply mechanism, strong monitoring systems, and

adequate infrastructure are key facilitators to integration (Atun, De Jongh, et al., 2010; De Jongh, Gurol-Urganci, Allen, Jiayue Zhu, & Atun, 2016; Watt et al., 2017). These facilitators are linked to various institutional tasks and processes that occur at the local health system level. These tasks are often organised, managed and governed through various institutional rule and procedure. Previous studies on health system integration mainly examine the implementation of integrated health programmes, models of service delivery, key facilitators and barriers to integration. These studies have not examined how the various institutional processes and tasks impact the service delivery in the integrated health programmes. Understanding how these institutional tasks (of drug procurement, staff recruitment, and programme management) are organised at the local health system level could bring new perspective on health system integration.

Health workers are an integral part of health systems, and their experiences are vital for understanding service organisation and delivery of health care. They work at health care delivery point and engage with patients and their families to implement the health policies. Within the integrated health programmes, health workers deliver health care along with doing coordination, reporting, attentive to the needs of the organisation and patients. Their work experiences and their knowledge about organisation and delivery of integrated health care programme at district hospital are vital. This study therefore aims to foreground health workers' standpoint in examining the organisation and delivery of integrated NCDs and mental health services at the district hospital.

1.2 Background of the study

In January 2008, the GoI launched the National Programme for Prevention and Control of Diabetes, Cardiovascular disease (CVD) and Stroke (NPDCS) to prevent

and control NCDs and piloted in 10 districts in 10 Indian states. Later, the GoI merged the NPDCS programme with the National Programme for Cancer Control (NPCC) and extended to 100 districts in 2010 including 2 districts of Bihar. The NPCDCS programme (National Programme for Prevention and Control of Cancer, Diabetics, Cardiovascular Disease and Stroke) focused on early screening, referral, diagnosis and treatment. In addition, the GoI revised the national mental health programmes and implemented district mental health programmes (DMHP) to strengthen the mental health services at district hospitals in 2015. Both DMHP and NPCDCS programmes were integrated in the district hospital within the NRHM[1] framework. The aim of integration of NCDs and mental health programmes was to maximise the use of scarce resources and optimal synergy for health care delivery (Government of India, 2011, 2015).

Recent studies on NPCDCS programme have reported several challenges in the programme implementation process related to human resource, drugs, management and governance of integrated programme. Ainapure et al (2015) examined the implementation and barriers of the NPCDCS programme in Udupi district in south India and reported a shortage of medical doctors, lab technicians, unavailability of robust action plan, inadequate budget and delay in release, delay in procurement of drugs, burden on community health workers (Ainapure et al, 2018). In another study, Pakhare et al (2015) examined the facility-level gaps for the implementation of NPCDCS programme in Madhya Pradesh and found that there are critical gaps in laboratory services, human resources, drugs and essential equipment both at community health centres and primary health centres. Krishnan et al (2011) examined community-based intervention for NCDs prevention and control in Delhi (India) found that local health administrators do not give priority to NCDs over other

1 National rural health mission was aimed to deliver effective primary healthcare to rural population in 18 states in India

health programme, which negatively affect the programme implementation (Krishnan et al, 2011). In addition, health workers involved in NCDs prevention receive a low remuneration and they lack appropriate training. Sometimes health workers and managers are blamed for their attention and motivation for not providing adequate time for integrated health implementation (Shidhaye et al, 2016). Above studies illustrate that there are many challenges in the implementation of the NPCDCS programme in India related to health worker recruitment, drug supplies, lack of diagnostics services at the district hospital.

1.3 Focus of the study

This dissertation aims to examine the implementation of integrated programmes from the standpoints of the health workers by adopting institutional ethnography method. The objectives of the study are:

1. To examine the policy framework (structures, processes, and intended action) for integrated NCDs and mental health programme in the health system.

2. To explore the possible disjunctures (between institutional texts and health workers' work) and its effect on implementation of integrated NCD and mental health programmes through focus on service organisation and delivery.

3. To understand how the work of health workers' is organised in the integrated NCD and mental health programmes and uncover the practices/forces that shapes their everyday experiences.

The research questions of the study are:

1. What institutional work, processes and forces shape health workers' everyday practices and shapes the integrated programme implementation?

2. How do institutional procedures affect the delivery of integrated programmes at the district hospital?

3. How is the work of health workers constituted by and connected to institutional procedures?

1.4 Methodology: institutional ethnography

In this study, I used Institutional Ethnography (IE) to map the "social organisation of work" involved in integrated NCDs and mental health programmes at district hospitals from health workers standpoint (place of inquiry). Institutional ethnography as an approach is developed by Dorothy Smith based on her understanding of social organisation of knowledge. It was proposed as a method of inquiry to investigate social life to explicate how it is actually organised from the standpoint of people who are located in the local environment, in this case district hospitals. It allows institutional ethnographer to examine the complex social relations that organise people's everyday experiences (Campbell et al., 2002; Smith et al., 2005). In institutional ethnography, the researcher begins with the peoples' experiences and their doing and then discovers the interconnection between various institutional processes that coordinate people's activities from a distant location.

1.5 Structure and organisation of the thesis

Following this chapter which provided a brief background, rationale and overall aim of the thesis, in Chapter 2, I will present the literature- both conceptual and empirical evidence - on integrated approach within the health care. I describe the emergence of integrated approach, examine its conceptualisation, and present various models that

continue to shape the current integration practice. I also discuss key issues pertaining to the implementation of integrated health programme and service delivery.

In Chapter 3, I present a brief history of Indian health system and discuss characteristic of Bihar's health system, where the study was conducted. I outline key events and important policy decisions that have shaped health service delivery in Bihar. I discuss the role and responsibility of various actors in health service delivery. I also discuss key challenges in health service delivery in Bihar.

In Chapter 4, I introduce institutional ethnography as a framework and a method that guides my inquiry. I discuss the key concepts of institutional ethnography, which I have used in my study to illustrate the coordination, and actual happening while implementing integrated programme. In this chapter, I present a summary of empirical evidence that used institutional ethnography to study the "social" and discussed how this approach will assist me in my inquiry.

In Chapter 5, I discuss how the study was conducted. I outline the data collection methods, analytical process and discuss how I conducted fieldwork in three different phases. I explain the site selection and participant recruitment procedure and discuss the enablers and disablers in my fieldwork. The chapter also discuss the quality of data and ethical considerations of the study,

In Chapter 6, I examine institutional texts such as the National Health Policy, the National Rural Health Mission framework, and other policy documents to map the work and institutional coordination that influence programme implementation. I examine the policy intent to establish decentralised autonomous organisation i.e. health societies, for the management and implementation of integrated health programmes at district and state level. Later I present a textual analysis and discuss

how these autonomous organisations are established in a way that limited the decision-making power of these health societies. In the last section of the chapter, I present examples of two institutional processes i.e. staff recruitment and drug procurement in the integrated programme that are centrally governed and show its implication on service delivery.

In Chapter 7, I explore and discuss the inter-connection between institutional procedures and service delivery by focusing on patients' care pathways at district hospitals. I discuss how the care pathways are organised when resources are not available and explain the implications on health workers and patients who move between various care points. I describe how the hospital management discourse continues to shift health administrators' attention from health workers and patients' experiences and their safety to institutional priorities for service availability. I discuss the work of health workers in both NCDs and mental health programmes and show how their work are coordinated within complex administrative set up where their professional autonomy is undermined.

In Chapter 8, I discuss how priorities at state level influence the delivery of NCDs and mental health services at district hospitals. I present analysis of health workers' everyday work and discuss how staff shortage in the hospital creates the conditions for removal of health workers integrated programmes and their deployment in different hospital units and health programmes. Later, I explore health workers' deployment and present how the notion of labour management and labour utilisation come to dominate health administrators' decision and shapes health workers experience while working in the integrated programmes. Here I focus on health workers' struggle and negotiation in their everyday work while delivering health care to patients.

In Chapter 9, the final thesis of the chapter, I present a summary of key findings and discuss them. I show how my IE analytical approach enabled me to discover the discourse of new public management, decentralise health care, administrative control, transparency that shapes the implementation of integrated health programme at the district hospital. In light of these findings, I was able to question the assumptions and claims of the integrated approach from health workers' standpoint and my own work experience. The chapter concludes with a section drawing out the study's implications for policy, practice and future research.

Chapter 2

Literature Review

2.1 Introduction

Integration in health care is a widely accepted concept across health settings. Integrated health care became a widely discussed concept in the 1970s as a means of improving the health of children and adolescents, along with elderly population. There was a strong movement towards more integrated and coordinated care, which shaped the primary health care movement, after the WHO's Alma-Ata Declaration on Primary Health Care in 1978 (WHO, 1978). The primary care model was aimed to deliver integrated care to people within their local communities. However, at the same time, there was growing concern about providing health care to the elderly population due to issues associated with ageing. Professionals demanded the development of Chronic Care Models (CCM) (Wagner et al., 2001), which was eventually adopted in many countries, to organise health care and delivery services to patients to improve their health outcomes. The CCM model has six key components that include: self-management support for patients; decision-making support to professionals; care co-ordination and case management; clinical information systems; community resources to promote healthy lifestyles; health system leadership (Wagner et al., 2001). With the growing health care need and more support for elderly patients, the CCM model included determinants of health, along with various health interventions that cut across primary, secondary and tertiary levels. Such interventions include issues related to public health such as health promotion, prevention, screening and early detection, rehabilitation and palliative

care (Barr et al., 2003). Primary health care and the chronic care model were key drivers towards the adoption of an integrated care approach.

The literature review was conducted to understand the conceptualisation and application of an integrated approach to delivering health services in various setting. In this chapter, I present key findings of review. First, I examine conceptualisation of integration. Later, I discuss the integration in context of high and low-middle income countries. In the last section of the chapter, I will discuss application of integrated approach for NCDs and mental health service delivery in low-middle income countries. This section also includes a brief discussion on health system issues that impact the implementation of integrated health programmes in resource constraint setting like India.

2.2 Literature search strategy

The iterative literature search was conducted using electronic databases such as PubMed, ScienceDirect, SCOPUS and Medline, Google Scholar, to identify relevant peer reviewed journal articles. The word categories used to identify the peer reviewed articles were as follows: health system integration, health system, program, outcome/output and perception. The details of key words are in the table 1 below.

Table 1 Key word use in literature search

Themes	Key words
Theme1	Integrat*, combinat*, unification, synergy, assimilation, vertical or horizontal,
Theme 2	Health system, health care delivery, integrated delivery system,
Theme 3	Program*, interven*, project, service*
Theme 4	Disease, NCDs, mental, psychiatrist, drug abuse, substance abuse, depression

Further, I collected additional articles through cross-referencing (relevant articles and research papers). Some articles were retrieved from health and social science journals from India to understand the integration in the Indian context. Gray literatures such as policy documents, programme implementation and operation guidelines were identified and retrieved from government and professional associations websites to understand the integration policy and program context in India. The inclusion criteria for the papers selected were: 1) the article must discuss concepts, models, effectiveness, outcome, implementation challenges related to integration, 2) articles must be related to a programme or service or health intervention in a high income or low-middle income countries. Articles which were clinical in nature or in languages other than English were excluded from this review.

Initially all the search results were downloaded in an Excel file. I scanned the titles of the articles to identify the relevant literature for the review. I excluded those articles which did not meet the inclusion criteria., especially those which were not related to the integration of health services. In the next step, I scanned the abstracts of selected articles and included these if found to be relevant for the review. I considered articles based on primary research, systematic reviews, and discussion papers related to integration. Most of the articles were related to integrated care, service integration for elderly and chronically ill patients, and integration of targeted health interventions, such as TB, HIV, malaria, tuberculosis, etc. The majority of articles were published by authors from United Kingdom, United States and Canada. The following sections provide a brief summary of the concept of health system integration and includes literature from high income and low-middle income countries on issues related to the implementation of integrated health programmes.

2.3 Health system integration: conceptualisation, models, expected outcomes

2.3.1 Integration: Conceptualisation

Integration in health care has been considered as a means of improving quality, efficiency and patients' satisfaction (Armitage et al., 2009; Atun, de Jongh, Secci, Ohiri, & Adeyi, 2010). Researchers and policymakers argued that greater alignment and synergy in health care through integration brings positive results for patients and

organisations. However, there is a lack of agreement among researchers on the concept of integration and how it can be achieved. Armitage et al. (2009), in their review of literature, identified 70 phrases and 175 definitions related to concepts for integration, used interchangeably to refer to: integrated health service, integrated delivery networks, integrated health care delivery, organised delivery systems, integrated health organizations, clinically integrated systems, organized systems of care, accountable care systems and other similar terms. Other scholars and organisations have also reported different definitions, conceptualizations, and applications of integration within health care (Armitage et al., 2009; Kodner & Spreeuwenberg, 2002; Strandberg-Larsen & Krasnik, 2009; Suter et al., 2009).

WHO uses a health system perspective to define integration in health care. It defines integrated health services delivery as "an approach to strengthen people-centred health systems through the promotion of the comprehensive delivery of quality services across the life-course, designed according to the multidimensional needs of the population and the individual and delivered by a coordinated multidisciplinary team of providers working across settings and levels of care. It should be effectively managed to ensure optimal outcomes and the appropriate use of resources based on the best available evidence, with feedback loops to continuously improve performance and to tackle upstream causes of ill health, as well as promote well-being through inter-sectoral and multisectoral actions" (WHO, 2016, p. 10). The definition adopts a health system viewpoint and acknowledges that integrated care can be delivered through the alignment of various functions of health systems.

Kodner and Spreeuwenberg (2002) defines integration from the process perspective as "a coherent set of methods and models on the funding, administrative, organizational, service delivery and clinical levels designed to create connectivity,

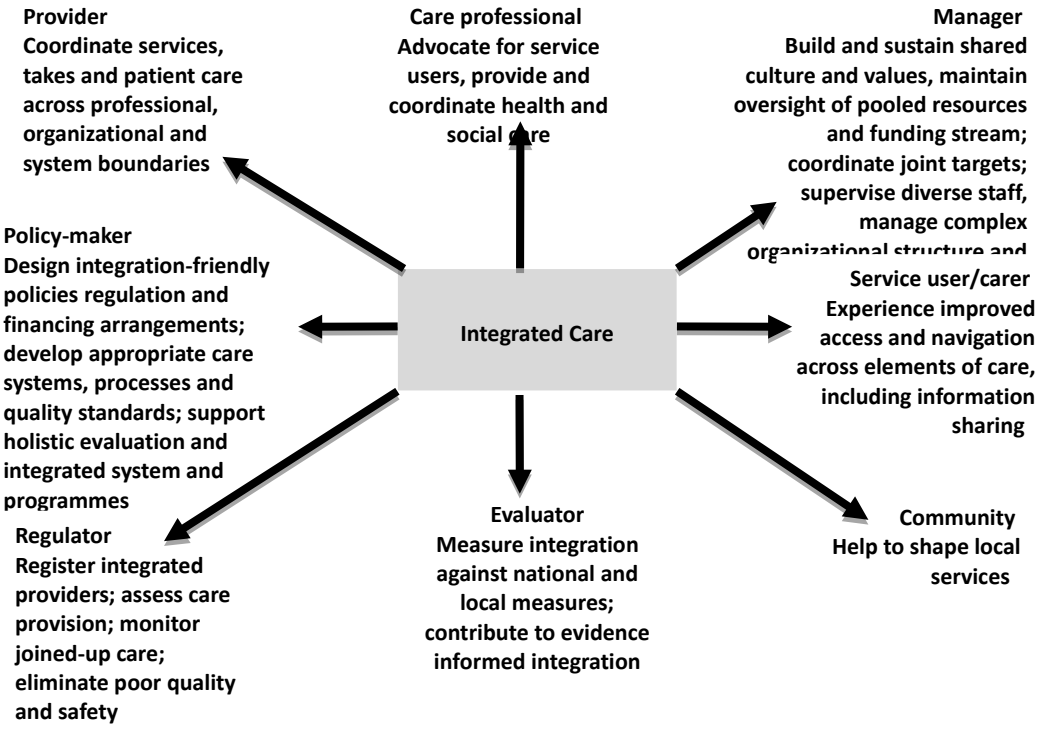
alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life, consumer satisfaction and system efficiency for people by cutting across multiple services, providers and settings. Where the result of such multi-pronged efforts to promote integration leads to benefits for people, the outcome can be called integrated care". It emphasises the coordination of care and interconnectivity to provide quality of care to patients.

Other scholars define integration from an organisational network perspective. Enthoven (2009, p. 284) suggests that an integrated delivery system is: "An organized, coordinated and collaborative network that: (1) links various health care providers, via common ownership or contract, across three domains of integration–economic, noneconomic, and clinical–to provide a coordinated, vertical continuum of services to a particular patient population or community and (2) is accountable both clinically and fiscally for the clinical outcomes and health status of the population or community served, and has systems in place to manage and improve them". Most of the definitions explain integration as bringing together inputs, delivery, management and organisation of services to improve access, quality, user satisfaction and efficiency (Armitage et al., 2009; Kodner & Spreeuwenberg, 2002).

The lack of clarity and inconsistency creates confusion and challenges when selecting integration strategies. Also, differences in the understanding of integration make it difficult to measure the intended outcome of integration. Scholars have called for creating a common language and framework for integration for future research and practice (Armitage et al., 2009; Kodner & Spreeuwenberg, 2002). The meaning of integration varies with the discipline and professional viewpoints (Contandriopoulos, Denis, Touati, & Rodriguez, 2003). Shaw et al. (2011) provides

a graphic representation of various viewpoints that shapes the delivery of integrated care (see Fig. 1). For example, integration can be seen from a different perspective and conceptual understanding, such as clinical vs. managerial, or professional vs. patients. For example, managers can see integration as a way to bring two systems together to achieve cost efficiency, whereas a doctor might look at integration to improve care and service delivery to improve patients' health. Some contributing perspectives on integration are outlined in Figure 1.

Figure 1 Different perspectives on integrated care



Source: (Shaw, Rosen, & Rumbold, 2011)

The differences in conceptualisations, viewpoints and models to describe integration stimulate this inquiry. It became clear that there is growing interest that argues integration will bring positive results for patients and organisations in terms of

financial and non-financial gain. These interests and viewpoints are the representation of managers, researchers, policy makers or executives, who are interested in expected outcomes. Integration in health care created a condition where health workers and health care professionals come together to deliver services to achieve the expected result of integration. However, these interests do not represent the viewpoints and experiences of health workers or managers who actually deliver or manage health care services. In previous studies, descriptions of the work of health workers was missing from models that explain how integrated programmes will achieve expected results.

2.3.2 Model of integration

Within health care delivery systems, there are various models of integration. Coxon (2005) identifies two models of integration. First, there are stand-alone organizations that provide a new service by integrating health and social care alongside providing mainstream services. The second model proposed is the cross-agency model that brings different disciplines and professionals together to collaborate at the service user level (Coxon, 2005). Strandberg-Larsen et al. (2009) identifies two distinct conceptual categories of health system integration within the literature: a) integration related to an organizational structure that primarily focuses on financial performance and b) integration related to the organization of care through coordinating different activities to ensure harmonious functioning to benefit the patient (Coddington et al., 2001; Gröne & Garcia-Barbero, 2001).

Armitage et al. (2009) in their systematic review on health system integration found different models of health system integration. They categorized these models into three main groups: system level, programme/service level, and progressive or sequential models. They emphasised that system models varied; most of them focus

on organizational changes, particularly organisational performance, leadership style, structure and process (Miller 2000). Programme or service level integration models focus on case management to improve patient outcome with better coordination of services (King & Meyer, 2006; O'Connell, Kristjanson, & Orb, 2000; Weiss, 1998; Wulsin, Söllner, & Pincus, 2006), co-location of services and information (Chuah et al., 2017; Haldane et al., 2017, 2018; O'Connell et al., 2000; Sigfrid et al., 2017; Wulsin et al., 2006), and implementation of teams (O'Connell et al., 2000) and use of a population health approach (Byrnes, 1998). This approach can be observed in low and middle-income countries where targeted and vertical programmes were integrated with the general hospital system, for example, integration of TB and HIV programmes in low and middle-income countries (Howard & El-Sadr, 2010; Legido-Quigley et al., 2013).

Progressive or sequential models of integration have emphasized integration "as a means to achieve improved healthcare performance, not the final destination" (Gillies, Shortell, Anderson, Mitchell, & Morgan, 1993). The premise of this approach is based on theories that support improvement of health care performance while adding value to the system, programme, community, patients and providers (Gillies et al., 1993). Each of the sequential models proposes a number of stages to achieve fully integrated care (Boon, Verhoef, O'Hara, Findlay, & Majid, 2004).

2.3.3 Desired Outcome of Integration

Evans et al. (2013), in their review of literature, identified four desired outcomes of integrated healthcare strategies: economic benefits, value with improved quality, organisation performance and patient level outcome. Economic benefits were the primary reasons for both horizontal and vertical integration strategies. Initially, the advantage of integration was framed in terms of efficiency, with improvement in

quality as a means of achieving economies of scale as a potential secondary benefit. Successful integration of staff, policies, funding, and clinical processes required investments and may potentially improve quality of care, but would not address economic benefits, particularly in the short term (Burns et al. 2005). There was shift from focusing on the economic benefits of integration towards efficiency and the quality-related desired outcomes of integration (Evans et al 2013) due to demand for greater protection of patients, providers and patients.

However, there have been inconsistent outcomes of integrated healthcare strategies. Wan et al. (2002) reported financial challenges as a result of integration, whereas other scholars found negative, mixed or no impact (Bazzoli, Chan, Shortell, & D'Aunno, 2000; Burns, Gimm, & Nicholson, 2005). These inconsistencies may be due to implementation difficulties, methodological challenges as a conceptual ambiguity, contextual differences, or a lack of long-term studies (Stein & Rieder, 2009). Failure to develop consensus on the purpose of health system integration among managers, policy makers, clinicians and patients may hinder the effort to secure cooperation at all levels (Friedman & Goes, 2001; Stein & Rieder, 2009). It was observed and recognised that quality may be at risk and resulted in the demand for greater protection of patients and public accountability (Evans et al., 2013). Additionally, growing evidence suggested that successful integration policy, staff, funding and clinical processes required significant funding that may result in improved quality of care but not necessarily efficiencies, particularly in short term (Burns et al., 2005; Leutz, 1999)

2.4 Integrated Health Care

As discussed in the previous section, integration has been conceptualised in many ways and its meaning differs with the context. The purpose of this section is to

present and discuss the different understanding about integration in high and low-middle income countries.

2.4.1 Literature from high-income countries

In high-income countries, the concept of integrated delivery systems emerged in the late 1980s, in response to the rapidly changing reimbursement system and healthcare financing environment (Spitzer, 2001). Initially, conceptualization of integration was rooted in a mechanistic view of care delivery and system change (Ackerman, 1992; Charns, 1997; Fox, 1989). Scholars argued that integrated health systems could be designed from the top down by taking series of steps. This process may involve bringing various elements of health care delivery together under large and centralised structures. However, many of these interventions and integration designs failed and fuelled discussion about recognising the complexity and dynamics of the integration process (Baskin, Goldstein, & Lindberg, n.d.; Begun, Zimmerman, & Dooley, 2003). Many scholars argued to that health care organizations should be theorised as Complex-Adaptive Systems (CAS) that can self-organize without any external control and as a function of relationships and collaborations among different agents (McDaniel & Driebe, 2001; Plsek & Greenhalgh, 2001). It was argued that control and decision-making capacity, that could determine the overall behaviour of the organisation, could be dispersed and decentralised. These ideas and the theoretical framework surrounding CAS allowed scholars to understand the challenges and opportunities for the management of new or existing integration efforts in health care organisations (Dattée & Barlow, 2010; Edgren & Barnard, 2012; Tsasis, Evans, & Owen, 2012).

The integration strategies, including both horizontal and vertical integration, were aimed at better economic outcomes, such as potential economies of scale, market

domination, increased profits and ultimately better prospects for survival (Thaldorf & Liberman, 2007) Initial efficiencies, along with improvements in quality of care, were assumed to be advantages of integration and a means of achieving economies of scale as a secondary potential benefit(Ackerman, 1992; Conrad & Shortell, 1996; Walston, Kimberly, & Burns, 1996). The growing demand on health services, due to demographic and epidemiological transitions, rising expectations of the population and acknowledgement of patients' rights, intensified the need for health care reform (Gröne & Garcia-Barbero, 2001). This demand side pressure along with availability of new medical technologies and information systems facilitated health care reforms to adopt "integration" strategies, that is, integration of services (Gröne & Garcia-Barbero, 2001) to meet health needs.

Many health care organisations in the UK and Canada adopted integration strategies with the aim to minimise and control the cost of care (Jiwani & Fleury, 2011; Shortell, Gillies, & Anderson, 1994). Later, the focus on the economic benefits of integration expanded to a focus on efficiency and quality of care (Evans et al., 2013). This shift occurred due to a greater demand for patients' safety and accountability from health care organisations (Grol, Bosch, Hulscher, Eccles, & Wensing, 2007; Gröne & Garcia-Barbero, 2001). In addition, there is a growing evidence base to support integration of staff, policies, funding, and clinical process through new interventions that could improve quality of care but may not produce economic benefits, particularly in the short term (Burns et al., 2005).

Integrated health care strategies in high-income countries aim to provide clinical services to individual patients for better health outcomes. Many models of integrated care were implemented for elderly patients or patients with long-term chronic health conditions or complex needs. From the clinical perspective, the integrated care model

tends to improve health outcomes, patients' experience, and quality of care. However, these models also serve the organisational goal to reduce the cost of care by reducing residential care and short stays in the hospital (Curry & Ham, 2010; Erens et al., 2016).

2.4.2 Literature from low-income countries

Over the past several decades, policy makers around the world have acknowledged the need for an integrated approach to addressing emerging health care needs of the population. The focus of health service delivery has had to shift from the hospital setting to the population setting, with more patient engagement at the frontline. Previous studies show the gap between the increasing burden of chronic disease and service availability through the local health system, which is largely based on hospital-based treatment (Atun et al., 2013; Gröne & Garcia-Barbero, 2001; Shigayeva, Atun, McKee, & Coker, 2010; Swanson et al., 2015). The development of medical technology, such as vaccines, new drugs, medical procedures, and others has shaped the landscape of the health system. Over many decades, these technologies addressed health problems in resource constrained setting. These technological advancements influenced and offered new alternatives for service integration.

Authors have argued that donor-driven vertical disease specific programmes in low- and middle-income countries have fragmented the health care system (Ooms, Van Damme, Baker, Zeitz, & Schrecker, 2008; Patel et al., 2015; Swanson et al., 2015) and interrupted the integration process. Available empirical evidence on the integration of health services conceptualise integration as a technical and mechanistic process to deliver health services (Armitage et al., 2009; Evans et al., 2013; Partapuri, Steinglass, & Sequeira, 2012). Integration in low-middle income countries is seen as an “approach of combining services of multiple interrelated diseases to

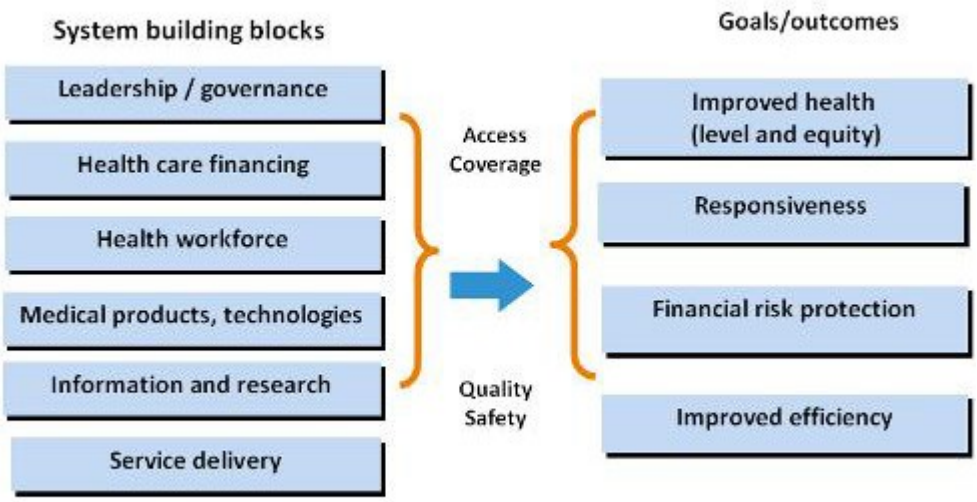
increase overall efficiency of the health system and patient convenience" (Lenka & Bitra, 2013). For example, integration would include combining screening of diabetes or HIV with TB screening services at a health facility to provide services for patients having both HIV and TB. Another example may be combining delivery of family planning messages during routine immunisation sessions (Cooper et al., 2015).

Despite growing interest in favour of the integration of health services, the empirical evidence on how integration should be implemented is limited (Armitage et al., 2009; Atun, de Jongh, et al., 2010; Wallace, Dietz, & Cairns, 2009). Amo-Adjei et al. (2014), in their study on TB-HIV integration, reported that integration of HIV and TB programs has improved clinical synergy and reduced duplication of services in service delivery. But the integration effort resulted in increased workloads of front-line workers and reduced access to some services due to stigma. Studies on the leprosy program integration in India reported that integration of the leprosy program with the general health system resulted in an increase in new case detection (Parkash & Rao, 2003; Rao, Bhuskade, Raju, Rao, & Desikan, 2002), but caused a decrease in follow-ups, monitoring of treatment completion (Rao et al 2002), and adherence to the treatment protocol (Parkash & Rao, 2003). Even with strong institutional support, integration of health services may not result in improved quality and increased access to health care. The factors related to management priorities, organisational culture, institutional policy and systems may affect the overall implementation of integrated health programmes (Watt et al., 2017).

Previous studies on integration were mainly focused on programmatic factors related to health workers' availability, medicine and knowledge. Less attention was paid to factors related to the broader health system (Chuah et al., 2017; Haldane et al., 2018;

Watt et al., 2017). WHO (2007) health system 'building blocks' provides a framework for understanding the health system and offers insight about designing and delivering health services (see figure 2). The six health system blocks are interdependent. An intervention in one block may have intended and unintended consequences on other blocks (Atun, De Jongh, et al., 2010). For example, integration of ANC services with primary care requires trained health workers. This combination requires appropriate interventions in the health workforce block, along with clear guidelines.

Figure 2 Health systems 'building block' framework. Source: (WHO 2007)



Drawing on empirical evidence and theory, Atul et al. (2010) proposed conceptual framework and analytical approach to analyse integration of health interventions into the health system. The analytical approach highlights elements of health interventions that affect the adoption, diffusion and assimilation of into health system. The analytical approach allows to compare and contrast the effort to integrate health interventions in different health settings and explain possible reasons for variations. Table 2 illustrate the element of integration and critical health system's function that allows to analyse the extent of integration of health intervention into general health system. Atun et al.

(2010), in their review on integration of targeted health interventions, show that various elements of health interventions were integrated into one or more critical functions of health systems but the extent and nature of integration largely differ due to various factors such as socio-economic development, government commitment, health workers inclination towards particular design etc. (Atun, De Jongh, et al., 2010).

Table 2 Critical health system's functions and elements of integration

Health System's Function	**Element of integration**
Stewardship and governance	• Accountability function • Reporting • Performance management
Financing	• Pooling of funds • Provider payment methods
Planning	• Needs assessment • Priority setting • Resource allocation • Service
Service delivery	• Structural • Human resources • Shared infrastructure • Operational integration • Referral and counter-referral systems • Guidelines or care pathways • Procurement • Supply chain management
Monitoring and evaluation	• Information technology infrastructure

Demand generation	• Financial incentives, e.g. conditional cash transfers, insurance • Population interventions, e.g. education and promotion

Source: (Atun, De Jongh, et al., 2010)

In the last two decades, several large global health initiatives (GHIs) and donor-driven targeted health programmes have emerged and focused on reducing disease burden and strengthening health systems through investing in disease-oriented programmes, particularly in low and middle-income countries. These targeted health interventions were primarily related to research or implementation of new interventions (technology, vaccines, drug, market-oriented solution etc.) through public-private partnerships. However, these GHIs have caused fragmentation in service delivery with unintended consequences on health systems (Atun, de Jongh, et al., 2010; Enthoven, 2009; Frasca, Fauré, & Atlani-Duault, 2018; Ooms et al., 2008; Patel et al., 2015). Studies show that programme integration tends to distract attention and influence resource allocation, which takes resources away from other urgent health priorities, such as tuberculosis, malaria, diarrheal disease, acute respiratory illness and immunization (England, 2007; Yu, Souteyrand, Banda, Kaufman, & Perriëns, 2008).

There was a growing demand to integrated targeted health interventions (such as tuberculosis, leprosy, malaria, HIV/AIDS, immunisation and others) with general health systems at point of care (Atun, de Jongh, et al., 2010; Dudley & Garner, 2011; Legido-Quigley et al., 2013; B. J. Marais et al., 2013). These health interventions are primarily disease-focused programmes aimed to reduce service duplication, increase utilization of existing resources and provide access to essential treatment to targeted

population groups (Watt et al., 2017). Integration was also sought to align targeted interventions with general health systems for their long-term sustainability.

The outcome of integration is generally measured through data on uptake of health services, such as increased use of contraceptives, immunization coverage, and the number of patients receiving medical treatment (Partapuri et al., 2012). But the likelihood of successful implementation of integrated health programmes depends upon factors such as availability of human resources, compatibility of services or supply chain management and infrastructure (Lenka & Bitra, 2013).

2.5 Application of integration in NCDs and Mental health service delivery

2.5.1 Integration for NCDs programmes

Authors argued that integration of non-communicable disease services with general health systems (Narain, 2011; Narain, Garg, & Fric, 2013) could address wider accessibility and equity issues. WHO proposed a population-based, integrated approach at the primary health care level for prevention and control of cancer, cardiovascular disease, respiratory diseases and diabetes. The prevention strategies include surveillance, prevention and control, with special emphasis on low- and middle-income countries (WHO, 1989). In 1986, WHO launched the Inter-Health programmes, a collaborative project, aimed to control and prevent chronic non-communicable diseases (CNDCs) among adults (Berrios et al., 1997; WHO, 1989) . Most of the common CNCDs share the similar risk factor for diseases that are lifestyle-related and modifiable. These lifestyles and non-healthy behaviours could potentially be changed by strategies related to community participant and behaviour change interventions at the primary health care level (Berrios et al., 1997; Hayter, Jeffery, Sharma, Prost, & Kinra, 2015).

NCDs are generally heterogeneous and etiologically diverse health problems. They are also characterized as chronic diseases. The successful management of NCDs requires coordination, improved communication and continuity of care (Haggerty et al., 2003; Nolte & McKee, 2008). Nolte and McKee (2008) emphasized that chronic conditions 'require a complex response over an extended time period that involves coordinated inputs from a wide range of health professionals and access to essential medicines and monitoring systems, all of which need to be optimally embedded within a system that promotes patient empowerment'.

Some authors have proposed integration of NCDs into other health programmes, such as HIV, TB, diabetes and family planning. These kinds of inter-programme integration have been proposed since patients are more likely to develop common NCDs and providing additional or topped up NCD services is cost-effective. These diseases share many common features in terms of epidemiology, disease aetiology, progression and management. For example, HIV and NCDs share the behaviour component as their risk factor. HIV/AIDS is related to a high-risk sexual behaviour (Haregu, Setswe, Elliott, & Oldenburg, 2015). Similarly, common NCDs such as diabetes, cancer and cardiovascular disease are associated with four major behavioural and lifestyle risk factors: unhealthy diet, insufficient physical activity, tobacco use, and harmful use of alcohol (Amanda & Geneau, 2012; Jaspers et al., 2014; Narain et al., 2013). Similarly integration of TB-Diabetes Mellitus was proposed as diabetes increases the risk of active TB, and recommendations were made that TB patients should screen for Diabetes Mellitus (B. J. Marais et al., 2013). These types of programme integration have been proposed to deliver services to patients, considering patients' needs and available services. Drawing on the work of multiple researchers (Groene and Garcia-Barbero 2001; Briggs and Garner 2006;

WHO 2008a,b; Atun et al. 2010a,b; Shigayeva and Coker 2015), Watt et al. (2017) categorises integration of health programmes into the following domains (table 3).

Table 3 Domain of integration (Watt et al. 2017)

1. Integration across disease programmes (clinically related diseases)
2. Integration across disease programmes (clinically different diseases), e.g.: - Integration across high burden conditions (e.g. HIV, malaria, TB) to reduce impact of co-infections
3. Integration between vertical (disease-specific) and horizontal (system-wide) programmes, which may involve: - Integration of interventions within a 'building block' of the health system (e.g. integrated staff training, financial and organizational management etc.) - Integration across one or more building blocks of the health system (e.g. human resource policies and governance initiatives) - Integration across 'service functions': of inputs, of different levels of service delivery, of management and operational decisions and technology
4. Integration across public health programmes and health service interventions, e.g.: - Integration between MNCH, family planning, through trained community health workers, and health promotion.
5. Integration across activities in the health systems and other sectors (e.g. treatment combined with educational interventions and community mobilization)

Source: (Adopted from Watt et al., 2017)

In Vietnam, population based NCD interventions were integrated with primary health care. These interventions include activities such as special event campaigns (e.g. the World No-Tobacco Day) and routine information, education, and communication activities such as meetings, loudspeaker announcements, and distribution of posters and leaflets. Van, Do, Bautista and Taun (2014) found that primary health care clinics are not able to provide appropriate services to the patients attending primary health

centres for common NCD treatment in Vietnam. The health workers involved in NCD prevention receive low remuneration. There is a lack of trained health staff to manage NCD diseases at the primary care level. In addition, some necessary equipment and medicines, which were recommended by WHO, are unavailable at community health centres (Kien et al., 2016).

In Bangladesh, integrated community-based interventions show positive changes in the lifestyle of people, such as a reduction in consumption of red and white meat, eggs, rice and sweets. Also, residents in the study area gave up smoking and tobacco chewing. Similar projects in India, such as community-based interventions, were well received and accepted by the community. In 2010, WHO proposed an action-oriented primary health care approach for prevention and control of NCDs, called Package of Essential Non-communicable disease interventions or WHO PEN, especially for low and middle-income countries (WHO, 2010). It aimed to deliver prioritized, cost-effective interventions into different components of health systems, and was a step towards integrating NCDs services into primary health care. The integration of an NCD programme into primary health care has some positive results. In Bhutan, it improved the knowledge and skills of health workers and brought diagnosis and management of common NCDs closer to the community (Samb et al., 2010).

2.5.2 Integration for mental health programmes

Integration of mental health services into general health services has been recognized as a proven strategy to reduce stigma, address a shortage of health workers and increase identification of persons with mental disorders at an early stage (WHO, 2003). In many low- and middle-income countries, patients visit psychiatric institutions to access mental health care services. These institutions are often located

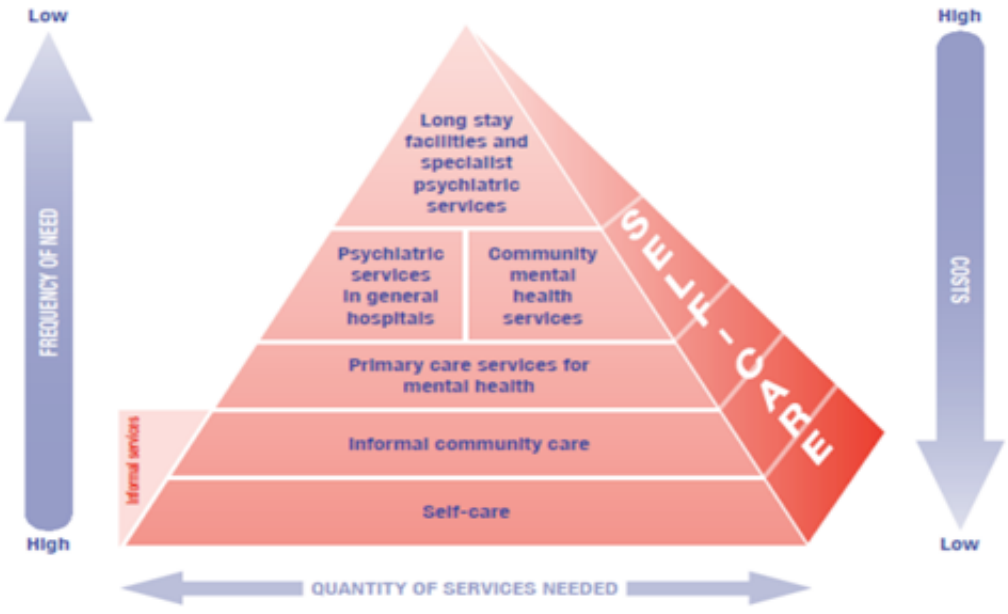
in major towns and cities, which are far from the patient's residence. The long distance and travel time become a barrier for people to seek care when required. To improve wider access to mental health services, policy makers advocate for the integration of mental health services into primary health care. Primary healthcare is 'the first level of contact of individuals, the family and community with the national health system', the closest and easiest form of care available, located near to peoples' homes and communities (WHO, 1978).

Mental health service delivery through health workers at primary health centres is considered a more cost-effective strategy than utilizing highly skilled workers. Recent studies show that some mental health disorders can be diagnosed and treated effectively at the primary care level. In a review, Patel et al. (2007) concluded that a brief intervention delivered by primary care professionals could be beneficial for people with alcohol dependence (Patel, Flisher, Hetrick, & McGorry, 2007). These interventions include management of hazardous alcohol use, and pharmacological and psychosocial interventions. The WHO defines primary mental healthcare as "mental health services that are integrated into formal general health care at a primary care level […] provided by primary care workers who are skilled, able and supported to provide mental healthcare services" including "first-line interventions that are provided as an integral part of general healthcare" (WHO, 2008).

WHO proposed mental healthcare delivery at each tier of the health system that could be more or less integrated with primary care service delivery (WHO, 2008). A visual representation can be described through a pyramid (figure 3). The top block of the pyramid is associated with a specialist at the tertiary care who can provide more specialized care to patients that require continuous monitoring and supervision for their health. The secondary level of care includes mental health services delivered

through hospitals and community health centres. At the bottom of the pyramid, the mental health services could be provided by non-specialist providers or front-line workers involved in primary and community care. They are often involved in early identification of mental illness, and they can refer a patient to appropriate health providers for comprehensive diagnosis and treatment. These front-line workers also create awareness about mental health problems in the community to reduce stigma and violence against mental health patients.

Figure 3 WHO service organisation pyramid for mental health



Source: WHO-WONCA, 2008

Decision makers in LMICs experience challenges in providing wide-scale, accessible and affordable health services. Some common barriers are related to leadership, effective management, financing arrangements, ownership and technical innovation; these are important characteristics of any successful programme implementation (Atun, de Jongh, et al., 2010; Patel et al., 2013, 2007). There is evidence to support the finding that integration of mental health services has failed (Patel et al., 2013). These failures can be attributed to three key barriers. First, primary health care systems are generally overburdened with patient loads, with multiple tasks and generally, a shortage of staff to provide proper care for people with mental disorders. Second, health workers at the primary care level do not have access to appropriate training and sufficient supervision. Most of the time, primary health care workers receive short-term training without any appropriate follow up. They are also generally de-attached from specialised services, which are required to help patients after referral (Patel et al 2013).

2.5.3 Implementation of integrated health programmes

The success of integration depends upon various factors, such as availability of trained health workers, political will, logistics and drugs supplies, strong monitoring systems, and adequate infrastructure (Watt et al, 2017). In this section, I draw on existing reviews on the integration of health programmes and discuss health system issues that influence the implementation of integrated health programmes and services delivery at the district hospital level. These reviews synthesise empirical evidence on health system barriers and facilitators for integration of health programmes and highlight the programme implementation challenges.

2.5.1 Leadership and management

Health systems in low-middle income countries suffer from various challenges and are not adequately prepared to provide quality and accessible health care to its citizens. Some of the challenges include the rising cost of care, shortage of trained and qualified staff, health worker migration, lack of basic infrastructure, inadequate training mechanisms, corruption, and lack of drugs and supplies at public health facilities. Leadership in the health system has been considered as a key for successful integration of health services (Atun, de Jongh, et al., 2010; Watt et al., 2017). Dodds et al. (2004), in their study on integration of mental health services with primary HIV care for women, found that strong leadership plays an important role in ensuring the overall vision is shared across multiple stakeholders. Strong leadership is required to enforce adherence to clinical guidelines for the health programme (Watt et al., 2017). Wyss et al. (2004) observed that factors such as the sense of sharing responsibilities, receiving financial and, and an environment in which staff could mutually rely on each other proved to be the important dimension of leadership in delivering health programmes. Strong leadership can also ensure clear communication across multiple stakeholders. Finally, effective managerial leadership can potentially make decisions quickly, mobilise resources and bring desired changes into the organizational culture.

2.5.2 Human resources recruitment

Human resources are one of the integral components of the health system that ensures the functioning of health services. Health workers play a significant role in health systems at different levels, ensuring the management and delivery of health services. Scholars have argued that having an inadequate number of trained health care providers is one of the barriers to integrating and scaling up mental health services (Saxena, Thornicroft, Knapp, & Whiteford, 2007; Watt et al., 2017; WHO,

2006). Uwimana et al. (2013), in their study on the integration of tuberculosis and prevention of mother-to-child transmission of HIV programmes in South Africa, found that lack of training was a key barrier that was affecting the successful integration and uptake of health services. They found that health workers were not trained and lacked sufficient knowledge and skill to provide care. This gap led to poor TB case detection among pregnant women and reduced the uptake of integrated HIV and TB services. Having an adequate number of health workers is required to ensure access to health care and quality services (Campbell et al., 2013). The shortage of trained and motivated health workers impeded success of priority health programmes (Sheikh, 2012) and integrated health service delivery (Legido-Quigley et al., 2013; Uwimana & Jackson, 2013; Watt et al., 2017) in low- and middle-income countries.

Recruitment of health workers is one of the key challenges in low- and middle-income countries (Gill, Gill, & Kaveri, 2009; Munga, Songstad, Blystad, & Mæstad, 2009; Sinha, Shenoi, & Friedland, 2019). One study found that district health administrators who are responsible for implementing and managing the integrated health programme lack the authority to recruit health workers (Kaur, Prinja, Singh, & Kumar, 2012). Previous studies show that health worker recruitment in a decentralised health care system is complex and time consuming (Munga et al., 2009; Wang, Collins, Tang, & Martineau, 2002). The decentralised recruitment system offers advantages for recruiting local health workers, but it does not attract trained and qualified medical professionals, especially for work in remote areas. There is a growing recognition of the need to produce trained health workforce to meet the demand of health services. But still, many countries in LMIC were unable to have an adequate health workforce.

2.5.3 Training and workload

Supervision of health workers' work in integrated programmes has been considered a facilitating factor for integration (Watt et al., 2009). Geelhoed (2013) studied the integration of ANC-HIV services in Mozambique and found that staff valued their work supervision because it allows them an opportunity to gain updated knowledge about service delivery and help to clarify programme related doubts. Absence of qualified health workers could be a key challenge in implementing mental health programmes at provincial and district levels. It may affect the managerial capacity of the organisation and impact the planning and management of health services (D. L. Marais & Petersen, 2015). Supervisors play an important role in the delivery of quality health services and provide opportunity for health workers to gain knowledge and skill. However, in resource poor institutions, managers are not adequately trained and do not have sufficient time to supervise health workers. In my experience, most of the time, managers' efforts are focused on ensuring service availability at the hospital, regardless of resource constraints; they do not have time to supervise health workers.

Integration of health services requires health workers to undertake additional tasks. These additional tasks may increase the workload of health workers, which could harm them in several ways. Many scholars have argued about the importance of adopting new approaches to health workforce management. Some of these approaches include task shifting (Khozaim et al., 2014; Martin, White, Hodgson, Lamson, & Irons, 2014; Odafe et al., 2013; Watt et al., 2017), task sharing (Dua et al., 2011), and engaging new cadres of health workers from the community. Uwimana et al. (2013) argued that managers need to make adjustments in staff productivity and work distribution to achieve the desired result of integration.

However, previous studies on integration do not describe the response of health workers to the task shifting approach (Armitage et al., 2009; Atun, De Jongh, et al., 2010; Haldane et al., 2018; Watt et al., 2017).

Health workers are located at the site where integrated services are delivered. They interact with patients and care providers in their everyday work. They are aware of local health care delivery requirements and everyday challenges. It is important to include and understand the health workers' viewpoint on integrated health care delivery, which has been largely ignored by previous studies. Some studies report the integration of health services may increase health workers' workload (T. E. De Jongh et al., 2016; Gounder et al., 2011). However, they do not go beyond such descriptions and examine how the challenges related to workload first occur or continues to exist.

2.5.4 Drugs and logistic supplies

Health facilities in low- and middle-income countries suffer from a severe shortage in infrastructure, equipment and drugs that affect patient care. Many studies highlighted a lack of resources (Joshi et al., 2014; Mabuchi, Sesan, & Bennett, 2018; M. Rao, Rao, Kumar, Chatterjee, & Sundararaman, 2011) and adequate infrastructure in hospitals. Drugs are one of the key components of service delivery that could potentially affect integrated programme service delivery. The lack of availability of drugs and consumables and interrupted supplies of medicine are major barriers in the uptake of integrated health services (Watt et al., 2017). Plotkin et al. (2014) in their cross-sectional study in Tanzania evaluated the integration of HIV screening into 21 government health facilities where cervical cancer services were delivered. The study found that there was adequate uptake of screening for both HIV and cervical cancer. However, they found that due to unavailability of HIV kits at the health facility, nearly 71 per cent of women who received cervical cancer screening, were not

screened for HIV. Logistic barriers and access to essential supplies and equipment may have implications for integrated health services.

The lack of availability of drugs at public health facilities and out-of-pocket expenditures on medicine negatively affect low-income populations and reduce their access to essential medicines (Bigdeli, Laing, Tomson, & Babar, 2015; Magadzire, Marchal, & Ward, 2015; Wirtz et al., 2017). Scholars have highlighted the need to strengthen local drug procurement (Prinja, Bahuguna, Tripathy, & Kumar, 2015; Tatambhotla, Chokshi, Singh, & Kalvakuntla, 2015; Waako et al., 2009), but it remains a challenging area. Local level purchase depends upon various factors. Mackintosh et al. (2018), in their study on drug procurement in East Africa (Kenya and Tanzania), found that frontline health staff manage procurement at the local level; in addition, the quality of supplies from public wholesale providers are a major concern. At times, health workers are not able to get specific drugs for over six months. The health facility staffs view procurement at the health facility from needs-based perspective. They usually procure from local shops and wholesalers (Mackintosh et al., 2018). Funding this frontline and local procurement is a challenge on day-to-day basis. In addition, health workers often experience a lack of equipment and drugs, which are required to offer integrated health services to patients. At times, they do not have diagnostic and screening tools, or consumables for health and safety (Manongi, Marchant, & Bygbjerg, 2006). These factors affect service quality. The hospital infrastructure and resource availability are important factor to deliver integrated care to patient. However, the hospital infrastructure and resources depend on other factors that are external to health workers. Some factors include organisational policy, procedures, rules, financial resources and the external actors that are involved in health care.

2.5.5 Clinical guidelines and treatment protocols

Previous studies have highlighted the importance of guidelines, textual protocols and checklists for the delivery of health care (Morrow, 2005; Suter et al., 2009; Uwimana & Jackson, 2013). The presence of clear rules and guidelines for prescribing medicine, referrals or care checklists, are considered to be important tools that coordinates work across sites and allows for the exchange of information in standard ways (Watt et al., 2017). Studies show that the implementation of guidelines and clinical protocols improves patient-level health outcomes (Cretin, Farley, Dolter, & Nicholas, 2001; Reddy et al., 2019). However, the absence of clear guidelines could affect health service quality (A. De Jongh et al., 2016). Uwimana et al. (2013), in their study on the integration of tuberculosis and prevention of mother-to-child transmission of HIV (PMTCT), found that despite having a clear guidelines for the implementation of TB and HIV services including PMTCT, no one was responsible for coordination of the TB-PMTCT activities. The supervision of health workers was largely undermined. The lack of clear communication among stakeholders affects the implementation of integrated health programmes. Guidelines also play an important role in coordinating health services across health sites, especially when health records are shared with other service providers (Inouye et al., 2011; Lombard, Proescholdbell, Cooper, Musselwhite, & Quinlivan, 2009). The evidence suggests that in the absence of clinical guidelines, administrators write memos and provide guidance to health workers as a means of following treatment protocols. The texts (policy documents, guidelines, clinical protocols or any forms) play an important role in coordinating integrated health services. It is important to explore and understand how health workers interpret and engage with these texts and how policy documents and managerial texts affect the implementation of an integrated health programme at the site of service delivery.

2.6 Conclusion

An integrated approach has been applied globally, with the aim to improve patients' health outcomes, organisational performance and reduce the cost of care. Policy makers recognise the strength of the integrated approach to deliver health services to address NCDs and mental disorders in remote and rural areas by implementing health programmes at primary, secondary and tertiary care levels. However, most of the previous studies were done from a policy perspective and were aimed towards formulating policy on health system integration or refining the theories related to integrated care, such as person-centred approaches, coordination of care, and continuum of care. They also focused on the desired outcomes of the effectiveness of the integrated approach. But the studies ignored health workers' experience, an integral part of the health system. The importance of their experiences and viewpoints and contribution to the success of integrated care have not been incorporated into these studies.

Health systems in low- and middle-income countries experience shortages of health workers, infrastructure, drugs, and essential supplies. These issues continuously shape the implementation of integrated health services. In this context, it is important to understand how health workers deliver integrated health care to achieve desired outcome. A study to understand the organisation of integrated health programmes, while delivering integrated NCDs and mental health programmes, from health workers' viewpoints, may help to us to identify the issues that could be addressed by means of taking corrective measures at the policy level.

Chapter3

Background

3.1 Introduction

This chapter provides an overview of Indian health policy and describes the key health policies and programs that shape the health care delivery system in Bihar. The chapter begins by describing health policies and their contribution to developing health care delivery across India, including Bihar. Particular attention is paid to recent policy decisions on adopting an integrated approach in delivering health care in Bihar. This chapter also provides an overview of Bihar's health system, public healthcare delivery challenges and a brief socio-political history of the development of healthcare in Bihar. In the last section of the chapter, I discuss the role of various actors in strengthening Bihar's health system.

3.2 Health policy in India

Multiple factors, such as socio-economic and political contexts and, politics, influence the health policy of a region. To understand the current health service systems of Bihar, it is essential to discuss health policy and planning in Bihar. Bihar's health system has emerged through a complex development process and as a result of various efforts aiming to improve population health. The Indian government set up various committees, five-year plans, and health policies to re-structure and reform health care service delivery. After independence, the Indian government established the Planning Commission to formulate the five-year plans for designing public policy and programs. The first five-year plan (1951-56) stressed that state policy should tackle prevalent social and economic inequalities. The first two five-year plans aimed to develop health infrastructure, workforce, and self-sufficiency in developing drugs to control recurrent epidemics. However, the first two plans did not yield much success due to the lack of an integrated approach for health sector planning**.**

The third five-year plan (1961-66) focused on the development of preventive public health services, communicable diseases and setting up specialized centres across the country, along with the provision of family planning services. The fourth five-year

plan (1969-74) brought about the establishment of primary health centres (PHC) in each community development (CD) blocks to offers preventive, primitive and curative services. Besides health services, PHC is also considered a focal point for imparting education through training and capacity building for medical and paramedical personnel. The fifth five-year plan (1974-79) acknowledged the rural-urban gap in terms of health resources availability and introduced basic health and other services to minimize regional disparities (Government of India, 1974). It was the first integrated approach adopted by policymakers to address the problem of the rural-urban disparity. The concept of integration became an integral part of the five-year plans. The initially integrated approach was aimed to mix various components of disease control programs at different states (promotive, preventive, curative and rehabilitative). The broad notion of integration also includes "organizational integration of primary, secondary and tertiary level services in which the secondary and the tertiary were to support the basic health care institutions and respond to their needs" (Qadeer, 2008, p. 58). Over the years, it was observed that integration of disease control vertical programs like the National Leprosy Control Programme (NCLP), National Malaria Eradication Programme (NMEP), Family Planning Programmes, etc., did not produce the intended results (Qadeer, 2008). The requirement of integration was more complex. During the 1970s, malaria caused a significantly high rate of death and morbidity (Government of India, 2005b, p. 173). To measure the ongoing health, health planning lacked supporting data and evidence to guide and strengthen health services in the country. Policymakers acknowledged the requirement to bring programs together with common strategies and to build a shared mechanism for monitoring and evaluation. Integration of services became a "complex conceptual exercise of prioritizing problems, recognizing a linkage between them and consequently allocating resources" (Qadeer, 2008, p. 58).

The Alma Ata Declaration of Health for All by 2000 AD in 1978 emphasized comprehensive primary health care. Planners acknowledged the role of districts-level data for further planning and the development of a response mechanism. The increasing burden of non-communicable diseases takes into consideration by the planners for further action. The buzz words of integration and intersectional convergence going rounds among the policy circles. However, a partial attempt was made to strengthen the process of integration and inter-sectoral convergence to meet the people's demands. The Structural Adjustment Programme (SAP) and health

sector reforms took centre stage during this phase and experienced a rise of the private health sector in all health domains. The intervention of bi-lateral, multi-lateral and other international funding agencies had worked on policy and planning in the post-reform phase. This has resulted in an expansion of the unregulated private sector, by encouraging public-private partnership in the name of efficiency, and the public sector was almost neglected by cutting expenditure in the social sector, including the health sector. In 1983, the first national health policy was put forward with an integrated, comprehensive approach towards the future development of medical education, research and health services received major attention in the country(Government of India, 1983, p. 1). Over the first two decades of independence, the five-year plans emphasized on the public sector and continued to subsidize the private sector through medical education and monetary concession, which resulted in a rapid growth from the 1970s. Several states attempted to control the private sector, but their efforts failed (Qadeer and Nair et al., 2005). In the 1980s, the private sector has emerged as a superpower entity in the field of health and worked in areas to bring several health reforms and demanded international standard in health care settings. This demand brought some major changes in the national health policy in 1983. The Seventh five-year plan (1985-1990) further pushed privatization, especially the family planning program through NGO partnerships in service delivery. Super specialization centres were created in urban areas, and rural areas were kept untouched from this. Later, the Eighth five-year plan (1992-1997) further extended support of privatization in health care by making new policies encouraging the growth of the private sector (private hospitals and clinics). The Ninth five-year plan (1997-2002) begins with the aim to bring “Growth with social Justice and equality”. In 2002, the MoHFW adopted a new health policy with the aim of achieving an acceptable standard of good health amongst the general population of the country (Government of India, 2002). Several policymakers have been pointed out the importance of more public investment to bring basic comprehensive health services in the country. The NHP 2002 also addressed regional imbalances (rural-urban) and various types of inequities (social and economic). The National Health Policy 2002 emphasized the integration of all vertical health programs under a single field administration (Government of India, 2002). The policy proposed the establishment of autonomous institutions, i.e. health societies, to manage and implement all national health care at both state and district level. The idea of program integration and formation of healthy societies was extended to the National

Rural Health Mission[2] (NRHM) 2005, India's flagship health program. The NRHM aimed to provide accessible, affordable and quality health care to the rural population, especially vulnerable groups in 18 states with weak public health indicators and infrastructure. It was an effort to carry forward the activities outlined in the National Health Policy of 2002. The mission intended to address the systemic deficiencies in the health system by increasing public health expenditure and investment in primary, secondary and tertiary care. These deficiencies included the lack of a holistic approach, absence of linkages with collateral health determinants, a severe shortage of infrastructure and human resources, a lack of community ownership and accountability, non-integration of vertical disease control programmes, non-responsiveness and a lack of financial resources (Das, 2008; Government of India, 2005b). The NRHM focuses on reproductive, maternal, child health and adolescent (RMNCH+A) services. The emphasis is on approaches for improving maternal and child health through a continuum of care and the life cycle approach. Since the implementation of the NRHM, the health system has observed major improvements, like increased use of primary health centres, an increase in community health workers, and services through public-private partnership (M. Rao et al., 2011a). In many states, funding from the NRHM led to improvement in health indicators. Immunization, antenatal and post-natal checks and institutional delivery has increased since the implementation of the NHRM. Similar to NRHM, the GoI approved the National Urban Health Mission (NUHM) in 2013, as a part of the National Health Mission. The aim of the NUHM was "to address the health concerns of the urban poor through facilitating equitable access to available health facilities by rationalizing and strengthening of the existing capacity of health delivery for improving the health status of the urban poor" (Government of India, 2013). NUHM also adopted decentralized health planning through municipal corporations, municipality, notified area committee, town panchayat as a planning unit (Government of India, 2013, p. 2). The government brought forth the third National Health policy 2017 with the aim to inform, clarify, strengthen and prioritize the role of the government in shaping health systems in all dimensions investments in health, organization of healthcare services, prevention of diseases and promotion of good health through cross-sectoral actions, access to technologies, developing human resources, encouraging medical pluralism, building a knowledge base, developing

2 In 2013, NRHM and NUHM merged and became jointly called NHM (National Health Mission). Throughout the thesis, I used NRHM, as most of the documents I analysed refer to NRHM.

better financial protection strategies, and strengthening regulations and health assurance(Government of India, 2017). The policy adopted integration as a strategy to strengthen the health system. The positive side of the NHP-2017 is the commitment towards achieving UHC. It offers little to address the current problem of a weak public sector; instead, the policy uses the words “purchasing of the services” as a short-term strategy until public systems are strengthened. However, in the future, it aims to strengthening of the private sector as well.

3.3 Implementation of Integrated NCDs and mental health programmes

3.3.1 NPCDCS programmes

The NHP 2002 recognized the high burden of mortality due to NCDs injuries, but there was no clear direction on prevention and control. In the 11th five-year plan (2007-11), the Government of India included strategies to implement the national program for prevention and control of diabetes, CVDs and stroke, with an initial expenditure of 1,250 crores (Government of India, 2007). The key strategies for NCD control and prevention were:

- Prevention through behavioural change
- Early diagnosis
- Treatment
- Capacity building of human resources
- Surveillance, monitoring and evaluation

In 2008, the Government of India launched the National Programme for Prevention and Control of Diabetic, Cardiovascular disease and Stroke (NPDCS) in 10 districts as a pilot project in 10 states (Punjab, Rajasthan, Karnataka, Kerala, Tamilnadu, Assam, Madhya Pradesh, Andhra Pradesh, Sikkim and Gujrat) (Government of India, 2011).In 2011, this program was merged with the National Cancer Prevention Programme and further integrated with the general health system within the NHRM framework. NPCDCS has been integrated at different levels of care, i.e. primary, secondary and tertiary. Under this program, primary level care is expected to provide services related to awareness generation, early detection and appropriate referral,

whereas secondary and tertiary levels of care will offer health services for prevention, early detection, appropriate management, referral, training and surveillance. The integration of the NPCDCS program with the general health system is designed to gain optimal operational synergy, to utilize the scare resources and provide continuous services to patients. The NPCDCS program was extended to 100 districts in 2010-11 with the integration of the national cancer control program under the NRHM framework.

In 2010-11, the NPCDCS program was implemented in Vaishali and Rohtas district, Bihar and extended to other four districts, i.e. Muzzafarpur, East Champaran, West Champaran and Kaimur, in 2011-12. Later, the NPCDCS program was approved for 24 districts in Bihar in phase's manner as seen in Table 4.

Table 4 Year-wise implementation of NPCDCS programme in Bihar

Year	District
2010-11	Vaishali, Rohtas
2011-12	Muzzafarpur, East Champaran, West Champaran, Kaimur
2012-13	Araria, Katihar, Banka, Kishanganj, Bhagalpur, Purnia, Buxar, Saharsa, Gaya, Sheohar, Gopalganj, Sitamarhi, Jamui
2013-14	Khagaria, Madhubani, Samastipur and Saran
2014-15	Nalanda

(Source: State Health Society Bihar, NPCSDC file notes)

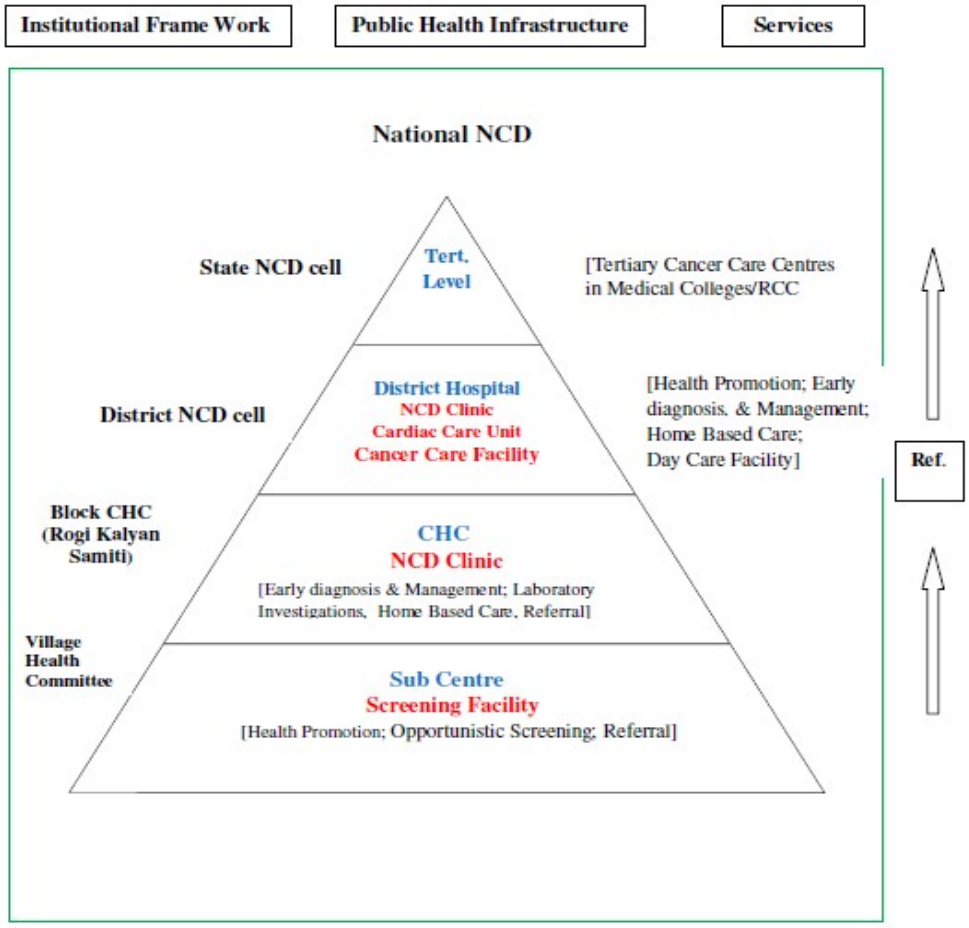
Institutional Framework for Implementation of NPCDCS programme

The NPCDCS program was structurally integrated with NRHM at state and district level, where District NCD cells were established in each district. Figure 4 illustrate the institutional framework for the service delivery and table 5 describe the packages of services available at the different level of care under the NPCDCS programme. The main role of the district NCDs cell was to plan, implement, monitor and evaluate the various programme activities. The district NCDs cells were made accountable for the achievement of physical and financial targets planned under the programme in

the state. Due to a shortage of programme staff in the NPCDCS programme, the management and implementation of the NPCDCS programme has been given to the district health society (DHS).

Under the NPCDCS programme, two task groups have been constituted separately, one for Cancer and the other for Diabetic, Cardiovascular disease and Stroke for technical input. Both task groups will be primarily accountable for providing technical support.

Figure 4 Institutional framework and service delivery under the NPCDCS programme



Source: (Government of India, 2011)

Table 5 Packages of services at the different levels of care under the NPCDCS programme

Health Sub-centre	• Health promotion for behavioural change • 'Opportunistic' screening using B.P measurement and blood glucose by strip method • Referral of suspected cases to CHC

CHC	• Prevention and health promotion, including counselling • Early diagnosis through clinical and laboratory investigations • (Common lab investigations: blood sugar, lipid profile, ECG, ultrasound, X-ray, etc.) • Management of common CVD, diabetes and stroke cases (outpatient and inpatient) • Home-based care for bed-ridden chronic cases • Referral of difficult cases to district hospital/higher health care facility
District Hospital	• Early diagnosis of diabetes, CVDs, stroke and cancer • Investigations: blood sugar, lipid profile, Kidney Function Test (KFT), Liver Function Test (LFT), ECG, ultrasound, X-ray, colposcopy, mammography, etc. (if not available, will be outsourced) • Medical management of cases (outpatient, inpatient and intensive care) • Follow-up and care of bed-ridden cases • Day care facility • Referral of difficult cases to a higher health care facility • Health promotion for behavioural change
Tertiary Cancer Centre	Comprehensive cancer care including prevention, early detection, diagnosis, treatment, minimal access surgery aftercare, palliative care and rehabilitation

Source: (Government of India, 2011)

The NPCDCS programme adopts various integration strategies to improve patient outcomes with better coordination of services focusing on case management, co-location of services and information, implementation of healthcare teams, and population health approach to facilitate health system integration.

3.3.2 Mental health programmes in India

A macroeconomic report published in 2005 estimated that 70 million people were living with mental illness and projected this would increase to 81 million by 2015 (Government of India, 2005d). The cost of treatment of mental disorders could negatively affect families' financial standing. In many countries, people with mental disorders are not able to access appropriate treatment (WHO, 2008) Many government reports have highlighted the shortage of psychiatrists in i.e. in India, in both the public and private sectors, as a major barrier to delivering mental health treatment (Saxena et al., 2007). The stigma attached to mental health disorders also prevents people from seeking mental health care services.

Mental health services in India

In 1982, India launched its National Mental Health Programme (NMHP), ahead of most other low- and middle-income countries, to promote community mental healthcare through an inter-sectoral approach. The objectives of the NMHP program were:

- To ensure the availability and accessibility of basic level of mental healthcare for all in the foreseeable future, particularly the most vulnerable and underprivileged groups;
- To encourage the application of mental health knowledge in general healthcare and in social development; and
- To promote community participation in mental health service development and stimulate efforts towards self-help in the community.

In 1996, the district mental health programme was added to the NMHP in four districts. This was an attempt to integrate mental health services in primary care. DMHP is a community-based approach for Mental Health Services to ensure the availability of mental health services to all by setting up psychiatric services in the peripheral area, training primary health care personnel and involving communities in the promotion of mental health care. For the implementation of NMHP, the government of India provided financial support to the state government for human resources, drugs, training, and another operational cost. Recently, the government proposed to cover the costs for all the administrative districts (642 in total) by 2017.

The government scaled up the DMHP programme under the 12th five-year plan, to strengthen mental health services at the district level. The aims of the programme are:

1. To provide sustainable basic mental health services to the community and to integrate these services with other health services
2. To offer early detection and treatment of patients within the community
3. To reduce the stigma attached to mental illness through a change of attitude and public education.

4. To treat and rehabilitate patients discharged from mental hospitals within the community

5. To shift the focus and take off the burden from mental hospitals

Under the DMHP programme, a mental health clinic cum day-care centre has been established in each programme district. The district mental health programme unit will provide clinical services including inpatient (psychiatrist ward) and outpatient care (mental health OPD), and referral services to higher health facilities to provide long-term care and treatment. It will also conduct programme activities in various settings, including communities, schools, colleges, prisons and workplaces. As per the DMHP guidelines, each mental health unit will have a psychiatrist, counsellor, social worker, case registry assistant, mental health nursing staff i.e. in India, and a monitoring and evaluation officer.

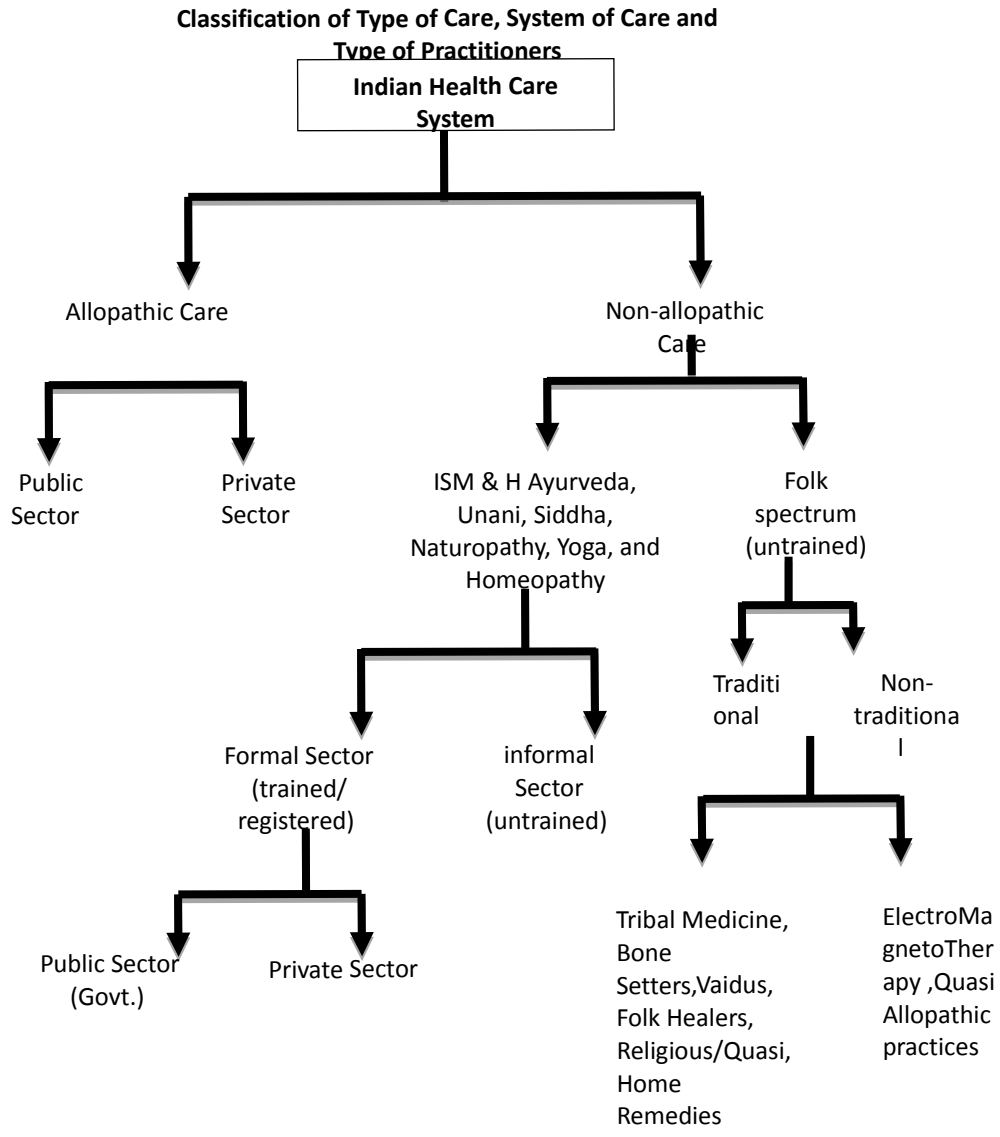
3.4 Health System in Bihar

The Constitution of India makes the state responsible for healthcare provision for raising the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties. Indian states provide free and subsidized public health services to people in BPL (below poverty line) categories. The Indian government is based on a federal structure, with a division of responsibilities and public financing. The state government is responsible for developing, organizing and providing health services. The central government looks after intentional health treaties, medical education, disease control, health policy and regulating the health sector through adopting new legislation to promote health in the country. The central government also develops strategies, provide guidelines to prevention and control of major communicable and non-communicable disease, it is also promoting an indigenous system of medicine that state governments can adopt. From time to time the MoHFW supports and intervene to prevent and control the spread of seasonal disease outbreaks and epidemic by providing technical assistance to states.

Bihar has a mixed healthcare system with both public and private health care providers. The majority of private health care providers are located in urban cities, offering secondary and tertiary health care services, whereas rural areas are largely served by public health facilities offering primary health care services. The current

public health infrastructure in Bihar has been developed on the recommendation of the Bhore Committee (1946). The committee proposed the adoption of allopathic medicines (also known as modern medicine or biomedicine) through a three-tiered health care system to provide preventive and curative health care in India. The dominant medical discourse states that the traditional medical system as unscientific and assigned it as a peripheral residual in the health care system. In India, alongside the large network of allopathic medicine practitioners, there are many traditional health care providers who practice indigenous systems of medicine (ISM) such as Ayurveda, Unani, Siddha and naturopathy, to a vast population.

Figure 5 Heath care providers in Bihar (India)



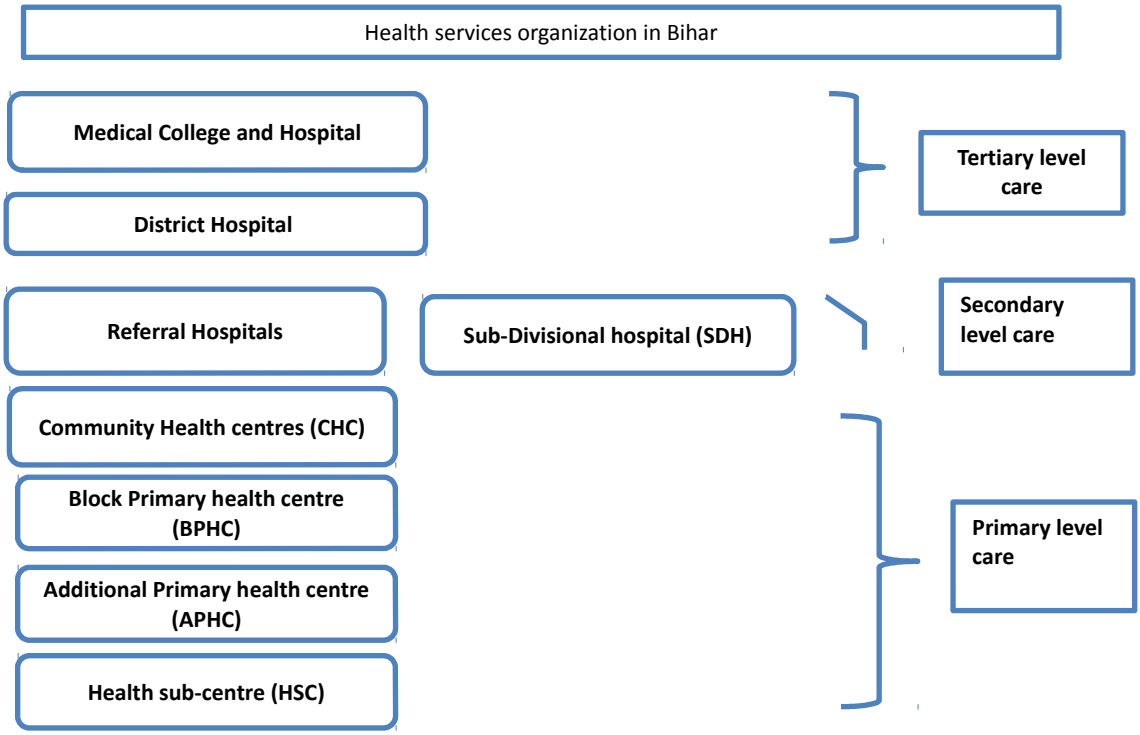
Source: (Leena, 2005, p. 212)

Despite the public health system promoting allopathic medicine, people still have the capacity to negotiate their therapies and treatment. People use different forms of medicine or healing methods to seek a cure (Figure 5).

Based on the Bhore Committee's recommendation, a three-tier health system was developed across the country (see figure 6). The state is primarily responsible for human resources recruitment, developing infrastructure and ensuring access to affordable health care for all citizens, regardless of their socio-economic status. The three-tier health system aims to limit the role of private health care providers. Because the public health system cannot provide access, private providers have become more

popular across the county. But in Bihar people can access appropriate health care through public health facilities as described below:

Figure 6 Public Health Delivery System in Bihar



- **Health Sub-centres:** A health sub-centre is the most peripheral and first contact point between the community and the public health system. A Health sub-centres encompass a population of 5000 people in a catchment area and only 3000 people in hard to reach area. As per the Indian Public Health Standards (IPHS), each sub-centre should have at least one auxiliary nurse

midwife (ANM)/female health worker and a male health worker. Health sub-centres usually provide antenatal care, immunizations, family planning and contraception, safe abortions, and adolescent health-related services.

- **Primary health centres:** Primary health centres are established for a population of 30,000 people in plain areas or 20,000 in hilly or difficult areas, with six indoors/observation beds. A PHC acts like a referral unit for six sub-centres. PHCs usually refer patients with complex needs or those who require specialized care to a community health centre or higher health facility. It is the first point of contact between a community and a medical officer. PHCs offer integrated curative and preventive health care to the rural population. As per IPHS, a PHC should have 14 staff members (including a medical doctor).

- **Community health centres:** Community health centres (CHC) are established in areas with a population of 120,000 people or in hilly or difficult areas with a population of 80,000. A CHC is a 30-bed health facility supported by five medical specialists – surgeon, physician, gynecologist /obstetrician, pediatrician, and anesthetist. Generally, a CHC provides OPD and IPD services, routine and emergency surgery, new-born and child health, and other national programme related services.

- **Sub-divisional hospitals:** Sub-divisional hospitals are in the middle of districts and block-level community, and they act as the first referral unit in an area. Patients are usually referred from neighbouring PHCs, CHCs and SCs. Sub-divisional hospitals play an important role in providing emergency obstetric care, including surgical interventions such as cesarean sections, and providing care for sick new-born children. These health facilities are equipped with 24-hr blood storage facilities.

- **District Hospital:** The district hospital is accountable to provide secondary-level referral services in each district. The district hospital provides preventive, promotive and curative health care (including specialist services) and works as a coordinating unit with agencies working on health issues. It covers both urban and rural areas of the district. The district hospital usually provides OPD services such as general medicine, general surgery, obstetrics

& gynecology services, family planning, emergency care, critical care and intensive care, anesthesia, ophthalmology, and other medical services.

Public health facilities offer preventive and promotive mass health care programmes for disease prevention and control such as leprosy, TB, HIV-AIDS, family planning, immunization, maternal and child health. However, private health care offers mainly curative services. Private health care providers are widespread and provide much extensive care public health services. The private health care sector is largely unregulated and there is an absence of ethical practice.

Public healthcare in Bihar is largely financed by the state government and Union Budgets collected through direct or indirect taxation. However, most people pay out of pocket for their health care. The government is unable to provide a full spectrum of healthcare services due to low public health investment, lack of human resources and poor public health infrastructure. Social health insurance is another way to finance health care, which is mainly provided in the organized sector covered by comprehensive social security legislation. Some of these include employee state Insurance Corporation, Central government health services. In recent years, the state also introduced various social security schemes to ensure health care for socially and economically backward communities. Some of these schemes are the National Social Assistance Programme, Janshree Bima Yojana, National Family Benefits Schemes, Pradhan Mantri Jan Aarogya Yojana (PM-JAY). The current health system in Bihar is a result of previous health policies and programmes formulated after Indian independence.

3.5 Bihar's Health

Bihar is India's third most populous state with a population of 10.4 crores and a population density of 880 persons per sq. Km. It is situated in the eastern part of India, which is surrounded by West Bengal in the east, Uttar Pradesh in the west and Jharkhand in the south. Bihar is considered the highest producer of agricultural crops, more than 80% percent of people employed in agriculture. Despite its rich topology, it remains one of India's largest and poorest states and is affected by many challenges in the area of health especially in of reproductive and child health. Primary health centres (PHCs) is responsible of the basic obstetric and neonatal care in Bihar. Although, a measurement of the health status of a country seems a complex

affair, where underlying health structure comprises a multidimensional concept, and accompanies with dire poverty and poor accessibility of health facility. The health status of poor states of India majorly cantered on women. Thus, it is a vicious cycle, mother in poor states more likely to deliver a pre-term baby or to a low birth child, and family is less likely to nurture a new-born with adequate and required nutrients. The aforementioned scenario is just a mirror reflection of the economic and the health status of Bihar. Particularly in the context of health, life expectancy at birth is very low, and the dire poverty along with sex discrimination at birth acts as a proxy to double the burden of poor health status in this state. Desire for at least one son practiced in a way that eligible couples frequently carried out female fetus abortion, which is negatively associated with the health of women is reproductive age.

Multidimensional nature of health includes all the age groups irrespective of gender; however, a few focused indicators of Sustainable Development Goal- such as reduction in IMR and MMR, have shifted all attention towards maternal and child health, especially in the context of Bihar. Data from the fact sheet of NFHS-3 and NFHS-4 justify these shifts. Table 6 present the changes in health indicators in Bihar between NFHS-3 and NFHS 4. National Family Health Survey is conducted by International Institute for Population Studies (NFHS), Mumbai, India. A few broad indicators (IMR, MMR) from Annual health survey (AHS) have also been taken as an extra data to assess and validate the current health status in Bihar. The table mentions below reports the nutritional status, maternal health status and some determinants of health in Bihar. The BMI which is considered as a good indicator of nutritional status has decreased by approximately 15% between the reference span of NFHS-3 and NFHS-4. However, the number of overweight and obese women increased two times more during this period, which is more likely to associate with a higher risk of non-communicable disease. In Bihar, a proportion of anemia reduced by 2% among pregnant women, although the absolute proportion is still 58.3%. Cycles of a maternal health allude to the health status of the mother during pregnancy, childbirth and the postpartum period. The percentage of pregnant women received antenatal visits has increased from 11.2 to 14.2 from NFHS-3 to NFHS-4 but this increase is very minimal in terms of relative and absolute numbers. Considering the number of women who had delivered in institutions has increased from 19.9 to 63.8 in Bihar during these years. However, the relative change in institutional birth and birth assisted by health personal boost our confidence, but the

other side of the story is that 37% of deliveries were home delivery. Percentage increase of mothers who received postnatal care from health personal within 48 hours after delivery in 13.4 to 42.3 in Bihar.

Another vital indicator of the health status of a society is its demographic profile. In a state like Bihar, literacy rate, mean age at marriage, knowledge of HIV/AIDS, information and uses of modern methods of family planning has been considered as the major determinate of overall health. The aforementioned indicators are indirectly linked to the health status of women. Availability and utilization of health are two different sides of a coin; various literatures observed that utilization in health-seeking behaviour is mainly influenced by education. Education has increased women's willingness and ability to seek health care; however, NFHS data estimates that the percentage of literate women had increased to approximately 50% during this period. Infant Mortality rate which was considered as a best social health indicator of a society has decreased from 61 to 48 per 1000 during the reference period.

Table 6 Comparative health indicators in Bihar

	BIHAR	
Indicator	**NFHS-3**	**NFHS-4**
Women whose BMI is below normal (%)	45.00	30.40
Women who are overweight or obese (%)	4.60	11.70
Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) (%)	60.20	58.30
All women age 15-49 years who are anaemic (%)	67.40	60.30
Mothers who had at least four antenatal care visits (%)	11.20	14.40
Mothers who consumed iron-folic acid for 100 days or more when they were pregnant (%)	6.30	9.70
Mothers who received postnatal care from a health personnel within two days of delivery (%)	13.40	42.30
Mothers whose last birth was protected against neonatal tetanus (%)	73.20	89.60
Institutional births (%)	19.90	63.80
Births assisted by a health personnel (%)	29.30	70.00
Births delivered by caesarean section (%)	3.10	6.20
Births in a private health facility delivered by caesarean section (%)	17.20	31.00
Births in a public health facility delivered by caesarean section (%)	7.60	2.60
Women who are literate (%)	37.00	49.60
Women age 20-24 years married before age 18 years (%)	60.30	39.10

Women who have comprehensive knowledge of HIV/AIDS (%)	11.70	10.10
Any contraceptive method used (%)	34.10	24.10
Women who use any kind of tobacco (%)	8.00	2.80

Source: NFHS-3 and NFHS-4

3.5.1 Health infrastructure and staffs

Although, the aforementioned information of several health indicators has increased its own pace, but this cannot be denied form the fact that the velocity of this change very slow. The major challenges/limitation which has emerged is a poor health system in Bihar. Many efforts have been taken by government and non-profit organizations to strengthen the health system but still condition is poor. Bihar is severely affected by a shortage of health facilities, trained human resources, medicine, and required equipment. This shortage affects the health care services across a state. Rural Health Statistic (RHS) Division, Government of India (2015) reported a huge gap in public health infrastructure and human resources (see table 7). This gap has amplified by population growth and demand for health services. The status of the health system of Bihar is still inadequate and required substantial improvement. Bihar experiences a shortage of 48% of health sub-centre, 39 % of primary health centre and 91 % of community health centres.

Table 7 Status of health infrastructure in Bihar

Description	Bihar (2007-08)	Bihar (2015-16)	Shortfall*[3]
Health sub-centres (HSC)	9729	9729	8908 (48%) ***
Additional Primary Health Centres (APHC)	1243	1350	1216 (39%) ***
Primary Health Centres	398**	533^	
Community Health Centres (CHC)		70[4]	704 (91%) ***
Referral Hospitals (RH)	70	70	
Sub-divisional Hospital (SDH)	23	55^^	

3 The Minister of State (Health and Family Welfare) stated in a written reply in Lok Sabha on 28 July 2017,that the shortfall at PHC was 48 percent, the same as in 2014-15, while at PHCs it was 42 percent, and at CHCs the shortfall marginally narrows the gap with 10 percentage points to 81%. Retrieved from http://pib.nic.in/newsite/mbErel.aspx?relid=169215 on 1 Feb 2018.

4 The Rural Health Statistics (RHS) data suggests that the number of CHCs in the state was 70, compared to the required number of 774, until 31 March 2015. However, the State Health Society (SHS) and economic survey data suggests that 130 PHCs were upgraded to 30-bed CHCs.

District Hospitals (DH)	24	36	
*** Rural Health Statistics (2014-15)*As per IPHS norms, ** PHC corresponds to Blocks, ^130 PHCs have been upgraded to 30-bedCHC, ^^Nine existing facilities have been upgraded to 30-bed CHC.			

Source: Rural Health Statistics (RHS) data (2014-2015)

The availability of adequate medical and health professionals is important to deliver quality health services. Doctors, nurses, auxiliary nurse cum midwife (ANM), ASHA and other health workers play a vital role in delivering health care at primary, secondary and tertiary levels. Recent data shows that there are severe human resource shortages at every level. Bihar has a huge shortfall of doctors (67%), Grade a nurse (44%), ANMs (25%) and lab technicians (46%) across the state (see table 8). The severe shortage of health workers and the gaps in health infrastructure reduced the state's ability to deliver health care services.

Table 8 Gap in Human Resources

Designation	Sanctioned posts (N)	Filled posts (N)	Gap (%)
Doctors	6261	2052	67%
Grade A	8538	4779	44%
ANM	11805	8895	25%
Lab Technicians	4098	2213	46%

Source: (Government of Bihar, 2015)

3.5.2 Health Care Training Institute

Bihar has huge shortage of health care training institutions that reduce capacity to produce human resource for health. There are total 13 medical colleges in Bihar including 3 private colleges. Out of total 70562 medical seats, Bihar has only 1300 seats (1.84 %) whereas Karnataka has 8845 seats (12.53 %) seats. Similarly, Bihar has also low post-graduation seats for medical doctors. Out of post 29336 PG seats in India, Bihar has only 603 (2.03 %) seats whereas Karnataka has a total of 3390 seats (11.56 %). The lack of investment from the private sector for the establishment of medical institutions as well as lack of support from the central government could be possible reasons for the low level of medical seats in Bihar. Table 9 and table 10 present summary of medical colleges and medical seats in Bihar, Uttar Pradesh, Karnataka, Kerala and India.

Table 9 Distribution of medical colleges and medical seats in selected States

State	Government institution		Private institutions		Total	
	No of College	**Seats**	**No of Colleges**	**Seats**	**No of College**	**Seats**
Bihar	9	950	3	350	13	1300
Uttar Pradesh	17	2199	31	4300	48	6499
Karnataka	18	2650	39	6195	57	8845
Kerala	10	1350	24	2800	34	4150
India	245	33472	256	37090	501	70562

(Source: NITI AYOG Report (2018-19))

Table 10 Distribution of post graduate seats in selected States

State	MD/MS	MCH	DM	Diploma	Total
Bihar	603	10	4	74	691
Uttar Pradesh	1897	64	88	222	2271
Kerala	1091	92	101	226	1510
Karnataka	3390	118	131	669	4308
India	29336	1294	1452	3844	34926

(Source: NITI AYOG Report (2018-19))

As per Indian nursing council, there are three entry-level nursing courses in India and several postgraduate certificate, diploma and graduate courses. The entry level nursing courses are:

- 18 months AMN training leading to a certificate
- 3.5 years GNM training courses leading to diploma
- 4 years, BSc. Nursing leading to an undergrad degree

Bihar has only two entry level courses- a certificate course for ANM training and diploma course for GNM. Out of 487, Bihar has only 27 nursing school and 11 GNM

training institution out of 1805. Bihar does not have an undergraduate or master's degree nursing course. Table 11 summaries availability of nursing education programmes in Bihar and India.

Table 11 Availability of nursing education programmes in India and Bihar

Nursing programmers	India	Bihar	Percentage
ANM training or MPHW(F) training Institutes -18 months after 10thclass	487	27	5.5
General nursing and midwifery (GNM) training Institute for three years after 12thclass or intermediate	1805	11	0.6
B.sc nursing colleges for four years after 12thclass with science	1069	Nil	Nil
Post basic B.sc nursing college for two year for staff nurses with GNM diploma	129	Nil	Nil
M.Sc (N) College for 2 years after completion of B.sc nursing	153	Nil	Nil

(Source: ANSWERS 2008)

From 1991 to 2005, the Government of Bihar did not appoint any doctors and paramedical staffs. The government closed all ANM schools in the state before 2005. Till 2011, Bihar did not have any bachelor's and master's degree program in Nursing (NHSRC, 2013). The percentage of nursing training institutions in Bihar is very less compare to other states of India. Out of 1487 ANMs schools in India, Bihar has only 27 schools (1.8 %). Additionally, there are 1805 GNM colleges in India where has Bihar has only 11 GNM colleges (0.61%). It clearly reflects the shortage of nursing education in Bihar (NHSRC, 2013).

3.6 Role and power of different actors in Bihar

The Indian constitution mandates states to make healthcare provisions to improve health and wellbeing of people. The MoHFW plays a leading role in formulating national health policies and setting up health priorities for the country. It supports state's effort to improve population health by financing various health programmes (such as NCPCDS, NPHCE, NMHP) through centrally sponsored schemes. Besides, the MoHFW builds international partnerships and signs cooperation agreements with multilateral and bi-lateral organisations to facilitate international cooperation across states. Under the NRHM framework, the MoHFW provides a financial package to

state for the implementation of national health programmes to address national health priorities in the country. Some of these health priorities includes maternal and child health, NCDs, mental health, AIDS, TB, etc. The MoHFW has authority to instruct state governments to take preventive, promotive and curative measures for prevention and control of communicable and non-communicable diseases in the state. It works closely with state's health department to monitor disease outbreaks and provide technical input to control them. The MoHFW's power is limited to providing financial and technical input for the programme implementation whereas the Department of Health has administrative power to implement them in the state.

The state's health department has administrative power and authority to develop health care infrastructure and ensure health care access to population. The Department of Health provides infrastructure and logistic support for the implementation of national health programmes in the state. It has administrative and financial power to recruit and deploy doctors, nurses, paramedics, community workers at public hospitals to meet the health care demands. The Department of Health plays an important role and coordinates with district and state level health societies to achieve desired health outcomes in the state. Moreover, it has the authority to modify, change and adapt the MoHFW's guidelines as per local contexts or needs.

The State Health Society Bihar (SHSB) is the primary agency for overall planning, management and implementation of centrally sponsored programmes in Bihar. It works closely with district level health societies (DHSs) and provides them technical support for the management and implementation of national health programmes (NPCDCS, NMHP, NPHCE etc.) at the district level. The SHSB prepares state programme implementation plan (SPIP) in consultation with district health societies. The SPIP outlines strategies, budgetary requirements and expected health outcomes for the state. The MoHFW has administrative power to approve the SPIP and direct the SHSB to make necessary changes if required. The SHSB has authority to make decisions regarding drug procurement, staff recruitment, and programme monitoring. It can also make necessary changes in the management and implementation of national health programmes with consultation of the MoHFW. The SHSB is also instrumental in establishing public-private partnership to strengthen health service delivery in the state. Some of these public-private partnerships include outsourcing

laboratory and diagnostic services, ambulance services, and hiring of cleaning companies for health facilities.

The district level health societies (i.e. DHSs) are responsible for the overall management and implementation of health programmes at the district level. Some DHS's responsibilities include preparing district health action plan, estimating annual health budget, managing human resource, and allocating sufficient resources as per local needs. The DHS receives an annual budget from SHSB for the implementation of national health programmes. The DHS has administrative and financial power to procure goods and services and recruit human resources for the integrated health programmes at the district level. However, the DHS is dependent on SHSB's instructions for drugs procurement and health workers recruitment. It seeks permission from the SHSB to make any programmatic decisions at district level. The DHS works closely with public health facilities to facilitate the establishment of required health infrastructure for healthcare delivery.

In 2010, the Government of Bihar established Bihar Medical Service & Infrastructure Corporation (BMSICL) as an autonomous agency to accelerate the development and creation of health infrastructure for health care in Bihar. The corporation functions as a sole procurement and distribution agency of drugs and equipment for all establishments under the Department of Health, Govt. of Bihar (BMSILC, 2010). It provides technical input to state and district level health societies for the procurement of quality drugs from the reputed pharmaceutical companies. It plays an important role in providing technical guidance to state and district level health societies for the procurement of drugs and consumable for national health programmes.

Apart from government established institutions, there are many international organisations who support the Government of Bihar to improve population health. WHO, UNICEF, and UNFPA are some of the multilateral organisations working closely with state and district health administration to reduce maternal and child mortality in Bihar. In the past 9 years, Bill and Melinda Gates Foundation (BMGF) played a major role in shaping the health system in Bihar. The BMGF launched "Ananya" programme in partnership with the Government of Bihar to improve health indicators, especially in socially marginalised communities. With BMGF's financial support, many organisations implemented health projects to support the Government

of Bihar's effort to strengthen healthcare service delivery. Some of these organisations includes Care India, Project Concern International (PCI), World Health Partner, BBC World Media Services, and Population Service International. They work as technical support organisations and provide feedback to the Department of Health on the health issues and service delivery. Table 12 presents a list of key organisations working in Bihar on health issues.

Table 12 Major agencies and their thematic intervention in the health sector in Bihar

Agency	Themes
WHO	Technical support and training on prevention and control of childhood disease
UNICEF	Social mobilization for routine immunisation
UNDP	Use of information technology for cold chain management for vaccination (EVIN- electronic)
UNFPA	Family planning
BMGF	Investment in health sector though partnership
CARE India	Health system strengthening
Project Concern International	Community mobilization on health, nutrition and sanitation
OXFAM	Disaster risk reduction and emergency response
Save the Children	Maternal and child health
Action Aid	Health and disaster risk reduction
PHRN (Public Health Resource Network)	Health advocacy
NHSRC	Technical support to the Government of Bihar on health issues

Other non-profit organizations, such as OXFAM, Save the Children, Digital Green, Action Aid, Water Aid, Caritas India, and MAMTA Health Institute for Mother and Child are working on cross-cutting themes. Some of these themes include women's empowerment, child health and child education, poverty reduction, disaster management and response, maternal and child health, and adolescent health and wellbeing. These organizations' interventions and developmental projects significantly increased awareness in the communities on health, sanitation and nutrition issues. Their effort has also strengthened public health service delivery mechanisms to reach out to marginalised and under-served communities in Bihar.

3.7 Conclusion

The health system in Bihar has evolved amidst social and political struggle. The Bhore Committee's (1946) recommendation has played an important role in establishing a three-tier public healthcare delivery infrastructure in Bihar. The National Health Policy 1983 and 2002 bought significant changes to the management and delivery of health care through adopting convergence and integrated approach. However, Bihar has not achieved an adequate level of health care delivery. Bihar continues to struggle with a lack of healthcare infrastructure, drugs, doctors, nurses, and paramedics. Public health is one of the neglected and concerned areas in the state. The expansion of private healthcare in Bihar has increased out-of-pocket for patients, forcing the poor to live in chronic poverty.

Since the implementation of NRHM in Bihar, there have been significant changes in the political agenda, and the ruling government is focusing on health and development. In ten years, the government has established various partnerships with national and international organizations to strengthen the health system and improve health indicators in the state. However, Bihar requires more investment in the health sector to develop human resource, infrastructure building, and healthcare delivery mechanisms.

Chapter 4:

Institutional Ethnography

4.1 Institutional ethnography

Institutional ethnography was developed by Canadian sociologist Dorothy. E. Smith as an "alternative sociology" (1987, 1999, 2005, 2006). According to Smith, institutional ethnography is "a revision of the relation of knowing" (1999, p.95). The approach is based on "social organisation of knowledge". It is more like an alternative way of "doing" sociology, different ways of "looking" a phenomenon or process under inquiry. It is a research approach that questions – how do we know, what we know, how does the get know. Smith, in her book *Institutional Ethnography: A Sociology for People*, writes:

> "I emphasise, however, that institutional ethnography, as it is written here, is a *sociology*, not just a methodology (it tends to get assigned to qualitative methods textbooks and courses). It is not just a way of implementing sociological strategies of inquiry that begin in theory, rather than in people's experience, and examine the world of people under theory's auspices. I have described it a "method of inquiry", and I know how that's a bit misleading. But I describe it as such because the emphasis is always on research as a *discovery* rather than, say, the testing of hypotheses or the explication of theory as the analysis of the empirical" (2005, p.2)

Institutional ethnography project aims to explore the everyday lives of people beyond their direct experience by exploring institutional relations of ruling that coordinate their everyday "doing". Institutional ethnography draws "*on local experiences in confronting and analysing how people's lives come to be dominated and shaped by forces outside of them and their purposes*" (Campbell & Gregor, 2004, p. 12). A

researcher undertaking institutional ethnography study participant's knowing and doing within their everyday work life. Institutional ethnographer begins his inquiry from the standpoint of individuals in the social relationship. He observes and talks to participants and look for "clues" to explore and map out how people are linked together in a series of action connecting with others who locate outside local and often not visible until carefully examined and explicated.

4.2 IE: Ontology and Epistemology

Crotty (1998) writes, "ontology is concerned with what is, with the nature of existence, with the structure of reality as such" and "epistemology is a way of understanding how we know what we know" (p. 3). In the sociology, the link between theory and research has been discussed widely. A researcher conducts study either to test theory or build theory. In both situations, data is collected, analysed and discussed in relation to theory. A conventional research project, researcher reviews existing literature, describe theoretical perspective. The problem statement is chosen prior to data collection that guides and determines the researchers' choice of theory and method for the project. It reflects regardless of researcher's own ontological and epistemological position.

Smith's (2005, 2006) institutional ethnographic method is a sociology that is built on core epistemological and ontological premises. The institutional ethnography relies on an epistemic assumption that all "*knowledge is socially organized; knowledge is socially constructed and carries particular interests that are embedded in its construction*" (Rankin, 2017). Knowledge is never "neutral." Smith (1990) argued that this traditional form of inquiry begins in what Marx and Engels (1978) described as "hegemony of the spirit (p.175), which means these forms of inquires begins with fundamentally idealistic assumptions. These idealistic assumptions believe that social

reality can be brought through human consciousness. Marx and Engels questioned the human relations over and against individuals: how collective and organised human relations become understood as a structure or system that dictate and dominate human experiences? In an idealistic inquiry a researcher identifies an actual phenomenon in the social that researchers collect data on the topic under inquiry, usually the individual experiences, perceptions or behaviours. Later data are taken out and considered as abstract evidence for analysis. The condition under which data was generated or produced is ignored especially in positivist social science research. Researcher uses this pre-designed interpretative framework to make sense of the data and further data is arranged to make sense in the context of a theoretical framework. Marx and Engel called this process as making "mystical connection" (1978). These arranged data are formulated into concepts or theories which offers direct relations with other concepts. Marx called this reasoning process ideological that count on distorted representation of social reality to generate its claim or truth. The processes of ideological reasoning generate theoretical concepts and conceptual frameworks to be applied to explain social reality. These concepts "as such are not ideological, they are ideologically by virtue of being" (Smith, 1990, pp.36). Despite reasoning, thinking and abstraction process, ideological categories echo with actual experience and they become part of our everyday life. Smith (1990) describe concepts as

> Concepts, ideology, and ideological practices are integral parts of socio-historical processes. Through them people grasp in abstraction the real relations of their own lives. Yet while they express and reflect actual social relations, ideological practices render invisible the actualities of people's activities in which those relations arise and by which they are ordered (pp.36-37).

In traditional inquiry, the social relation that produces a particular experience is not the focus of inquiry. Rather inquiry is confined to the manipulation of concepts and speculations (Carpenter & Mojab, 2008). Theory is "*used to make sense of the world and our sense about our social as a historical project with real social relations is lost*" (Carpenter & Mojab, 2008, p. 3). Smith sees it as obstruction of inquiry. Smith rejects the domination of theory as it is based on experience of objectified social relationship. Mikhail Bakhtin (1981) refers this domination as "monologic" that suppresses and removes the dialogic of social (Smith, 1999). Mainstream sociological theories create an order of knowing in which the observer's discursive position about everyday people's experiences is placed at the top. Contrary mainstream sociology, IE takes a particular interest in peoples' actualities over any conceptual or theoretical concepts that might explain the social reality. The IE project aimed to discover what people actually does and how their doings are socially connected to other invisible practices, processes and conditions. In other words, IE not only studies the lived experience of people but also focuses on the extended chain of actions, mediated by documentary form of knowledge, that shapes their experiences (Grahame 1998; Wallby 2006).

According to Smith (1990) a social inquiry should begin in the real, material process of life, which Marx and Engle described in The German Ideology (1978). In other words, it means that inquiry should focus on actual individual and their experience of everyday life. Smith argued that individual will know about their social reality through their participation, constituted through their mutual social activities. Their position and their standpoints towards the setting and social relations is organised in a way that their standpoint towards the setting will necessarily not be the same due to their different understanding of work, position and setting. In other words, being able to understand how things happen the way they do requires first exploring peoples'

actual activities, and also understanding that these activities are socially organized by forces that are largely unknown to the people whose experiences are of interest.

The exploration or discovery of social starts from and always includes the local site of origin, and the larger organisation that shapes the everyday world. Differences in people's perspectives and experiences are central to discovering how people are active in producing coordinated institutional forms (Smith, 2006). Institutional ethnography takes on each diverse account to assemble the process to explore and explicate "linkages that are lived, brought into existence in time and space by actual people doing actual things" (Campbell & Gregor, 2004, p. 98) rather than displacing the viewpoints through interpretation of their experience (Smith, 2006). He uses data to map out complex chain of actions, elaborate conceptual schemata of ruling discourse and how people's experience and live take shape within institutional relations (Smith, 2006, p. 39).

In doing institutional ethnography, the researcher is not methodologically removed from the research, rather he is directly involved in the entire process (Campbell & Gregor, 2004) and researcher's perspective becomes an integral part of the research. Smith (2005) writes,

> The design of an ontology as a theory of the being of the social is intended to provide a guide to the aspects or dimensions of actual ongoing social processes, in time and in place, that institutional ethnography's project of inquiry can appropriate. It does make the claim, as ontology, to provide a conceptual framework for selective attention to actualities such that the project of inquiry can proceed as a discovery of and learning from actualities. (p. 52)

Institutional ethnography does not claim universality; rather it is believed that each individual has a unique biography, experiences, and position within the social where they are located. They have their own perspective, feelings, beliefs, needs, desires and interests (Smith, 2006).

4.3 Conceptual tools in institutional ethnography

4.3.1 Text and textuality

Text carries a significant role in maintaining ruling relations. Text carries meaning and power that are replicable. Smith defined texts as "definite forms of works, numbers, or images that exist in a materially replicable form" (Smith, 2001, p. 164). They "can be read, heard, and watched by more than one individual, in different places, and at different times" (Smith, 2005, p. 165). In institutional ethnography, text plays a 'magical" rather than an ordinary role in passing information.

Institutional ethnography shares similar interest in text with Foucault in explaining the relations between text, power and governance. However, there are some central differences. The notion of discourses, in Foucault's work, described as a kind of large-scale conversation in and through text. According to Foucault, the subject is constructed as the effect of strategies of discourse, where power and knowledge intertwine to produce a disciplinary "regime of truth" focused on the body (Foucault 1980 p.311).

Smith (1990) critique Foucault's analysis. She argued that textual practice discounts the actualities of people's lives and produces an abstracted and "implied" subject. She questioned the ontological problem and said,

> "…presupposes the textual and works within it, reading off the actualities of

> people's lives, as Foucault does with sexuality, from the textual. The ideology of postmodernism seals off any attempt to find an escape hatch for inquiry beyond the textual surface of discourse. (Smith 1990b: 4)"

When texts are read, they replicate the notion of standardization of work and activities across time and site (Smith, 2001, p. 174). The phenomena of replicability allows texts to "perform at [a] key juncture between the local settings of people's everyday worlds and the [ruling relations]" (2005, p. 101). When text read by participants in the local setting, it hookups the awareness of participants into external relation of ruling that is not presents.

Text serves as an instrument for the social organisation of ruling and provide foundation to the relations of ruling. Smith view text as "the foundational media of coordinating people's work activities" (Smith, 2001, p. 175). Peoples' activities are organised by text, produced at a distant place. The textual organisation happens in two ways- "one as (texts) enter into how the course of action in which they occur is coordinated and the other as coordinators of a local and particular courses of action extending both temporally and spatially beyond the text" (Smith & Schryer, 2008, p. 121). Institutional ethnography pay attention to two-way coordination, tied by text, in which peoples' work is coordinated at local site (Smith, 2005).

In my inquiry, I discovered the importance of textual practice within the implementation of integrated approach for NCD programme service delivery that organises health workers' everyday actions at their workplace. For instance, district administrator reading official order from department head for staffs' recruitment or drug procurement organise administrators' work towards adhering those instructions by bringing other subjects together in an organised relationship, which subject might not aware of. Employing the textual analysis of policy or organisational text that I

gather during field work, I explore how texts are activated by managers and how health workers are brought into a coordinated relationship in carrying out the hospital tasks that are delegated in texts. While reading the texts, the readers are brought into a “text-reader” conversation in which they interpret the text and other side of the conversation is established by text. Using Smith’s view on text, I use text and their reading by people as an essential phenomenon for organising work in the integrated programme in the hospital I examined the policy and organisational texts, and how they guide local administration for the implementation of integrated programme. My analytical understanding of using text to explore the organisation of integrated programme at district hospital is not limited to bureaucratic orders or rules but it deals with the text-reader discourse that happens in the academic publication related to health system.

4.3.2 Standpoint and disjunction

Standpoint is a key term in institutional ethnography. It is a location or a point from where a researcher looks and acknowledges the way inquiry is ‘situated’ at the local site among knowers and their ways of knowing. The standpoint 'creates a point of entry into discovering the social that does not subordinate the knowing subject to objectified forms of knowledge of society or political economy' (Smith, 2005, pp.10). An individual doesn’t create social relation and social reality rather, they inherit through material and social relations from past (Marx & Engels, 1978).

The notion of standpoint allows researchers to identify the side and locate himself while “constructing an account that can be trusted” (Campbell & Manicom, 1995, p. 7). Smith critique the mainstream sociology that focus on producing objective knowledge from a particular standpoint which she called ‘unproblematized’, ‘normalised’, ‘positionless’ standpoints that she pointed, male-centred standpoint.

With her own experience of being a single mother, she devised a method to begin with women's standpoint, which later she changed to people's standpoint to illuminate how people's lives are constructed by 'ruling relations' (Smith, 2005; Smith, 1987).

In this project, I take the standpoints of health workers working in the NCDs and mental health programmes that allow me to stay grounded in what is significant for them. The organisational power and managerial perspectives are often enforced through various forms of communication, which shapes the knowing of people. Here I move away from accepting managerial perspective as correct or more adequate explanation of health programmes. In this inquiry, I used the worker's standpoints to discover the "disjunction" (Smith, 1987) in the implementation of integrated programmes and organisation of health workers' work in relation to the argument made or knowledge created for the integrated approach in the policy text. Smith (1987) refers to "disjuncture" as a dominant approach within sociology that categorise accounts of people's experiences and use descriptive language to explain the actual realities of everyday life.

In current sociology practice, the language or words used by people to describe their life events and experiences were often different when it was told by the sociologists. People's accounts and their experiences are used to emphasize different elements or argument. What is being observed, documented or described represent the observer's standpoint. In my literature review, I noticed that researchers theorise people's (both workers and patients) experiences in relation to integrated approaches as a way to improve organisational performance and patient's level outcome. These theories shift the viewpoint away from that of actual people and experiences to the organisational priorities which is discussed or formulated as national level.

Throughout my inquiry, I used standpoint as a conceptual tool to position my research in activities and organisation of work happening for workers, in their embodied experience and everyday life. One of the key discoveries was the disjuncture within various texts that see health workers differently. How they were represented in the national policy and how they were treated within organisation varies completely. The notion of standpoint helped me to situate myself while I read the administrative and authoritative descriptions about "organisational rule-regulation" or staff's "frustration".

4.3.3 Social relations

The term *"social relations"* in institutional ethnography offers guidance to researcher to understand the coordination, interconnectedness and interdependence of human activities (Smith, 2006). The notion of social relation aims to understand how work at the local setting is organised by forces outside of that setting, which Smith (2005) and other scholars described as

> "Social life is not chaotic but is instead organised to happen as it does. What Smith calls the social relations of everyday life actually organise what goes on. People's own decisions and actions and how they are coordinated with outside events are part of social relations. It is the interplay of social relations, of people's ordinary activities being concerted and coordinated purposefully, that **constitute "social organization"** (Campbell & George, 2004, p. 27)

Smith argued that our contemporary world is organised by text that we continuously engage with. Transnational financial rule and global health policies penetrate our local environment and shapes our works and experiences without our knowing about origin of ruling texts. These texts put us in an organised social relation where we are

socially connected with others located outside the local setting. Marx (1973) theorise money as a tool that come to organise a particular order of social relations that overrides direct relationship among individual (p. 4).

Social relations, in institutional ethnography, can be seen as extended relations between peoples' work, their activities and action linked to others working at distant places. Using the Smith's view of social relations, I examine an integrated approach as extensive coordination of people's purposeful intentions across multiple local sites. By people, I mean those who plays a significant role in decision or offering any guidance in any form textual, visual or verbal Social relations, in institutional ethnography, can be seen as extended relations between peoples' work, their activities and action linked to others working at distant places.

My inquiry traces these texts that organise and shapes the work of health worker in integrated programmes at district hospital I paid attention to institutional texts such as textual instructions, official order especially procurement rules and human resource recruitment policies. In order to map these social relations, I focus my analytical attention to the health workers' work sites where they perform their tasks.

4.3.4 Work

In institutional ethnography project, the notion of "work" is another key. It includes all the aspects and ways "people are actually involved in the production of their everyday world" (Smith, 1987, p. 66). It includes all the paid and unpaid work people do in their everyday life that are connected to others. Institutional ethnography sees the construct of "work" differently. Literatures have been widely used the concept of "labour" to represent "work". Marx analysed the interdependence of people in a specialised economy that differentiate people based

on their labour. The actual work of people is represented as labour, a commodity, to establish a relationship where their subjectivity is removed or undermined. Marx referred commodity as a mysterious thing as it reflects "the social character of men's labour appears to them as an objective character stamped upon the product of labour". Smith (1990) further extends Marx' idea and argued that it is knowledge that is produced as a fact brings people in an organised relationship. She said,

> People's actual work is objectified in the commodity. Relationships between people are mediated by (and appear as) relations between commodity and money. Similarly, relations between individual knowers appear as facts and are mediated by relations between facts. Subjects are necessarily implicated in the accomplishment of facts but disappear in their project. Through the fact that we are related to that other or those others whose observation, investigation, or to their experiences was its source. (p. 68)

With Smith's notion of work, I take account of all the work, both clinical and non-clinical activities, that health workers do to support hospital or administrative office to deliver health services. All these "doing" (Smith, 1987) are considered as part of their work, under employment contract, organising the social relations of integrated approach. I observed all activities of health workers at their work site. Their work includes various activities that are listed in their terms of reference (or job description). It also includes the work that are not considered as work. It includes learning how to take ownership of work and follow supervisors' order within a sense of doing good for patients even if it includes work that are illicit to perform. To understand the health workers' work, researchers need to see the workers' activities and also see how administrative accounts of workers' work differs from the actual happening. The researcher pay attention to what is required to "get things done" to

identify the work that is often “invisible” and subsumed within administrative accounts. For example, counsellor’s work is to coordinate with various administrative officers for approval or visiting bank to deposit the cheque. The work is not under the scope of work of the counsellor in administrative account, i.e. part of his employment contract, but the work is important as it ensures staff members receive their pay/salary to manage their domestic/living expenses.

4.3.5 Ruling relations

In IE, the concept of “ruling relations” plays a significant role in assisting researchers to analysing structure of power, organisation, direction and regulation (Smith, 1987, p3). Smith (1983) refers ruling as “a complex of organized practices, including government, law, business and financial management, professional organization, and educational institutions as well as the discourses in texts that interpenetrate the multiple sites of power” (p.3).

Smith’s (1987) thinking about ruling was influenced by Marx. Smith views class as “a fundamental organisation of the relations in which peoples’ lives are caught up” (p.23) rather an abstracted idea of power and oppression. Like Mark, Smith believes class and relations of ruling are collectively produced by people - “while we work and struggle, our everyday acts and intentions are locked into the underlying dynamic of the relations and forces of production and governed by the powers they give rise to” (1987, p.135). However, the analytical approach of relations of ruling differs from Mark’s analysis. In capitalist era, class and class interests were governed through different practices than contemporary society.

Smith (1990) argues that ruling in contemporary society is organised through knowledge production and construction of truth that relies on complex process of

documentation, accounting, recording and analysing *particular aspect* of peoples' work and their life. These reporting and accounting activities intended to gather evidence on a particular topic to frame as a subject that requires attention, then it organises, influences and rule what happen next. Smith wrote about ruling relation as "those forms that we know as bureaucracy, administration, management, professional organization and the media. They include also the complex of discourses, scientific, technical, and cultural that intersect interpenetrate, and coordinate the multiple sites of ruling" (Smith, 1990, p. 6).

Smith rejects Foucault's claim that "power is everywhere, not because it embraces everything, but because it comes from everywhere" (Foucault, 1978, p. 93). She argued that Fouault's theory of "power/knowledge" is an ideological practice that comes through process of abstraction and detached from actual participant's experiences (Smith 1990). To Smith, in Foucault's formulation "power has no ontology, no form of existence" (p. 70). Smith (1990) proposes that power be "understood as arising as people's actual activities are coordinated to give the multiplied effects of cooperation. The power of objectified knowledge arises in the distinctive organization it imparts to social relations" (p. 70). She goes on to point out that

> "Power and knowledge are not linked in some mystical conjunction such as that enunciated by Michel Foucault. What we call 'power' is always a mobilization of people's concerted activities. If facticity, if objective knowledge, is a form of power, it arises in the distinctive concerting of people's activities that breaks knowledge from the active experiencing of subjects and from the dialogic of activity or talk that brings before us a known-in-common object. Objectified knowledge stands as a product of an

> institutional order mediated by texts; what it knows can be known in no other way." (p. 79-80).

Smith proposed that by "investigating the actual social organization of knowledge", we can understand and "bring the social relations organizing power into the light" (p. 66). The health workers' work district hospitals are continuously shaped by professional, administrative and bureaucratic knowledge practice that shapes and rules workers knowledge about their everyday work. This study explores and examines the notion of ruling relations about workers work and their experiences in integrated programmes is organised and control outside their knowledge.

4.5 Empirical studies using IE

There is a growing body of literature that employ Institutional ethnography as a method of inquiry to discover how social is constructed and how people are brought together into institutional relationship for common purpose. Institutional ethnography has been applied into various disciplines such as sociology, nursing, social work, education, health care, and law. The purpose of the institutional ethnography studies is to investigate the work and textually mediated practices to dominant discourse come to shape people's experiences.

In the field of nursing studies, institutional ethnography has been used to investigate the work of people in HIV/AIDS care (Dmitrieva, Stepanov, Lukash, & Martynyuk, 2019; Mykhalovskiy & McCoy, 2002) substance use, nurses-patients relationship, nursing care (Urban, 2018), Residential care home (Reid, Kydd, & Slade, 2018). Caspar et al 2016 used institutional ethnography to study the organisational system that shapes resident care attendant access to care plan in long-term care setting. They used naturalistic observation, in-depth interviews and textual analysis as a method to

collect data. In their study, they reported that despite providing 80 to 90 percent of direct care to patients, resident care attendant does not have access to care plan, which contains relevant information about residents' need and preferences. The work of care attendant in long term care setting is organised in a way that ensure resident care attendant remains at the lowest level of an ingrained hierarchy (Caspar, Ratner, Phinney, & MacKinnon, 2016).

Reid et al (2016) conducted a study on social organisation of care planning in a residential care home in Scotland. He found that senior social care workers experience was socially organised through power institutional texts such as national and local policy, documents, care plan, audit forms. The study shows that senior social care workers decision-making process is aligned with institutional policy where he attempts is to keep bed occupancy rate high to avoid admission to people who are not mobile over 75 years of age. Malachowsk et al. (2016) used IE to study social organisation of the everyday work experience of the employee living with self-reported depression. The stud reported that employee experiences are shaped by various organisational policies, procedure and text-based sequences of activities. When employee with self-reported depression is absent from work for over 3 weeks, attendance monitoring programme activated, where employees are required to take part in a pre-defined institutional procedure of interview, followed by counselling session. Employee are oriented towards their attendance issues along with mandated doctor visit (Malachowski, Boydell, Sawchuk, & Kirsh, 2016).

The institutional ethnographic studies explore the everyday life experiences and institutional processes from the standpoint of certain groups of people, often have marginalised and subordinated positions. It brings viewpoints of those who often lack capacity to negotiate within institutional relations. Texts are integral in the

organised world (Smith, 2006) and they coordinate people' everyday activities through inserting the interest of those located outside the local sites.

4.6 Conclusion

In this chapter, I presented an overview of institutional ethnography, as a conceptual framework and as a method to guide my inquiry. I discuss key conceptual tool of IE and outline procedure that I employed to analyse the data. Previous institutional ethnographic studies were mainly used in in the field of social work, health care, mental health, education, women's studies etc. IE is relatively new to health system research and offers opportunity to examine health systems from people's standpoint.

Chapter 5

Methodology

5.1 Introduction

In this chapter, I outline the research design of the study and provide a reflective account of the research process. I begin this chapter by explaining my motivation and experiences in Bihar, and the factors that influenced my decision to undertake this research project. I then explain the problem with the research. The chapter highlights the approach taken to analyse the integrated programme by focusing on participants' work and their experiences delivering health care. I discuss methods of data collection and my approach to data analysis and reflect on the ethical consideration.

5.2 Choosing the topic: motivation, experience and curiosity

In this section, I reflect on my research journey and discuss how I chose my research topic and research approach. This journey was primarily shaped and influenced by my previous work experience in a community health project and working with vulnerable adults. My previous work experience with both public and private sector organisations gave me significant exposure to the local realities and challenges of health service delivery in Bihar. Like other institutional ethnographic studies, my own begins with my own experiences working on various health projects in India. My understanding about the "social" was formed during my social work training in the course of undergraduate and postgraduate study. Both academic programmes provided me with the opportunity to engage with families, communities and social services agencies to gain perspectives on how services are designed and delivered to people, and what challenges people face when they access these social services.

My previous work with people with leprosy significantly shaped my understanding about the integration of health programmes. During my work at the leprosy colony, an isolated colony in Bakhtiyarpur block, Patna, I observed patients suffering from leprosy. They reported that they could not access health care services from the nearest health facility. In addition, they experienced discrimination, stigma and exclusion when they visited local public health hospitals. Their individual accounts

and experiences compelled me to delve into the problem of service accessibility. In 2005, the National Leprosy Elimination Project (NLEP) was integrated with the general health system and outreach services were reduced (Siddiqui et al, 2009). Post integration, health workers involved in the leprosy programme were terminated or deployed into other health programmes. In addition, the emphasis was on self-reporting, i.e. leprosy patients need to come forward, visit the nearest health facility and report any symptoms of leprosy (Rao & Suneetha, 2018). This represented a transfer of responsibility from the public health system to patients to identify and report symptoms related to leprosy. The decision to integrate the NLEP programme in the general hospital occurred at the policy level and has implications on patients' lives. I observed that, due to stigma and poor awareness about leprosy, patients living in the leprosy colony did not come forward to report their disease and often went untreated. Also, patients and their families often do not have adequate knowledge to identify the signs and symptoms of leprosy until it reaches a later stage. These experiences and my understanding of the policy decision around the integration of the health programme and its implications for service delivery were foundational to my research inquiry.

Further, my previous experience as a monitoring and evaluation officer at Project Concern International in a community mobilisation project, "Parivartan",[5] also significantly shaped my approach to this study. The "Parivartan" project was funded under a big umbrella programme called "Ananya" (2010-11) by the Bill and Melinda Gates Foundation (BMGF). Under the Ananya programme, other international organisations, such as CARE India, BBC Media Action, World Health Partners (WHP), Population Service International (PSI), Mathematica Policy Research and others, worked closely with the government of Bihar to improve health outcomes related to MDG 4 and 5 (Bill & Melinda Gates Foundation, 2011; Kathuriam & Khanna, 2014). While working on the project, I came across various issues and ethical dilemmas within and outside my job that raised several questions around the rationale, priority and legitimacy of actions. For example, why was maternal and child health singled out as the most important area? Why did other disease programmes not receive much funding? Many of the agency workers believed and agreed that the project had positive outcomes on people's health but also

5"Parivartan", meaning change or transformation in Hindi, was funded by the Bill and Melinda Gates Foundation.

acknowledged the problems during implementation. I was also unaware about the project's impact on the overall health system and policy environment.

One goal of the "Ananya" programme is "helping government to adopt the most promising approaches across the state". The words "promising approach" caught my attention and forced me to critically reflect upon larger donor-driven programmes. I was trying to understand the meaning of "promising approach", and the larger purpose of such a significant investment in the health sector and how the investment would change the health service organisations (in both private and public sectors) in the state. The programme focused on maternal and child health, nutrition, kalazaar, malaria, diarrhoea, pneumonia and other diseases. These observations and experiences significantly shaped my understanding of how various actors engage with government and attempt to integrate health interventions with public health systems for programme sustainability.

The word "adoption" often catches my attention. In literature, "adoption" is sometimes interchangeably referred to as integration, convergence, merger or other similar terms. I explored these terms from a different perspective and focused on learning about agencies, their commercial and philanthropic work and the way they promote or integrate their private interests or agenda in the health system. I was also keen to build my understanding about actors supporting these strategies.

I was learning about integration while preparing to apply for a doctoral program for the Institute for Global Health and Development, Queen Margaret University. I joined the PhD programme in September 2014, and I came across the vast literature available on "integration". Scholars proposed the adoption of integrated health care strategies to solve contemporary health challenges, to meet the growing demands of patients and to reduce the increasing cost of care. Many scholars proposed different theoretical frameworks on integration, such as integrated care, coordination of care, continuum of care and the patient centred approach. These conceptual frameworks helped me to understand the elements and components of the integrated approach from a health system perspective. However, these conceptual frameworks presented the viewpoint of decision makers about the health system. They do not represent the patient's or health workers' standpoints I observed during my work in the leprosy colony. These personal work experiences, along with the literature available on

integration, allowed me to explore the concept of integration from the standpoint of health workers, who work to deliver health services at the district hospital.

5.3 Problematic of research

The problematic in institutional ethnography (Rankin, 2003; Smith, 2006) does not refer to what those within the setting would inevitably explain as the problem they are experiencing. Smith (2005, p. 40) refers as "the starting place for inquiry does not mean starting with people's problems". Smith employed the concepts of problematic "to direct attention to a possible set of questions that may not have been posed or a set of puzzle that does not yet exist in the form of puzzle but are "latent" in the actualities of the experienced world" (Smith, 1987, p. 91). The decision about the problematic is central to institutional ethnography project to outlining the interests represented in the research. Institutional ethnographer begins with identifying concerns, issues, and problems that are real for participants and situated in their work in an institutional order. For developing institutional ethnography project, the researcher must become aware of experienced actualities to identify the problematic in his enquiry (Campbell & Gregor, 2004). To identify problematic of the study, preliminary field work is required to know the experiences of the participants. This often requires participants' interviews or observations of their work at the site of the study. The initial field work is aimed to know about how particular things happen as they do (Campbell & Gregor 2004, p.46). For identifying problematic of the study, I conducted field work between November 2015 to January 2016 and interacted with health workers and managers to understand the issues and challenges in the integrated NCDs programme at the district hospitals.

The health workers I interviewed have identified problems in the service delivery in the integrated NCDs programmes, such as the lack of human resources and the irrational decision-making by the government for termination of health workers from the NCDs programme. They reported that many positions in the integrated programmes were vacant over a year and it had interrupted the service delivery process. I found that SHSB ordered district health administrators to end the employment contract of the health workers because of the discontinuation of funds from the MoHFW. It became clear that there are disjunctures between health workers' availability in the integrated programmes and institutional processes of staff recruitment which had caused trouble in the service delivery. Similarly, drug

procurement procedure was another concerning area contributing to the problem in service delivery. The drugs and consumables were not available at the district hospital. At the district level, drugs were usually purchased in a small quantity by health workers. Despite the provision of free medicine for the NCDs programmes, patients are often required to buy drugs from the local market. These were concerns and problems I observed in the integrated programmes.

When I further explored health workers' work, I found health workers, working in the integrated NCDs or mental health programme, were deployed in other programmes – Rashtriya Bal Swasthya Karyakram (RBSK), JSY (Janani Surakhya Yojana) or in hospital units, such as alcohol de-addiction centre, emergency room. They were unable to deliver services as outlined in the programme. From my initial inquiry, it became clear that there are institutional procedures (i.e. staff recruitment, drugs procurement, deployment), which are related to the health workers' work, which created interruptions and problems in the service delivery. The puzzle for this inquiry (Campbell & Gregor, 204, p. 47) was to explore how the work of health workers is connected with these institutional procedures and how it affects the service delivery in the integrated programmes at the district hospital. This institutional ethnography brings back views of all others who participate in the integrated programme implementation and reveals the invisible institutional work, processes, and forces that shape health workers' everyday work at the district hospital.

5.4 Research Design

In this study, I adopt institutional ethnography to guide this study. Institutional ethnography is proposed as an alternative sociology to investigate the institutional relations. In this institutional ethnography project, I used interview, participant observation and textual review as methods to generate information to address the research objectives. The data collection began with observations, followed by interviews with participants to clarify doubts and gain in-depth understanding about their work within the integrated programmes. While conducting observations or interviews, participants referred to documents and official texts as important documents which direct them towards their work. I collected these texts to further examination and analysis to explicate how the implementation of the integrated NCDs and mental health programme is organised at district hospitals in Bihar.

The data collection was conducted in three different phases between November 2015 to September 2016.The first phase of the data collection was aimed to seek permission from the Department of Health for conducting the field work in public hospital in Bihar. This phase was also important in identifying the problematic of the study, which I discussed in previous section. The section phase of the study was aimed to observe the implementation of NCDs and mental health programmes at selected district hospital and identify the district to interview research participants. The third phase of the study was aimed to conduct interview and understand how their experience of service delivery is linked to the institutional processes.

The data analysis was guided by the Smith's discussion on exploring institutional relations in understanding how world are socially organized (Smith, 2006). I used Smith's key concept text-act-text, textual-reader conversion to analyse the research data. The focus of data analysis is aimed to explicate how the work and activities of health workers in the implementation of integrated NCDs and mental health programmes are socially connected with the work of others located outside the district hospital and discover forces that shapes health workers' experiences.

5.5 Research process

5.5.1 Access to study site

To gain a better understanding about the institutional process within the integrated programme, I chose to undertake an internship position at SHS Bihar. I wrote a letter to the Executive Director, SHS Bihar (SHSB), introducing myself as a PhD student. I requested a position at the SHSB and provided supporting documents, including an appreciation letter from the SHSB about my previous work experience, a letter from the Director, IGHD, QMU, and two referees. One of the referees was a senior Indian Administrative Officer (IAS) who supervised me during my previous internship in the Department of Planning and Development, Govt of Bihar. Another referee was a public health expert with 20 years of experience in Bihar. Having these influential referees, who work directly with the Government of Bihar, enabled me to get the internship and start fieldwork.

In December 2015, the SHSB approved my internship application and permitted me to conduct fieldwork. I was placed in the maternal health cell (MH cell) in the SHSB as an intern, with a responsibility to support the department's work on gestational

diabetes mellitus (GDM). The internship provided an opportunity for me to engage with administrative officials and programme officers across departments in the SHSB. Not receiving the internship would have delayed my data collection and access to participants, which was crucial to begin the inquiry. During my internship, I gathered more information about NCDs programme implementation and the bureaucratic processes. This information was essential for establishing a background for the fieldwork. The State Programme Officer (SPO), Maternal Health (MH) cell, issued a letter to the Civil Surgeon, introducing me and my research project. The letter was intended to mobilise support from the district health administrator to grant access to health facilities and official documents for research purposes. Being an intern at MH cell, I visited districts to attend maternal health workshops and meetings, but I also discussed the research project with health officials and programme managers at the district level. This was crucial to locate my participants to begin the research discovery.

5.5.2 Site selection process and criteria

In institutional ethnography, the researcher moves between different sites to explore and discover ruling relationships from the participants' standpoint (Smith, 2005). The researcher moves from one site to another to gather individual accounts of participants' work, aiming to explore how their work is organised and socially connected to others located within or outside the local setting. Research starts with a participant at one site and moves to another, with the clue or lead given by the previous participant. The purpose of such movement is to discover social connections between participants, their work and their ruling relations with others.

In this study, I purposefully selected three district hospitals (in West Champaran, East Champaran and Vaishali districts) in Bihar as sites for my research inquiry. My previous work experience and an understanding of Bihar's health system and service delivery were the key factors for the site selection for this institutional ethnography project

Prior to the fieldwork, I selected two district hospitals in Vaishali and Rohatas, where the NPCSDS programme was first implemented in 2010. However, after interacting with government officials, I found that most of the staff members working in the NPCDCS programme were terminated by the SHSB. The health officials cited the

discontinuation of financial support as the reason for the terminated positions in the NPCDCS programme. Only a few health workers, such as a counsellor and data entry operator, were left working in the NPCDCS programme. The health officials revealed that the district health society temporarily deployed health workers into the NPCDCS programme to provide NCDs services at district hospital.

I realised that recruiting participants for the study from the NPCDCS programme might be challenging. I undertook a mapping exercise to find out the availability of the healthcare staff in NPCDCS. I found only one counsellor working at the district hospital in West Champaran. One participant was not enough for the IE project. Given this new situation, I refined my research strategy and expanded my scope to include the NMHP and NPHCE programmes. I revised the original site selection criteria and decided to begin the study with the district where at least one staff is working in the integrated NPCDCS, NMHP or NPHCE programme.

During the first phase of fieldwork (in January 2016), I attended a workshop on maternal death review in Muzzafarpur, where I met district health administrators and officials from West Champaran, East Champaran and Vaishali districts. At the workshop, I introduced my research project to health officials and asked if they were interested in discussing the project in a separate meeting. During these interactions, one of the senior health officers showed interest in the research project. He expressed his concern about the poor implementation of the NPCDCS programme and invited me to begin fieldwork in the West Champaran district. Upon his request, I decide to begin data collection in that district. The actual data collection started with the observation of service delivery at the district hospital, followed by interviews with health workers and managers. The participants of the study were based in different locations, such as the district hospital, DHS office, SHSB office and others, as described in Table 2. Later, I purposefully included two additional district hospitals (from East Champaran and Vaishali) in the study to collect diverse experiences of health workers in the integrated NCDs and mental health programmes.

5.5.3 Data collection process

Prior to my fieldwork, I developed my data collection plan in detail. This plan included my travel schedule, logistic arrangement and scheduled appointments for meeting health officials at programme districts. In this section, I will discuss my data

collection process and provide a reflective account about the decisions I made in the course of my fieldwork, which I have categorised into three phases.

5.5.1 First phase: getting permission and knowing the people

During the first phase of inquiry (November 2015 to January 2016), I obtained permission for the fieldwork from the Society Health Society Bihar. I gathered information related to the NPCDCS programme from programme officials and staff working at the SHS Bihar once permission was granted. In the first few weeks, I participated in meetings and workshops, and conducted field visits to understand the programme implementation. I learned about the organisational culture and bureaucratic processes. I aimed to understand the programme implementation processes and bureaucratic environment at the SHS to inform the next phase of my research study. In the first stage of the fieldwork, I used eight weeks to understand the status of staffing, service delivery, programme management, reporting, etc. During my field visits, I found that the district hospital in West Champaran offered NCDs related services (diabetes screening and counselling) to patients despite the recent termination of staff from the NPCDCS programme. Health workers working under different integrated programmes (such as the National Mental Health Programme and the National Programme for Health Care for the Elderly) were working for the NPCDCS programme and were involved in service delivery. I found this phenomenon interesting. These observations in the first phase raised a few questions and informed the second phase of my fieldwork. Some issues were:

- Why are other programme (NPHCE) staff members working for the NPCDCS programme?
- How is their work being coordinated at the district hospital?
- What are the implications for NPHCE programme service delivery if staff are deployed in the NPCDCS programme?
- How do health administrators maintain a balance between various programmes when resources are unavailable to them?

These initial observations and interactions with health workers and managers helped me to define the problematic of the study, which I discussed in earlier section.

5.5.2 Second phase: locating the site

The second phase of my inquiry (February 2016 to March 2016) aimed to observe the implementation of NCDs and mental health programmes at the district hospital and build a purposeful and trusting relationship with participants. I spent four to five days in each selected district to understand the programme implementation at the district hospitals before starting the interviews.

Building a purposeful and trusting relationship was critical to recruiting participants to generate reliable data for the research project. I found that participants' willingness to participate in the study depended on many factors, such as their fear related to sharing or recording interview data, prior permission or approval from their supervisor, and their confidence in my ability to maintain confidentiality. I adopted a pragmatic approach and spent most of the time doing observations at the DHS, mental health OPD and NCD clinics at the West Champaran district hospital to get to know health workers and their work. My observation focused on health workers' work and activities in the integrated NCDs and mental health programmes.

I found that implementation of the integrated programmes in each district hospital differs in terms of the management, staffing pattern and organisation of service delivery. At the end of the second phase, I identified West Champaran district where the NPCDCS programmes were operational, staff were available and administrative staff were interested in the research project.

5.5.3 Third phase: entering into health workers' experiences

The third phase of the fieldwork aimed to enter into the health workers' experiences and identify concerns and problems in the integrated programme from their standpoints. I conducted interviews with participants (see Table 14 and 15) and performed observations at multiple sites to understand how the health workers' work and their activities are connected with the work of others located within or outside the district hospital. In this process, I also collected institutional texts and official documents to analyse and make these connections visible. In the third phase, I spent nearly four months at various research sites (between May 2016 and September 2016). At the beginning of the third phase, I spent two months in the West Champaran district, and then one week in other districts (Vaishali and East

Champaran) to observe the institutional processes I discovered in the West Champaran district.

A typical fieldwork day began with visiting the district hospital during OPD hours between 8:30am to 2:00 pm. During these hours, I observed the health workers' work (both paid and non-paid), their activities of coordination and negotiation with other officers and managers, and the delivery of services (e.g. screening, counselling, advice, guidance). I spent time at different hospital units, such as mental health OPD, NCD Cell Office, NCD clinics, de-addiction centre and administrative office. Spending time at each site is essential in an institutional ethnography project as it provides an opportunity to observe the work and activities of staff. This time provides an opportunity to conduct formal or informal interviews with participants. My interview and observation focused on collecting data about the concerns and challenges health workers experience while delivering health services. These concerns and challenges were further explored with other participants involved in the management and implementation of integrated NCDs and mental health programme. The purpose of the interview and observation was to discover how the work and activities in the integrated programmes are connected to several sites, such as NCD clinic, geriatric ward, civil surgeon office, district programme manager's office, state health society, MoHFW and others.

In the second half of the fieldwork day (usually between 2 pm and 7 pm), I used to visit the DHS office to learn the programme managers' viewpoint on the problems or concerns I observed at the district hospital. Spending time at the administrative office and talking to programme managers was part of the data collection process to clarify my doubts, ask questions and understand their standpoints related to the health workers' accounts. The purpose was not to identify recurring "themes" or validate the accuracy of the participants' accounts; rather, it was to seek their help in building knowledge of "how things work" in the integrated health programmes. For example, health workers reported that a manager gave him money to buy drugs from local markets. To know more about the institutional processes, I discussed the drug procurement system with managers to understand the conditions in which health workers are involved in drug procurement. This informal "chat" or talk helped to analyse the interview and observational data I collected. In addition, spending time at the DHS was an important part of the research methodology to understand the work

environment, organisational culture, group dynamics and work process linking the NCDs programme and service delivery.

5.6 Data collection methods

5.6.1 Participant observation

In IE, participant observation provides a "place" as a starting point through observing participant's actions to trace and map out the social organisation and ruling relations. Observation enables the researcher to describe the social setting, participants and their doing (both paid and non-paid work) under the inquiry. Participant observation enhances institutional ethnography's goal of incorporating places, time, and the presence of larger social organisation within the local environment (Diamond, 2006, p.45). Participant observations offer "… a way to start in the local particularities to establish problematic with the focus on how actualities of people's live come to be hooked up with institutional relations (Diamond, 2006, p. 60). The researcher becomes part of data generation as he experiences, sees, feels and reflects while observing participants and their doing and knowing "how things work".

I began observation at SHSB as an intern. During my internship, I observed various work processes, such as preparing official orders, decision making processes, and the use of review meetings to guide programme implementation and review the performance of heath programmes. This allowed me to establish a purposeful and healthy relationship with state officers looking after NCDs and mental health programmes at the SHSB. After becoming familiar with the work processes at the SHSB, I moved to the West Champaran district to observe the service delivery in the integrated NCDs and mental health programme. I spent several days at different observation sites to observe and understand the work processes and implementation of NCDs and mental health programme at district hospital. I familiarised myself with health workers' routine work, working conditions, concern with the programme and their professional practices. The locations and sites of observation in the study were as follows (table 13):

Table 13 Sites for Observation

Observation Site	Focus of observation
Registration desk	Patient registration system, patients' movements
General (medicine) OPD	Patient load, care pathways, doctor-patient communication
Mental health OPD	Psychiatrist consultation, psychological intervention, registration, patients care pathway
Geriatric ward	Health workers' work, diabetes screening
Counselling room	Patient counselling, counsellor's work
Drug de-addiction centre	Counselling process, infrastructure, service delivery
NCD clinic at district hospital	Patient-provider communication, medical consultation, recording and reporting of patients' data
District NCD cell	Record-keeping, staff interaction, medicine distribution
District Hospital	Care pathways for NCDs and mental health programme, infrastructure for the NCDs and mental health programmes, intensive care unit, emergency care, a general overview of service delivery
District Health Society Office	Everyday work, office culture, interactions among staff
State Health Society	Work processes, development of official orders, record-keeping

I did not pre-define the specific sites for observation. I chose these observation sites after interacting with officials and health workers as they described the issues and challenges they face while delivering services in the integrated NCDs and mental health programmes. For example, in a discussion, a health worker highlighted that a patient, having NCDs, "spends more than three hours in the hospital" to access health care and often gets "frustrated in the process". Such information guided me to plan observation at the registration desk and general (medicine) OPD to understand the medical consultation processes to explicate the conditions in which patients' experiences of frustration and trouble emerged. I took observational notes in my research notebook at the observation site. All the observational notes were detailed with additional description within 24 hours. These observational notes contain a thick description of the event or phenomena and mainly focus on the work that was undertaken either by health workers or patients at the observation site. These observational records were later typed into a Word document for further analysis.

5.6.2 Interview

In institutional ethnography, interviews aim to explore and map out organisational and institutional processes that coordinate and control local activities, rather than

revealing subjective states and experience (Smith, 2006). Interviews in IE are conducted in an open-ended way and are oriented to discover interconnected activities and the work of participants. They focus on discovering "how things work" and how activities are coordinated at different times and places. In institutional ethnography, the interview is not an endpoint but instead a starting point, which allows the ethnographer to begin the inquiry.

In institutional ethnography, the researcher cannot predefine selection criteria for research participants. Participant and site selection are determined in the course of the research. Institutional ethnographers "are not oriented towards descriptive reporting on a population and they do not think of participants as a 'sample'" (Smith, 2006, p. 33). In this study I selected participants as the investigation progressed. Study participants were purposely selected on the basis that they could provide relevant information, expand understanding around the social organisation of work and provide details about organisational processes related to integrated NCDs and mental health programmes. The study participants were identified while reviewing and analysing research notes taken during interviews and observations. Sometimes, the participants were also identified during interviews, when interviewees express their inability to provide accurate information/answers to interview questions. Interviewees also suggested me to approach district level managers and administrators (potential participants) to collect accurate information and find answers to the interview questions. Based on their recommendation, I approached managers and administrators and selected them for interviews. These participants were directly or indirectly involved in management, implementation or governance of integrated NCDs and mental health programmes and were located at various sites such as district hospitals, DHS, SHSB and the Department of Health.

After performing initial observation at the NCDs clinics, I began to interview health workers working in the integrated NCDs and mental health programme to discuss the issues I observed. These interviews highlighted various challenges and problems in the integrated health programmes at the district hospital. Some of the challenges were related to staff recruitment, drug procurement and health workers' deployment. Following these challenges, I moved away from the local site, i.e. district hospital, to a site where other participants could provide me with more information about the institutional processes of staff recruitment, drug procurement or service delivery in

the NCDs and mental health programmes. While exploring the invisible institutional processes, I interviewed hospital managers, district health administrators, human resource managers, account managers, nodal officers and a civil surgeon. These participants presented their standpoints and perspectives about service delivery in the integrated health programmes. Their standpoints, perspective and work knowledge were largely influenced by their position, job description, professional orientation and the instructions they received from supervisors. Participants were working in different units and had different roles in the NCDs and mental health programmes. Some were from administrative, finance and programme management units. Others were from the health workers (counsellor, ward assistant, nurses etc.) working at the hospital. Some of the participants were interviewed twice to get more details about their work. All participants in the study had different professional backgrounds, specialising in areas such as physiotherapy, health care, nursing, psychology, rural development, epidemiology, medicine, hospital administration and social work. Table 14 and Table 15 illustrate the background of the participants across research sites.

Table 14 Background of research participants

Participant Category	**Nature of participants**	**Programme/ organisation**	**Number**
Health Workers	Counsellor, clinical psychologist, ward assistant, hospital attendants, sanitary attendant, community nurse, nurse, case registry assistant, psychiatrist nurse	NMHP NPCDCS NPHCE	13
Managers	District programme manager, district programme coordinator, district community mobiliser, hospital manager, mentoring and evaluation officer, state programme officer, human resource (HR) manager	DHS SHSB	5
Doctors	Psychiatrist, physician	NMHP District hospital	2
Health Administrators	Civil surgeon, nodal officer (health programmes), state programme officers, hospital superintendent	DHS	4
Public Health Experts	State Immunization Consultant	UNDP, NHSRC	3
Total			**27**

Table 15 Distribution of participants across research sites

Participants	West Champaran (District hospital/DHS)	East Champaran (District hospital/DHS)	Vaishali (District hospital/DHS)	Patna (SHSB)	Total
Health workers	8	2	3	0	13
Managers	3	0	0	2	5
Doctors	1	1		0	2
Health Administrators	3	1	0	1	5
Public Health Experts	0	0	0	2	2
Total	15	4	3	5	27

I interviewed a total of 27 participants across four research sites (West Champaran, East Champaran, Vaishali and Patna), which included 13 health workers, 5 managers, 2 doctors, 5 health administrators and 2 public health experts. Health workers and doctors were interviewed at district hospitals (mental health OPD, NCD clinic, de-addiction centre, general (medicine) OPD, whereas managers, health administrators and public health experts were interviewed at DHS or SHSB. Out of 27 participants, 15 were involved in service delivery (NCDs or mental health) at a district hospital and 7 were involved in management and implementation at district level (works at DHS). Three participants were recruited from SHS and were directly involved in management and implementation of NCDs and mental health programmes, and two participants were independent consultants working with the Department of Health to provide technical support to strengthen the health system. After doing extensive observations, reading and analysing institutional texts and multiple interviews with participants at different sites, I was getting reparative data from participants about their work, institutional processes and issues in service delivery. I felt that I had adequate observational data, texts and interview account to build an understanding about the organisation and delivery of integrated health programmes at the district hospitals. I made a concision decision to stop data collection process and field work.

These interviews were mainly conducted in the second (February to March 2016) and third phases (May to September 2016) of fieldwork. Most of the interviews were audio recorded with the permission of the participants, and later transcribed with computer assisted software. All of them requested me to delete the audio files when my research is over. Eleven participants, especially managers, administrators, the clinical psychologist and doctors, did not want their interviews recorded. They were

worried about some sort of negative consequence. They requested that I not record their interview and instead take notes. I took rough interview notes during these interviews, and later the same day I expanded these rough notes based on my memory. The aim of transcription was to capture what participants told me during the interviews without inserting analysis or judgement. All the interviews were conducted in Hindi and later manually (verbatim)transcribed in Hindi using Microsoft Word application and audio player. Later, when I arrived at Queen Margaret University, I translated all the Hindi interview transcripts into English. Each interview lasted between 30 and 90 minutes. A few participants (health workers) were interviewed twice to collect more information about their work and institutional processes

5.6.3 Textual Review

"Texts are ubiquitous in the industries and knowledge-based economies" and discovering how texts work in an institutional setting is central to the analytical potential of IE (Rankin & Campbell, 2009). Texts are often viewed as ordinary in static form, not recognised as being placed within our temporal and local work, where they are continuously active to coordinate participants' activities (Smith, 2006). The collection of key documents (texts) that guide the implementation of integrated programmes and service delivery began with participants' interviews. It was an ongoing process throughout my fieldwork. Many documents were identified through discussion and interview with managers. Table 16 presents the texts that were collected and analysed in this study. For example, health workers reported their termination and linked it to the budget approval from the Ministry of Health and Family Welfare. I found the record of proceeding (ROP) that contains information about the budget for the NCDs programme. Similarly, a manager at the DHS explained "local purchase" as a method to buy consumables for the NCDs programme, which led to the discovery of "The Bihar Finance (Amendment) Rules, 2005".

Table 16 Key texts used to analyse textual coordination

Policies and Institutional texts	Details
National Health Policy 2002 (Government of India, 2002)	Presents vision for health care and service delivery in India
NRHM Mission's document (Government of India, 2005b)	Describes NRHM's strategies and approach to providing healthcare to the rural population
NRHM framework for implementation (Government of India, 2005c)	Describes the institutional arrangement and implementation framework for the NRHM
Memorandum of Understanding (MoU) (Government of India, 2005a)	Signed between the MoHFW and the State Department of Health to support the implementation of NRHM in the state
Model Rule and Regulation, Bylaws for health societies (Government of India, 2005a)	Provides details on the content of bylaws and rules and regulations for health societies.
District Health Action Plan (DHAP) (State Health Society, n.d.)	Prepared by district health society and submitted to the SHS
State Programme Implementation Plan (State Health Society, n.d.)	Prepared by the SHS after compiling district health action plans and submitted to the MoHFW
Record of Proceeding (ROP)	Prepared by the MoHFW to inform the SHS about approval of programmes and budget for State Programme Implementation Plan
Job description/TOR of health workers	Outlines the qualifications, roles and responsibilities of a position
Affidavit	Submitted by staff members when they join the DHS or SHSB.
Various official file notes	Administrative file texts, read and signed by health officials and administrators
Letters, emails and any form of communication	Official communication to inform health workers, administrators and managers about decisions or information related to health programmes
The Bihar Finance (Amendment) Rules, 2005 (Government of Bihar, 2005)	Financial rules for all government bodies in Bihar

Some documents were publicly available on the health department websites, such as the National Health Policy 2002, the MoU between the Ministry of Health and Family Welfare and State Department of Health, the Rule and regulation for the health societies at district and state level. However, some were not accessible to the public, such as official orders, administrative file notes, programme reports and financial data. The district health administrators allowed me to review meeting notes, official documents, file notes and administrative orders for research purposes.

5.7 Data analysis

In IE, categorising data may distort and obscure the relations at the crux of the institutional ethnography (Rankin & Campbell, 2009). The main analytical notion is the notion of social relations at the core of the research interest. Each information shares relevant information that allows researchers to see the emerging big picture. The analysis goes beyond producing informant accounts or interpretation of their subjective experiences, rather, the analysis aimed to discover coordinating relation in workers' everyday work that takes place at the local site. Eric MyKhalouskiy pointed out "analytical thinking begins in the (data collection) interview" (DeVault & McCoy, 2006). He suggests that "talking to people", researcher checks his understanding as it develops, which is crucial to mapping the social under enquiry.

Researchers are required to provide convincing evidence to account for the experience that have been described by informants in the analysis process. Data analysis follows a specific thread of social organisation and attention is paid specifically to processes and coordination. Researcher moves back and forth between data (texts, transcripts and observational records) that focus on the notion of participants' work and the context it was produced (DeVault & McCoy, 2006). Researcher uses his reflexivity and engages with these actualities, consistently checking his conceptual understanding with what is being learned through actualities as they experienced by those involved (Smith, 2005).

In this project, I used Nvivo 10 software to organize and manage research data i.e. interview transcripts, observational notes, and texts. The observation notes and interview transcripts were manually thematically coded. The coding process was not like creating thematic codes where participants' subjective experience was categorized rather, it was a thematic segregation of information from data that describe health workers' work. For example- when a health worker explained about drug procurement at a district hospital, I coded this as health worker's work in drug procurement rather than how he felt during the procurement process or his opinion.

I used all three forms of data to describe the work process. Interviews helped clarify and understand the observation data whereas official documents were reviewed to see how the work within the integrated programmes were described, categorized, accounted, funded or otherwise socially organized. The purpose of reviewing these

texts was not to validate or verify what participants told me during the interviews. The analysis aimed to discover connections and create a social map to discover how participants' activities and everyday work in integrated programmes are shaped by the interests of those who are located at a distant location (away from the district hospital). The incorporation of documents, or texts, into the inquiry allows me to look beyond interview and observation data.

I read the transcripts and focused on discovering what staff members do to deliver health services. Some of the health workers' work, such as "waiting for the patients at the NCD clinic", "evaluating patient's load while doing counselling" were considered as work by health workers. However, "waiting at district health society for release of salary", "convincing manager to prepare salary file", "visiting administrative offices" were categorized as extra work as they were not listed in their job description. I discovered how health workers categorise their doing as "work" or "extra work".

Second step in the analytic process was to make institutional connection between health workers' work and institutional processes. File containing coded themes from interviews, observations and official documents described the interconnection between the participants' work and organizational process. The data described health workers' work, which is in line with organizational priority, to provide medical care to patients through several channels.

This part of analysis was aimed to showing connection between health workers' everyday activities and organizational processes which includes registration, counselling, screening and diagnosis, risk management, and others. The notion of text coordination is essential to examine what the text does to readers when they read in an institutional setting. I read these officials documents multiple times to understand what these texts ask a reader to do in the process. For instance, the Bihar Financial (Amended) Rule 2005 provides instructions to get approval from purchase committee for the procurement of drugs if it is more than Rs. 15000 (220 USD) of total sum. It was clear that these texts were outlining the institutional procedures that must be followed, adhered for those who involved in the procurement of drugs and consumables for health programmes. It was evident that these texts were written for specific purpose to carry out specific tasks within an institutional setting. This helped me to discover the textual practices within the integrated service delivery.

The analytical process also highlighted a lack of clarity in the official document which prevents managers to undertake institutional tasks, leaving them to develop local practices that cause troubling experiences at the local setting. For example, I identified performance appraisal was another institutional process that health administrators have to organise to review the health workers' performance. However, administrative letters that outline the human resource policy and emphasise the performance appraisal for the renewal or extension of health workers' employment contract, do not provide how the performance of health workers be appraised? Who will do the appraisal? These information were not available to the administrators which affected the institutional task of performance appraisal.

I used mapping as an analytical approach to create a visual account of the institutional processes. I created a map that represent participants, their work and the texts that coordinate their doing at the hospital while delivering health care. The mapping represents the actual work processes, text-based works, and local decision patterns that shape the health workers experience in implementing integrated NCDs and mental health programmes. I began the mapping process while I was reading the interview transcripts during my fieldwork. The map was illustrated with rough drawing on paper. and it was further developed and re-produced with links with institutional processes that participants described during interviews, particularly the involvement of those who are not present at district hospital, but frequently appears in the participants' account. I used to chart papers to create the initial maps by highlighting the institutions, person, works and texts and their direct and indirect influence on each other (see figures 7 and 8). These maps were used for further analysis and analytical writing to highlight disjunctures and ruling relations.

Later, I used Adobe Illustrator 4.0 to create simple digital diagrams, which I used in this thesis

Figure 7 Visual account of rule and regulation of health societies

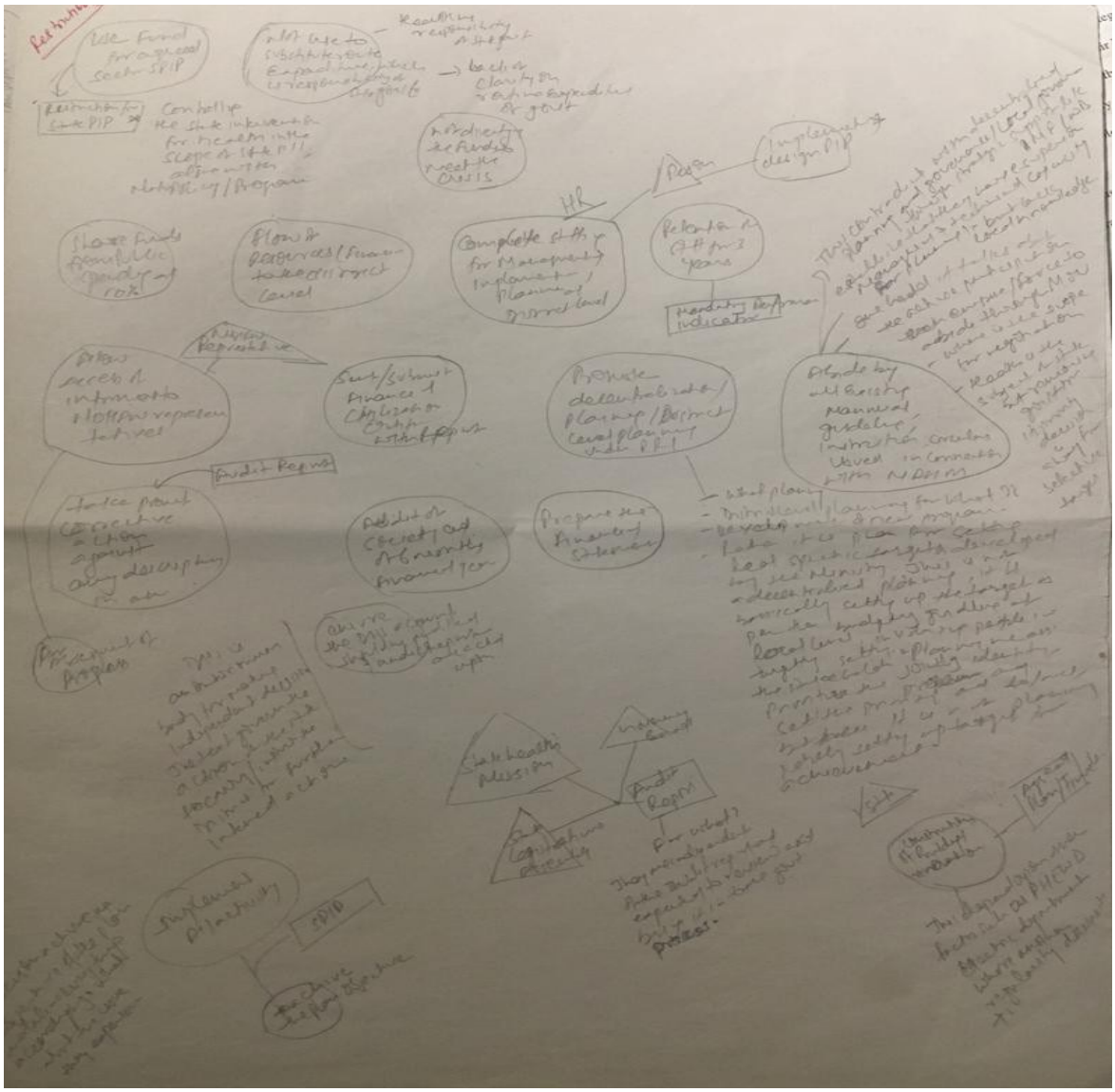
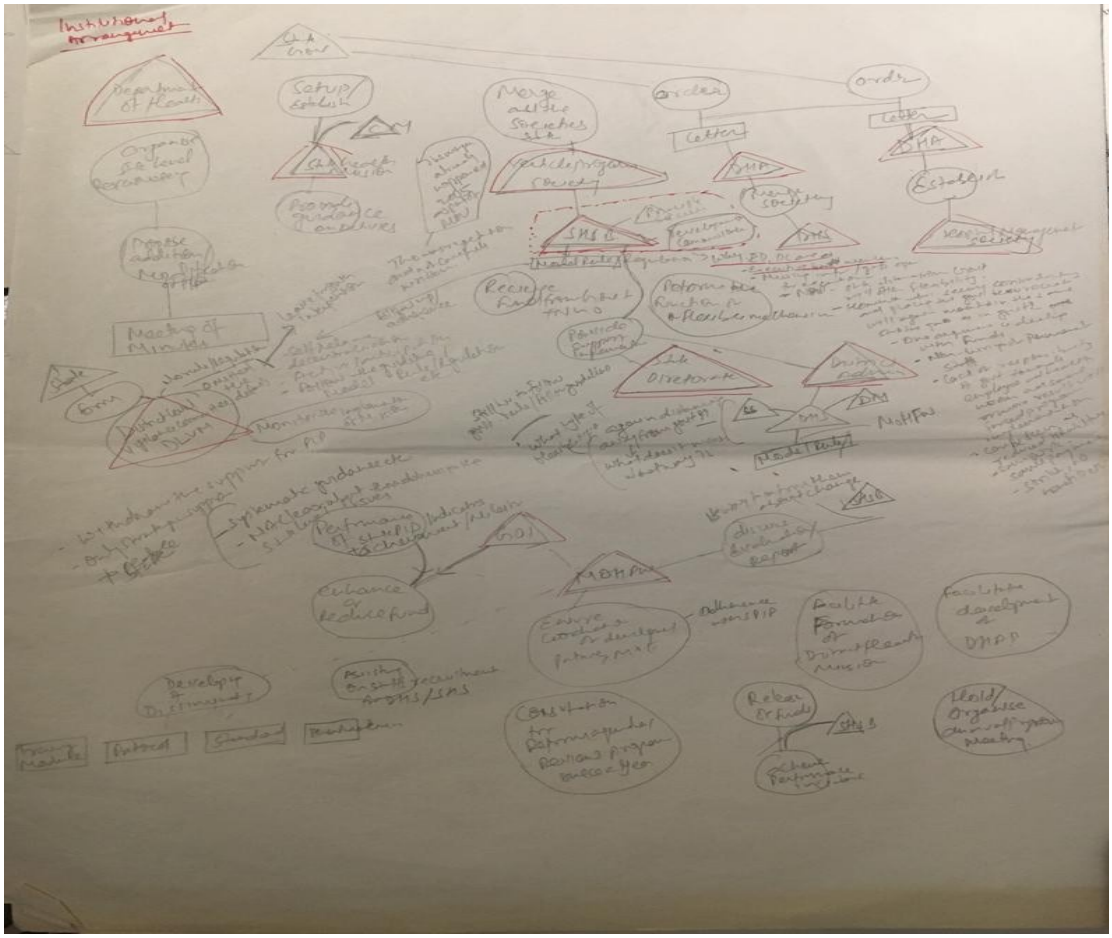


Figure 8 Visual account of institutional arrangement under NRHM



The visual maps provide an understanding on how texts and participants'' works and activities are interconnected and how they brought health workers together in an institutional relationship and direct them toward particular doing. It provides a basis for describing the work process and explaining how the work within integrated programmes are organised. For example, the work of drug procurement is completed by health worker, but it is connected to the manger's work which includes providing money, adhering with institutional rule of procurement of goods and services. This visual analytical process allowed me to understand how the work of manager and health worker are connected and coordinated through the financial rule.

Third step of data analysis shows how institutional processes and practice is ideologically organized around a particular idea and knowledge such as transparency, administrative control, and contractual employment. I looked beyond the service delivery at district hospitals to the policy environment in which the government

authorised the texts and planned to deliver health care in the integrated NCDs and mental health programme. The questions I tried to answer in this stage related to the origin of these texts, the action these texts were intended to achieve and the authority they hold within administrative and institutional hierarchy.

The analysis reveals that social organization of knowledge which discursively organises the implementation of integrated NCDs and mental health programme. The analysis shows that participants' actual experience at district hospital is connected to dominant discourses or ideologies which are incorporated into the health care planning and service delivery at national level. The analysis departs from the studies in which researchers used pre-determined conceptual frameworks or theories to examine the participants' experiences.

The purpose is to demonstrate how everyday experience or works of participants are invisible anonymously connected with the work of other located outside the local setting. Organizational power relations are revealed by examining an idea or knowledge prevails in an institution. The analysis focusses on demonstrating how health care delivery is organized by privilege some knowledge while marginalizing other knowledge. For example, I found how the institutional procedures of staff recruitment and drug procurement is linked with the idea of transparency and accountability, which is embedded into the organisational policies of DHS, SHSB, BMSICL, the department of health and widely discussed in organisational literature.

5.9 Ensuring trustworthiness in the research

Ensuring goodness (Morrow, 2005) or trustworthiness (Guba& Lincoln, 1982) in qualitative research is important, and it is dependent upon the research paradigm and discipline in which the research is conducted. Rigour is traditionally judged on four criteria, referred to as credibility, transferability, dependability and conformability (Guba& Lincoln, 1982). The researcher uses strategies for trustworthiness from the start of the research. Some strategies to ensure the trustworthiness of a study include triangulation, member checking, peer debriefing and reflexivity (Creswell & Miller, 2000; Guba& Lincoln, 1982; Lincoln &Guba, 1986). According to Campbell and Gregor (2004 p.55), "the scientific nature or validity of a research result is established when methodical procedures are logically consistent with an accepted and adequately described theory of knowing and are demonstrably followed".

Methodologically, rigour in IE enquiry is not achieved through techniques such as triangulation, and rich and thick description, as used in qualitative research, particularly in traditional ethnography. Rigour in IE comes from the coherence of the developing map of social relations (DeVault& McCoy, 2006). The researcher does not focus on checking the recurrence of themes or verifying the accuracy of "what informants say"; rather, he checks the creation of new knowledge to explain "how" something works, proceeding through enquiry while returning to participants when questions or inconsistencies arise (Devault, 2006). This kind of analysis utilises data generated about "what people know" and "what they do" for the purpose of identifying, tracing and describing the elements of trans-local social organisation and its ruling relations (M. Campbell &Gregor, 2004).

In this study, I used purposive sampling to identify research participants as the study progressed. However, due to the small number of health workers in the integrated programmes, all health workers who gave consent were included in the study. I present visual maps and thick description to allow readers to see the institutional relations that coordinate the participants' work in the integrated programmes. There may be questions regarding the transferability (commonly known as generalisability) of the findings to other contexts. It is important to note that in institutional ethnography, "the local is penetrated with the extra- or trans-local relations that are generalised across particular settings" (D Smith, 2005, p. 42). The ruling relations and institutional processes made visible at the district hospital are transferable to other settings.

5.10 Ethical considerations

In institutional ethnography, human participants are not subjects of the study. Institutional ethnographic studies focus on interconnected activities, how they are organised and explicating social relations often embedded in the texts (M. Campbell &Gregor, 2004, p. 57). Before I began data collection, ethical approval was sought from the Research Ethics Committee of Queen Margaret University, Edinburgh. Further, permission from the SHS Bihar was obtained to undertake fieldwork at public hospitals in Bihar.

During fieldwork, there were some important issues related to authority, power and control that impacted participants' dignity (Cassell, 1980) and their behaviour in the

research process. In previous sections, I describe my dual role as a researcher and an intern at the SHS Bihar, which gave rise to ethical considerations that required reflection throughout the research process. The State Programme Officer at the SHSB wrote a letter (Appendix 5) to district health officials introducing myself and my research project. This support letter enabled me to gain access to participants across the research sites.

For some staff, especially those working at the district administrative office, the letter projected me as an insider, as I was working as an intern with the SHS Bihar, whereas health staff involved in service delivery recognised me as an "outsider" who came to audit their work through research. In the beginning, this resulted in uneasiness among staff, especially those involved in service delivery. To reduce this uneasiness and fear, I spent considerable time with staff to build trust and transparency for the research project and clarified the purpose of my presence at the district hospital. I met participants on different occasions to get to know them and share my research activities and process. These occasions included official meetings, capacity building workshops, and district hospital or social gatherings such as birthday parties, festivals, weddings, both within and outside the official work environment.

In this study, I obtained informed consent from participants prior to conducting research. Before each interview, an information sheet (in English and Hindi) was shared with participants to help them understand the context of the study, its aim and the standard protocol of the research. Once participants had read the information sheet and received answers to any questions they had, written informed consent was obtained from each participant before the interview. All the interviews were conducted when health workers were not busy or involved in service delivery. Interviews were sometimes interrupted by other staff or patients, which is a natural phenomenon in a busy hospital setting. We stopped the conversation whenever such an interruption occurred.

I explained to participants that as a researcher I would observe and record issues related to integrated NCDs and mental health programmes, with the purpose of collecting data on how services are organised and delivered at the district hospital. These observations could include their work, activities, experiences and the ways they deliver health services and interact with patients. To my surprise, these health

workers wanted me to report their work-related problems to senior administrators. Some of their problems include shortage of health work, drug procurement, their poor working conditions and irrational deployment. Health workers believed that health administrators and managers were aware of these issues but were not taking appropriate steps to resolve them. As data collection progressed, participants' expectations increased. They wanted me to present their problems and challenges to senior health administrators at the department of health. I informed them that as a researcher or as an intern, I would not be able to present their individual concerns to the authorities. I also informed them that I would share the key problems and issues, such as staff shortages, unreasonable workload or delays in salary, with senior health administrators, and it would be up to the officials to address these issues. I encouraged them to talk to their supervisor or administrative office about their concerns regarding programme implementation or service delivery.

While conducting interviews, some of the participants did not want me to use an audio-recorder to record the interviews. They stated that they trusted me, but they feared these recorded materials could be used as evidence of the problems and issues in the integrated programme. I respected these views and did not record interviews; rather, I took rough interview notes that I later expanded.

On many occasions, I observed service delivery at the general OPD, mental health OPD, NCD clinic de-addiction centre and other units at the district hospital (see Table 3). Before I began my observation, I verbally explained the purpose of observation to the respective health workers and doctor and requested permission to observe the service delivery process. Once permission was granted, I obtained verbal consent from patients to observe medical consultation process. I explained that I would not record any personal or confidential information and that at any time they were free to ask me to leave the room (OPD, NCD clinic, etc.), without any consequences to their treatment at the hospital. Once patients gave verbal consent, I began my observation.

While observing the service delivery and the work of health workers at the mental health OPD, I did not record any personal information about patients, as this could be sensitive. However, I took notes about patient-provider interactions and relationships, and the nature of instructions or guidance to patients during the medical consultation. On some occasions, the clinical psychologist requested that I not observe the

consultation at the mental health OPD due to the limited mental capacity of the patients, as they could not provide informed consent. On such occasions, I did not observe the session and instead waited outside the OPD room. Later, staff members provided me with necessary information for the study; this information was related to patients' medical problem, length of the consultation, the advice given to the patients and the future activities planned during consultation. Sometimes, I voluntarily withdraw from the observation site when I felt that my presence could potentially cause stress, anxiety or any concern to patients or their family. I encountered one ethical challenge while writing observation notes: providing a detailed description of staff members' work sites might reveal their identity.

During my fieldwork, I reviewed patients' case records and collected some samples (such as data collection format, case records, psychologist assessment format) for analysis of the reporting and recording mechanisms in the integrated NCDs and mental health programmes. These case recordings included patients' personal and medical information, which is sensitive in nature. To ensure confidentiality, anonymity and privacy, I omitted all identifiable personal information from my analysis. On some occasions, health workers were hesitant to share the reporting format and requested that I wait for their supervisor's approval. I met with the appropriate medical officers and informed them of the purpose of collecting sample case records and explained that I had obtained approval from the SHSB to interview, observe, review and collect documents for my doctoral research. After explaining that this material was required for my research, the officials approved my request and instructed the health workers to provide me with the required documents and forms and asked them to support my data collection process.

5.11 Limitation

One methodological limitation could be the time I spent at research sites. It is important to highlight that I conducted fieldwork at four sites (three districts and one administrative office in Patna). The time I spent on fieldwork was not distributed evenly across district hospitals. I spent a large amount of time during fieldwork at the district hospital in West Champaran to understand the interconnection and interdependence, and then I moved to other districts to understand the programme implementation. However, more time spent at the other two district hospitals may

have provided new discoveries of connection and dependencies that coordinated health workers' work and their doing.

The study participants were mainly health workers and managers connected to the NCDs and the mental health programme. The recruitment of participants may have posed limitations in reaching eligible participants. For example, some managers or health officials working in other health programmes may have had other insights about tension and conflict while delivering health care. In this study, I did not include the standpoint of those who wrote the policy or produced the texts. Policy makers' perspectives could have provided the opportunity to make new discoveries about the integrated programme and its implementation.

Another limitation of this study is the unavailability of NPCDCS programme staff. In the NPCDCS programme, all positions were vacant except for one counsellor in the West Champaran district. Most of the health workers included in the study were recruited for the NPHCE programme. These health workers are deployed in the NPCDCS programme to provide care. However, I focused on the work of these health workers to explicate the social organisation of the integrated programme.

Chapter 6

Institutional Framework for Implementation of Integrated Health Programmes

6.1 Introduction

In this chapter, I will explore the institutional framework for implementation of the integrated programmes as a textually mediate process, through the lens of Dorothy Smith's discussion of how texts organise social relationships and bring people into a chain of actions (see Chapter 4). My analysis begins with an in-depth analysis of various institutional texts[6] available on the government website, which I discovered during my fieldwork while talking to participants. I use two concepts from Smith (2006) –*text-reader conversation* and *text-action-text practice*, to think through how these institutional texts work together to organise governance and management at state and district level for the implementation of integrated programmes in the NRHM framework. Following this, I discuss the institutional processes of human resource recruitment and drug procurement with participants involved in or related to integrated NCDs programme implementation. This is to understand how these institutional texts are interpreted and used while making actual decisions.

Smith (2006, p.67) proposes that text should be analysed as an occurrence in time and space, as part of an on-going sequence of connected activities, rather than abstract objects. In exploring the framework for the implementation of the integrated programme, I used idea of material replicable (2006, p.66) text that can be read by different people as the same text. But as people interact with and interpret these texts, it brings them into an institutional chain of actions, which organises them and their work in the local setting.

In carrying out my study, I first analysed the National Health Policy 2002, a text document that set out an overview of health care provisions in India. This text is linked to other textual documents that entail the activities of the NHP 2002, such as:

- NRMH mission document 2005,
- NRHM framework for implementation 2005,

6Sometime referred to as authoritative or regulatory texts.

- the MoU between the Department of Health and MoHFW, 2012
- Model bylaws of health societies, 2005
- Generic Rules and Regulations of health societies
- The NPCDCS guideline 2011
- The NPCDCS Revised guideline 2013
- Record of proceeding (ROP) 2014-15, containing budget approval details by the MoHFW

Apart from these texts, I also accessed the Bihar Financial (Amended) Rule 2005, along with administrative letters and official texts which facilitated coordination to implement integrated NCDs programmes activities.

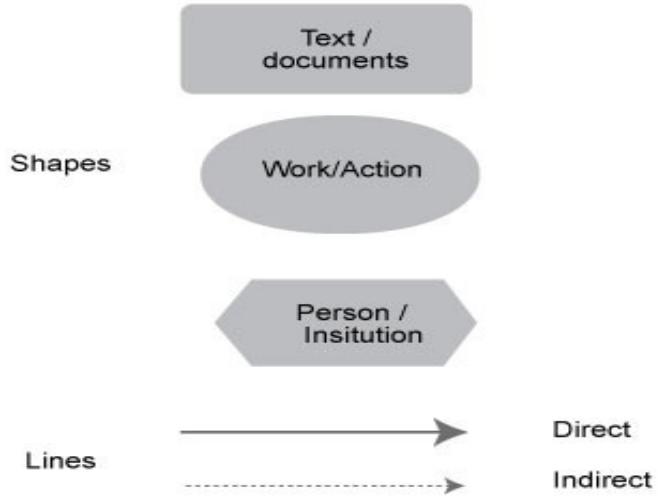
While these documents appeared to be distinct and separate, they function together to provide an overview of how to understand and implement the National Health Programme in the state. I also gathered texts (official documents letters, memos, etc.) generated by the SHSB, MoHFW and the DHS to explore the intended actions and coordinate efforts in relation to activities in the NCDs programmes. While following the text-action-text sequence and interconnection link, I produced maps, which provide an overview about how these regulatory texts bring intended changes and organise participants at the district hospital.

I read these regulatory texts as an uninformed, first-time reader, as an experienced public health worker and as an outsider who does not know about the integrated programme implementation within the health system. During my interaction with health workers, they reported a shortage of health workers and a lack of drug in the NCDs programme. I tried to understand and explore how these regulatory texts related to the institutional procedures of staff recruitment and drug procurement in the integrated NCDs programmes. I was interested in understanding how health workers experience the staff recruitment and drugs procurement procedures and how they adhere to these regulatory texts.

I recruited participants after spending an extended period at the district hospital while observing, collecting and reviewing official texts. These participants (counsellor,

nurse, HR manager, civil surgeon, nodal officer, hospital attendant and, programme managers) work at the district hospital in various capacities. In this chapter, I will use the following legend (Figure 9) to visually present the institutional relation and coordination for the implementation of integrated health programmes.

Figure 9 Legend



6.2 The policy context and institutional arrangements for integration of health programmes

Integration of health programmes has been on the agenda item for a long time in India. Since the National Health Policy 2002, there have been significant changes in national health program implementation. The National Health Policy 2002 emphasised the integration of all vertical health programmes under a Single Field Administration (Government of India, 2002). It states that the integration of health programmes would bring *"a desired optimisation of outcomes through a convergence of all public health inputs*" (Government of India, 2002, p. 23). It adopted decentralisation as an approach to reform and re-structure the health care delivery system in India.

In 2005, the Government of India launched the National Rural Health Mission (NRHM) 2005, India's flagship health programme. The NRHM aimed to bring "*architectural correction of the health system*" to provide accessible, affordable and accountable primary health care services in rural India (Government of India,

2005b). To achieve the desired goals outlined in the NRHM, the MoHFW produced various institutional texts, such as the NRHM document and the, NRHM framework for implementation to clarify the strategies and framework for institutional reform. These institutional texts also aimed to inform the state about its role and responsibility in NRHM implementation. The NRHM "Mission Document" outlines the overall mission, vision and strategies for the programme implementation, while the NRHM "Framework for Implementation" (2005-2012) provides guidelines about how the state should re-structure the health system at district and state level by merging existing health societies into an integrated health society(Government of India, 2005c).

In 2005, the MoHFW and Department of Health, in the government of Bihar signed a memorandum of understanding (MoU) for restructuring the health system and strengthening the public health delivery mechanism in Bihar. Under the MoU, the central government committed to provide financial support for implementation of the national health programmes. The MoU was instrumental in creating an institutional arrangement for implementing the NRHM. It outlined the working relationship between state and central governments. According to the MoU, the MoHFW will provide financial assistance and technical support for implementation and programme monitoring, whereas the department of health, Govt. of Bihar,) will work as an implementation agency and will ensure adequate infrastructure, staff recruitments and other arrangements health workers recruitment and arrangement all the programme implementation support.

The MoU entails that the state must re-structure the health system to receive financial support for the national health programmes. These mandatory institutional arrangements include (see Figure 10):

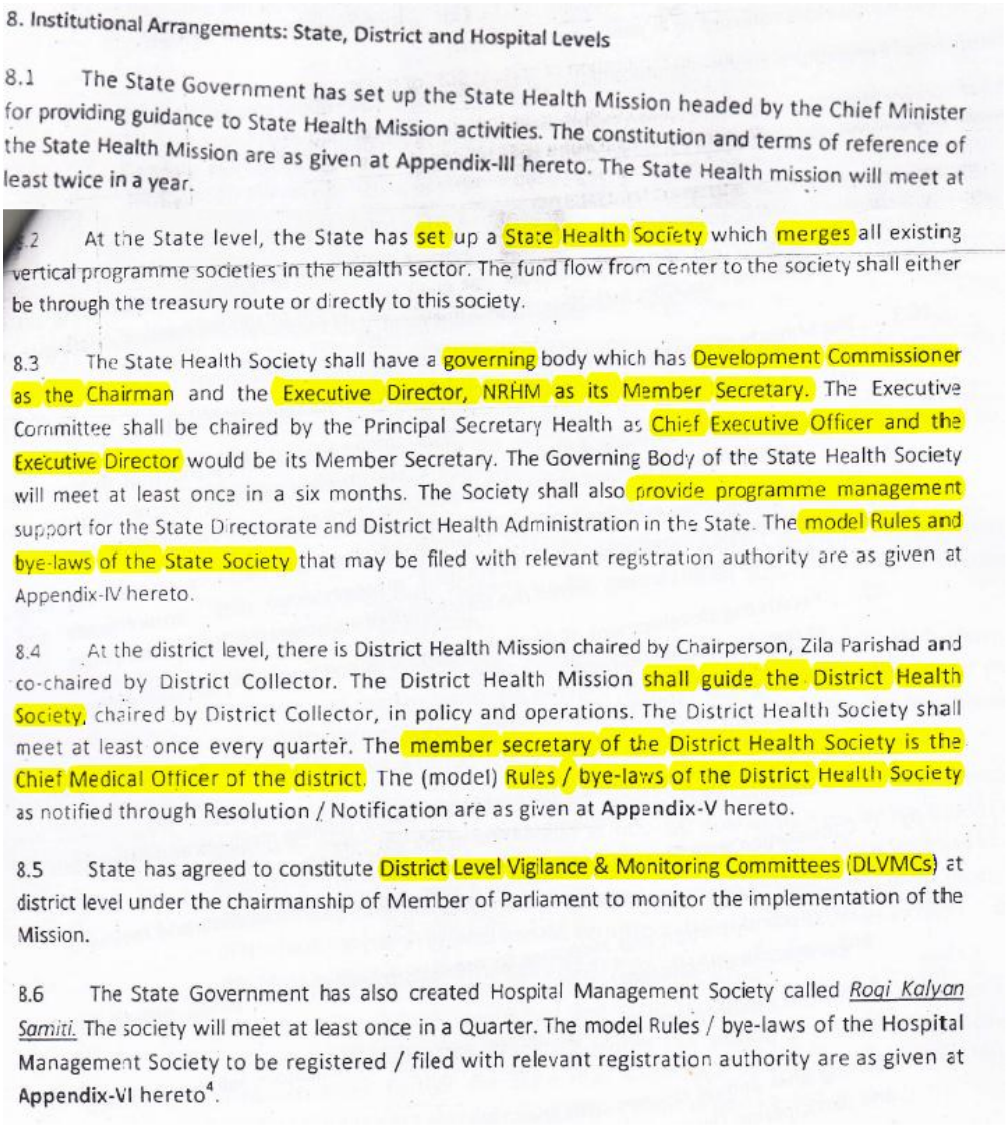
- Setting up the State Health Mission under the chairmanship of the Chief Minister to provide guidance for the health programme (Section 8.1 of the MoU)

- Merging existing health societies (such as leprosy societies, tuberculosis societies and others) and establishing an integrated health society at the state and district level to receive funds for national health (Section 8.2 of the MoU)

- Senior Government Officials as heads of the health societies (Section 8.3 of the MoU)

- Merging all district level health societies into an integrated health society governed by senior administrators

Figure 10 Extract of MoU between department of health and the MoHFW (2012, p.4-5)



8. Institutional Arrangements: State, District and Hospital Levels

8.1 The State Government has set up the State Health Mission headed by the Chief Minister for providing guidance to State Health Mission activities. The constitution and terms of reference of the State Health Mission are as given at Appendix-III hereto. The State Health mission will meet at least twice in a year.

8.2 At the State level, the State has set up a State Health Society which merges all existing vertical programme societies in the health sector. The fund flow from center to the society shall either be through the treasury route or directly to this society.

8.3 The State Health Society shall have a governing body which has Development Commissioner as the Chairman and the Executive Director, NRHM as its Member Secretary. The Executive Committee shall be chaired by the Principal Secretary Health as Chief Executive Officer and the Executive Director would be its Member Secretary. The Governing Body of the State Health Society will meet at least once in a six months. The Society shall also provide programme management support for the State Directorate and District Health Administration in the State. The model Rules and bye-laws of the State Society that may be filed with relevant registration authority are as given at Appendix-IV hereto.

8.4 At the district level, there is District Health Mission chaired by Chairperson, Zila Parishad and co-chaired by District Collector. The District Health Mission shall guide the District Health Society, chaired by District Collector, in policy and operations. The District Health Society shall meet at least once every quarter. The member secretary of the District Health Society is the Chief Medical Officer of the district. The (model) Rules / bye-laws of the District Health Society as notified through Resolution / Notification are as given at Appendix-V hereto.

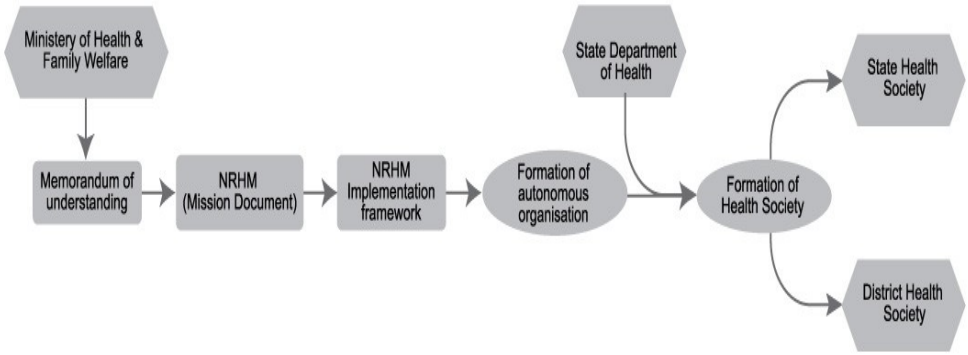
8.5 State has agreed to constitute District Level Vigilance & Monitoring Committees (DLVMCs) at district level under the chairmanship of Member of Parliament to monitor the implementation of the Mission.

8.6 The State Government has also created Hospital Management Society called *Rogi Kalyan Samiti*. The society will meet at least once in a Quarter. The model Rules / bye-laws of the Hospital Management Society to be registered / filed with relevant registration authority are as given at Appendix-VI hereto[4].

The MoU holds regulatory notion and defines the scope, roles, commitments, performance review processes, and financial arrangement for the partnership

between both parties. I discovered there were other interlocking texts which were produced to expand these regulatory notions and make it explicit for the state to understand the institutional arrangement under the agreement. These interlocking texts model memorandum of association for health societies, generic bylaws, model rule and regulation of societies. It was expected that the state adopts these interlocking texts to re-structure and create institutional arrangements at district and state level by forming various health societies and working committees. Figure 11 illustrates a visual depiction of NHP 2002, NRHM 2005 and the MoU. These texts hold the power and authority of the MoHFW and must be followed and adhered to.

Figure 11 Visual depiction of direct and indirect action of institutional text

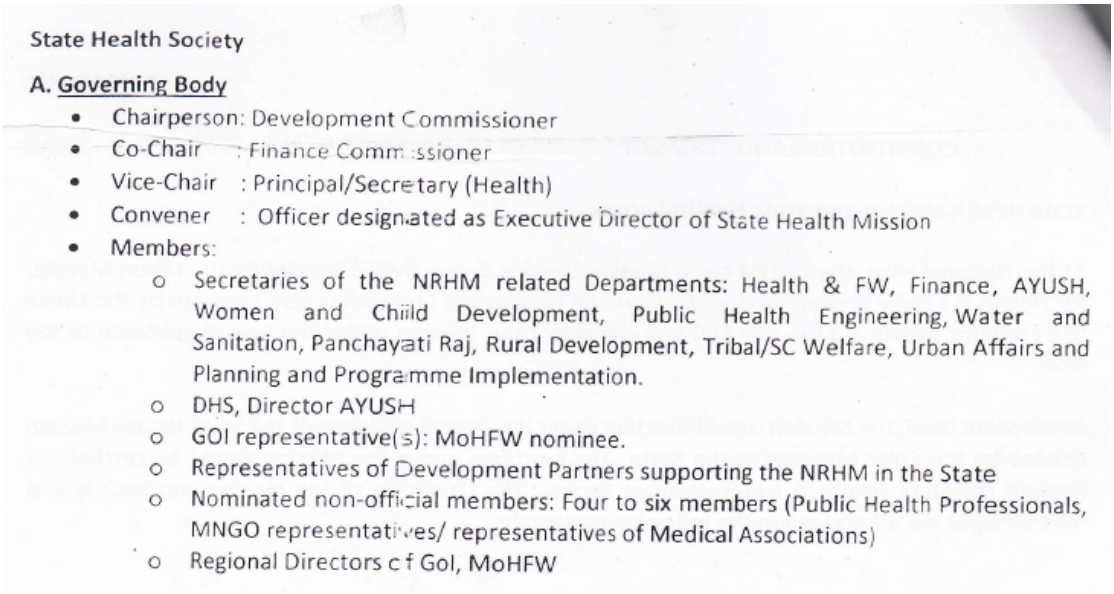


At district and state level, these health societies were formed to provide additional managerial and technical support to the Department of Health for implementation of National Health Programmes in the State. These societies are considered autonomous organisations (NHP 2002; NHRM 2005) that can independently plan, manage, implement and monitor the National Health Programmes. As an autonomous organisation, a Health Society and its governing boards can make decisions without any external influence.

Examining the institutional texts showed that the autonomy and decision-making capacities of health societies were restricted and limited by the MoHFW through textual work practice. The senior executive positions in the health societies were pre-defined and reserved only for senior administrative officials and bureaucrats involved

in government (MoU 2012), which contradicts the notion of organisational autonomy. Figures 12 and 13 illustrate how executive positions are reserved for government administrative officials in the governing body of the SHSB and DHS as a condition in the MoU.

Figure 12 Governance structure of state health society(MoU, 2012, p.23)

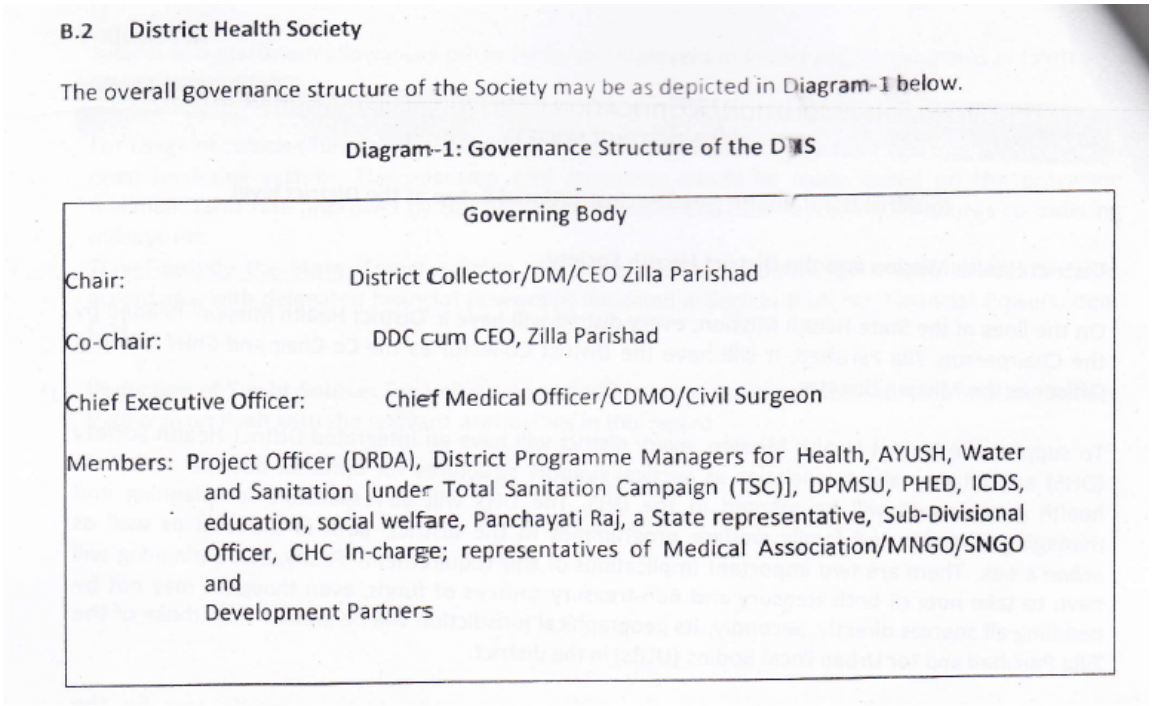


State Health Society

A. Governing Body

- Chairperson: Development Commissioner
- Co-Chair : Finance Commissioner
- Vice-Chair : Principal/Secretary (Health)
- Convener : Officer designated as Executive Director of State Health Mission
- Members:
  - Secretaries of the NRHM related Departments: Health & FW, Finance, AYUSH, Women and Child Development, Public Health Engineering, Water and Sanitation, Panchayati Raj, Rural Development, Tribal/SC Welfare, Urban Affairs and Planning and Programme Implementation.
  - DHS, Director AYUSH
  - GOI representative(s): MoHFW nominee.
  - Representatives of Development Partners supporting the NRHM in the State
  - Nominated non-official members: Four to six members (Public Health Professionals, MNGO representatives/ representatives of Medical Associations)
  - Regional Directors of GoI, MoHFW

Figure 13 Governance structure of district health society (MoU, 2012, p.57)



B.2 District Health Society

The overall governance structure of the Society may be as depicted in Diagram-1 below.

Diagram-1: Governance Structure of the DHS

Governing Body	
Chair:	District Collector/DM/CEO Zilla Parishad
Co-Chair:	DDC cum CEO, Zilla Parishad
Chief Executive Officer:	Chief Medical Officer/CDMO/Civil Surgeon
Members:	Project Officer (DRDA), District Programme Managers for Health, AYUSH, Water and Sanitation [under Total Sanitation Campaign (TSC)], DPMSU, PHED, ICDS, education, social welfare, Panchayati Raj, a State representative, Sub-Divisional Officer, CHC In-charge; representatives of Medical Association/MNGO/SNGO and Development Partners

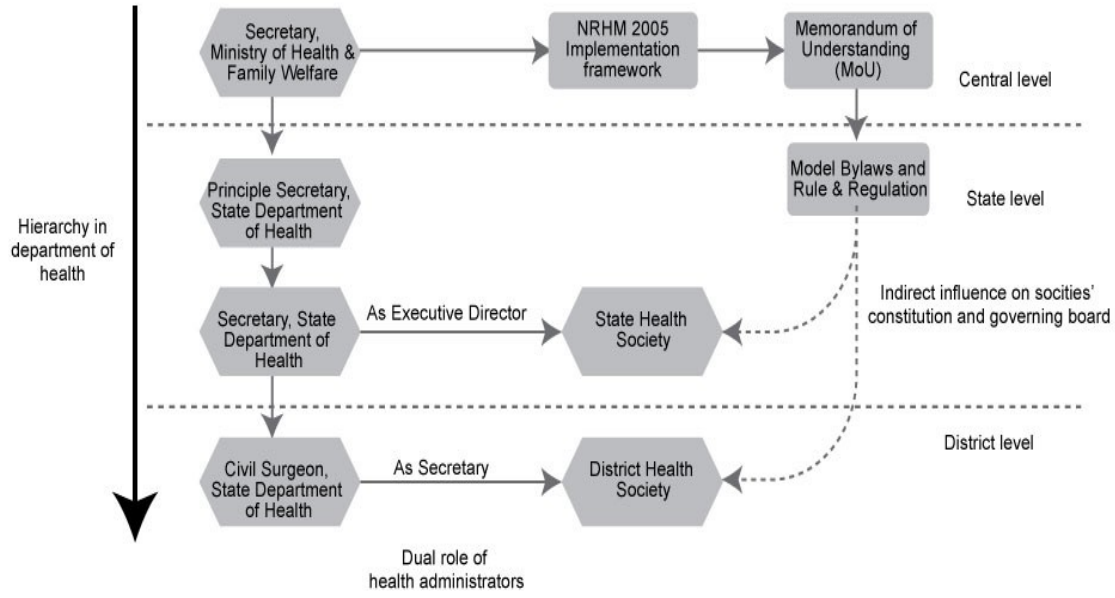
All three organisations – the Department of Health, SHSB and, DHS – are distinct organisations. They are independent, with their own governance and management

procedures. However, there is an administrative and institutional hierarchy among their governing board members, which ensures that the decisions taken by local (i.e. district) level administrators are consistent with regional, state and national level decisions, communicated in the form of texts.

The Secretary of the Department of Health holds the position of the Executive Director in the SHSB. Similarly, the Civil Surgeon (district health administrator) in the Department of Health holds the position of Secretary in the DHS. There is a clear administrative hierarchy within the Department of Health, as the "Civil Surgeon is subordinate to "Principal Secretary". As per government administrative protocol, the Civil Surgeon has to follow all orders issued by Secretary of the Department of Health, undermining the authority and decision-making capacity in the DHS.

Similarly, the District Magistrate holds the "Chairman" position in the DHS, and he is administratively sub-ordinate of the Chief Secretary, who holds the "Chairman" position in the SHSB. SHSB's governing board is primarily comprise of senior health administrators, working in the decision-making positions in various government departments, whereas the DHS's governing board is comprised of district level programme officers and managers. The district level programmes officers (of DHS's governing board) are administratively connect to the senior administrator (SHSB's governing board).Similarly, other governing board members, such as district magistrates, development commissioner, government health officials, secretaries of government department, are interconnected with each other in an institutional hierarchy under same government administration but having different role. There is no organisational hierarchy between the DHS and the Department of Health, but they differ in terms of institutional capacity (finances, resources, manpower, infrastructure, etc.). Figure 14 illustrate the dual role of health administrators in the Department of Health and health societies.

Figure 14 Dual roles of health administrators (civil surgeon and secretary) of the Department of Health in SHSB and DHS



The MoU and institutional texts do not illustrate why the governing bodies of these health societies are reserved for senior government officials. A senior manager at SHSB said that reserving key decision-making positions for government administrators is necessary to maintain administrative control:

> *We have to keep certain positions for government officers and retired administrators…. In society, we deal with crores of rupees* [millions of dollars]. *If they commit fraud, how will you find out* [not a government official but a contractual employee]. *At least for government employees, we have all their records. If they are involved in corruption and caught, then their pension and properties* [financial and physical] *will be seized. However, for contractual employees, we don't have their full record.* (Manager, SHSB, Patna).

The manager presented his viewpoint and rationale for reserving senior executive positions in the SHS and DHS, but this viewpoint is based on the assumptions that government employees are not reliable they may involve in fraud or corruption. The notion of administrative control and accountability are embedded in the membership

of health societies and the institutional arrangements. Such an arrangement reflects that a strict administrative and institutional hierarchy is required for the implementation of national health programmes with limited interference from local authorities (both at district and state level), and this could be achieved by bringing government officials into an organised institutional relationship under an administrative hierarchy.

The MoU, as an authoritative text, plays a central role in inserting the MoHFW's interest in organising the work of government officials in the integrated national health programmes at different levels. This textual work practice manages to bring administrators, officials, managers and health workers into an organised social relationship to ensure that they work together and implement the national health programme as per the MoHFW's instruction.

6.3 Text and organisation of institutional tasks

In this section, I will discuss how institutional texts regulate the work of administrators and govern institutional processes linked to activities in the national health programmes. In interviews, participants highlighted the shortage of health workers and unavailability of drugs as major problems. While talking to the health administrators and managers, I found their narratives referred to certain texts, i.e. letters, emails and orders. I identified, collected and examined these texts to explore the textual practice. This offered me an opportunity to explore staff recruitment and drug procurement procedures for the integrated programmes. In this section, I included the MoU, Rules and Regulations of health societies, and the Bihar Financial Rule (Amended) 2005. These texts were developed at different time to enforce institutional procedures to support the implementation of health programmes.

6.3.2 Employment policy and health worker recruitment in the NPCDCS programme

As highlighted, the MoU between the Department of Health and the MoHFW is the regulatory text that the state government agrees to adhere to in order to receive financial support for national health programme implementation. The state followed these regulatory texts and adopted interlocking texts (model MoA, bylaws, rule regulations) to establish the SHSB and district health societies. It is important to note

that these regulatory texts were produced by the MoHFW at the national level. These texts carried the interest and authority of the MoHFW. They are read, interpreted and used by administrative staff for the implementation of the National Health Programmes. These texts function together and coordinate the staff recruitment policy, procedures, and also involved in the staff recruitment and selection process.

6.3.2.1 Health worker selection and employment

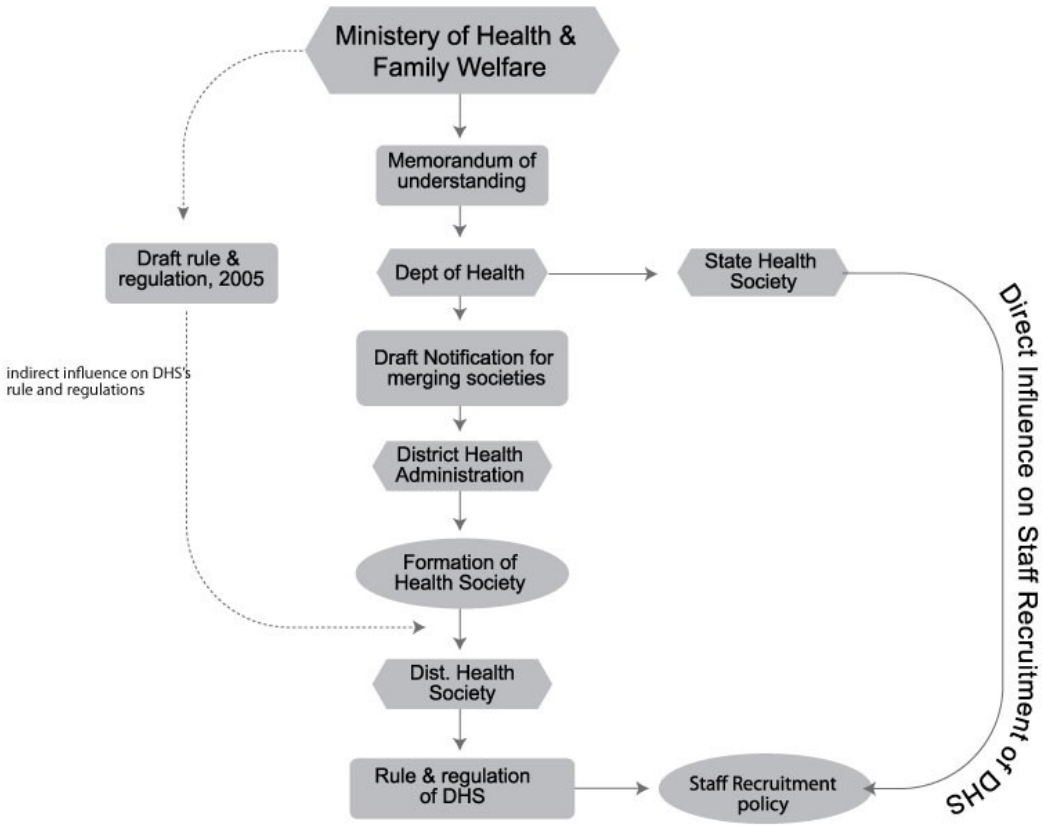
During the first phase of my fieldwork in West Champaran district, I observed a shortage of health workers in the integrated NPCDCS programme. Out of nine staff members designated to work in the NPCDCS programme, there was only one staff member working at the district hospital. The eight NPCDCS programme staff members had resigned from their jobs either because of personal reasons or because their employment contract had been termination by the DHS on the instruction of the SHSB (see table 17). The manager at the DHS reported that there had been a significant delay in the recruitment process for the NPCDCS and NMHP programmes. Later I found the SHSB *"did not recruit health workers on time and many positions in the programme are vacant over the last two years"* (counsellor, NCD clinic). The staff members' account oriented me towards an institutional relationship between the DHS and SHS for health workers' recruitment. I further gathered and explored official texts and talked to health workers to understand how the institutional task of recruitment occurs in the integrated NPCDCS programme.

Table 17 Availability of staff members in the NPCDCS programme West Champaran

NPCDCS Programme	Position	No. of positions	Availability (as of 30th November 2016)
District NCD cell	Programme officer	1	0
	Financial consultant	1	0
	Data entry Operator	2	0
District NCD clinic	Medical doctor	1	0
	Nurse	2	0
	Counsellor	1	1
	Data entry operator	1	0
	Total	**9**	**1**

Health workers in the national health programmes, are employed by the DHS but are selected by the SHSB through a centralised selection procedure at the state level. The MoHFW limits the authority of the DHS by inserting "authoritative texts" into the model rule and regulation, 2005 (Rule) that governs the DSH's staff recruitment procedure for national health programmes. The rule states that *"recruitment may either be made by the State Health Society (SHS) [e.g. recruitment of executive secretary from the open market or recruitment of DPM on deputation basis] or by the DHS (e.g. recruitment of support staff for the district programme manager) or a combination of both may be determined by the State Health Society*" (Model Rule and Regulation 2005, DSH). The authoritative texts restrict the DHS's autonomy to recruit health workers. They further create dependency on the SHSB for health workers' selection. Figure 15 highlights how the MoU between the MoHFW and the Department of Health influences the recruitment process for the DHS.

Figure 15 Indirect influence of the MoHFW on health societies' staff recruitment policy



The MoHFW argued that centralised "*recruitment can be facilitated by the SHS, as this would allow economic scale and save time*" (Government of India, 2005a). But there is no indication of how much time would be saved and how economical it would be. The Rule and Regulation (2005) of the DHS does not contain information on the steps and timeframe for recruitment by the SHS. Thus, it leaves district health officials uninformed about timelines around staff recruitment for the national health programmes. When I spoke with a district health manager regarding recruitment delay, he said,

> *We do not have authority to recruit health workers. They (SHSB) select health workers and ask us (DHS) to give them employment contracts for 11 months. There are many problems in the recruitment process, and they do not want to resolve it. We have sent several letters, and, on many occasions, we have informed them of our challenges in delivery services without adequate staff members but still we have not received any proper solution. We do whatever we can*. (Manager, DHS)

The manager's account highlights the institutional procedure of staff recruitment, where the state selects health workers and asks the DHS to offer them employment contracts on a fixed-term basis. While reviewing recruitment advertisements, I found that in January 2015, the SHS advertised positions and invited applications to recruit for the NPCDCS programme. Later, the SHSB cancelled and withdrew these advertisements, citing that these *"advertised positions are new positions and were not approved by the governing board of the SHSH for recruitment"* (manager, SHSB). The SHSB's governing board must approve staff recruitment for all national health programmes prior to advertisement. The approval of staff recruitment is a complex institutional task which involves many officers and managers who undertake the work of reading programme guidelines and institutional texts, estimating salary and budget for recruitment, assessing other programmatic requirements, preparing and developing job descriptions and producing a summarised official document; this is placed before the governing board for their approval. These managerial tasks could "*take months or years depending upon the approval process"* (manager, SHSB).

In May 2015, these NPCDCS positions were re-advertised, but the SHS did not select participants until November 2016. Many participants cited the "bureaucratic

system" as a reason for recruitment delay, but they offered no details that would allow for an understanding of this bureaucratic system. Table 18 illustrates the steps and the work of the SHS and DHS in staff recruitment for national health programmes under NRHM.

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Table 18 Staff recruitment process at the SHS for health programmes

Steps	Work	Work done by
Step 1	Position request by the programme manager for recruitment as per guideline	SHS
Step 2	Approval by the governing board of SHS Bihar for recruitment	SHS
Step 3	Advertisement of jobs by HR cell	SHS
Step 4	Submission of applications by applicants	SHS
Step 5	Assessment of applicants and preparation of a list of candidates that scored high on the assessment criteria	SHS
Step 6	Shortlisted candidates invited for interview	SHS
Step 7	Selection of candidates through interview, discussion and written exam as per recruitment procedure	SHS
Step 8	Selection letters issued to selected applicants to join the programme in the district	SHS
Step 9	Inform DHS about candidate selection and instruct them to issue contracts as per outline norms	SHS
Step 10	Employment contract letter issued by the DHS	DHS
Step 11	Letters sent by DHS to applicants' universities for document verification	DHS
Step 12	DHS receives certificate verification reports from the universities	DHS
Step 13	If the educational certificate is found to be fake, then necessary administrative action should be taken; if certificates are reported to be original, then the employee to begins works continue his work	DHS

The MoU between the Department of Health and the MoHFW highlights NRHM as not a permanent mission and only "contractual/outsourced staff" are permitted to engage in the its mission activities (Government of India, 2012). The notion of contractual/outsourced staff appears in SHS bylaws stating that the contract of staff members "shall be for a period not exceeding 11 months at a time" (Byelaws of SHS Bihar, 2012). The implication of these institutional texts was observed at the DHS

while reviewing the employment contracts of the health workers in the national health programmes.

In November 2012, the SHSB recruited candidates for the NPCDCS programme. The SHSB wrote a letter instructing the DHS to issue employment contracts to the newly selected candidates for 11 months. Following the SHSB's instruction, the DHS verified the educational documents of selected candidate and issued an employment contract post collecting all the required documents. One of the essential documents is the employee's "notarised affidavit", in which each candidate declares that:

- They will not claim permanent employment in the programme in future
- All the educational certificates and information given during the joining are correct, and if found to be false then they will be terminated from the job, and a criminal case (FIR) could be filed against them.

The 11-month employment contract resonates with the conditions outlined in the MoU. The submission of a notarised affidavit was not part of the MoU. However, on the instruction of the SHSB, the DHS asks all selected candidates to submit a notarised affidavit before signing an employment contract. The 11-monthcontract, along with a notarised affidavit, limits the rights of the health workers and restricts them from any future employment within the DHS. It also puts health workers in a subordinate position within the organisational hierarchy, where they have limited rights to negotiate for their employment terms and conditions. Health workers fear job loss. In an interview, a programme staff member said, "*every day we work under fear. We don't have any permanent job. Anytime the government can end our contract*" (health worker, district hospital). Another employee said, "*we do hard work and sometimes we work 10-12 hours every day. Even though we know that we should only work around 8 hours a day, we cannot say "no". Because if we say no then the officer will create trouble for us because we are not permanent employees.*" Such fear and frustration among staff are evident in their daily work.

6.3.2.2 Extension of employment contract

The extension or renewal of health workers' employment contract is a complex institutional procedure which creates trouble for health workers. The initial 11-monthcontract is subject to renewal upon "*satisfactory performance review of the*

health worker". The contracts of all the health workers in the NPCDCS and NPHCE programmes were due for renewal in November 2013 and December 2013. The programme managers and health administrators "*did not undertake any performance appraisal"* (health worker, NCD cell). The performance appraisal is an institutional task that aims to ensure staff members are well trained and engaged in activities leading to an increase in organizational performance. Generally, the performance appraisal procedure involves the following work:

1. Preparing and developing key performance indicators (KPI) between staff members and supervisor

2. Doing periodic performance review of staff against these KPI and giving them feedback for further improvement

3. Preparing strategies for capacity building and development through education, training and learning

4. Rewarding the work (financial, non-financial or both)

I observed that health workers and their supervisors did not have sufficient information to complete the task of performance appraisal. However, the institutional task of performance appraisal is linked to the renewal of health workers' employment contracts in the integrated NCDs programmes. Instead of completing the task of performance appraisal or developing a performance appraisal process, the health administrators (DHS) wrote several letters to the SHSB for their guidance on renewing the employment contracts of health workers. However, the SHSB did not respond to their letter.

Health workers reported this whole process as a "*frustrating experience"*. They are left in a situation where they fear job loss. In this situation, the district health administrator assured health workers and asked them "*to continue their work in the hospital until the DHS receives instruction from the SHSB for the renewal of their employment contracts*" (health worker, NCD clinic). The administrator's assurance to health workers and instruction to work, with no formal employment contract, was a locally developed practice to mitigate the problem of service delivery at District Hospital. The health workers continued to work for the NPCDCS programme without any formal employment contract. Their salaries were on hold, as they did not

have any formal employment contract with the DHS. For almost a year, health workers "*didn't receive their salary*" (nurse, NCD clinic).

In June 2014, an NPCDCS programme staff member wrote a letter to the District Magistrate, the chairperson of the DHS, informing him about his work at the district hospital and describing his financial situation. In the letter, he explained that "*he has not received his salary for the last six months and expressed his financial hardship to manage his domestic expenses*" (health worker, NCD clinic). He did not receive any response from the District Magistrate or any district health administrator. Many staff reported that they experienced economic hardship and felt helpless during this work period (without an employment contract). They struggled to maintain their "*family expenses especially related to food, children's education and medical treatment, and sometimes borrowed money from family and private moneylenders at high interest rates*" (health worker, NCD clinic). As per financial rules, the DHS "*cannot release the salary for staff until their employment contract is renewed or extended*" (manager, DHS).

While reviewing the official texts, I found the district health administrators wrote four letters to the SHSB, in December 2013, January 2014, March 2014 and September 2014, asking for advice and clarification on the employment contracts and health workers' ongoing work in the NCDs programmes. The SHSB did not offer any guidance until November 2014. On November 14, 2014, and December 10, 2014, the SHSB wrote letters instructing the DHS to release the salaries of health workers in the NPCDCS and NPHCE programmes and extend their employment contracts until the end of December 2014. The letter also instructed the DHS to end the employment contracts of a few staff members, whose positions were removed in the ROP (record of proceeding), which I discuss in the next section.

The short-term contract extension ended on December 31, 2014. There was *"no performance appraisal organised, nor employment contracts extended by the DHS*" (health worker, NCD clinic). In January 2015, the district administrator asked the NPCDCS programme workers to continue their work at the NCD clinic at the district hospital. The senior administrator reassured them that their employment contract will be renewed once the DHS receives instructions from the SHSB similar to those received in December 2014.

With this assurance, health workers continued their work in the NPCDCS programme, expecting that they would get their employment contracts renewed within a few months. However, the DHS received no direction from the SHSB. The lack of instruction from the SHSB and increasing pressure on the health administrator to rationalise the health workers' work without contracts was troubling in the DHS. It was against the financial rules and administrative guidelines. Instead of organising performance appraisals and renewing the contracts of health workers, the DHS ended *"the employment contract of health workers in March 2015 without giving them a30 days written notice 'notice"*(health worker, NCD clinic).The health workers categorised their termination as an "exploitative experience". In an interview, one health worker said,

> *...in the health department, nobody will help you. You have to fight for yourself. Our contract was not renewed the previous...* [name of officer] *when we talked to the civil surgeon, he did not listen to us. We requested him many times and asked him to issue renew our employment contract. He did nothing. Rather, he terminated our job contract. This was not fair to us. We begged him but nothing happened. Since DHS ended our employment contract, we went to meet the Executive Director, SHSB. He also gave assurance and told us we will get the employment later, but nothing happened for a few months. But later we received the letter from SHSB saying that our employment contract has been renewed until further notice.* (Health worker, NCD clinic)

The health worker explained his frustration with the overall employment renewal process. Health workers' recruitment, employment contract preparation, performance appraisal and the employment contract renewal process are connected to the organisational rule and regulation of the SHSB, the DHS and the MoU. The contractual employment of health workers is a condition for the partnership between the MoHFW and the Department of Health, Government of Bihar, for the implementation of national health programmes. The notion of contractual employment inserted in the MoU is reproduced in the rules and regulations of the DHS and SHSB that continue to organise the institutional task of staff recruitment in the NPCDCS and NPHCE programmes at district level.

6.3.2.3 Termination of employment contract

The termination of health workers' employment contracts is also socially connected with the work of the MoHFW. In May 2013, the MoHFW issued a revised guideline to restructure the NPCDCS programme. The revised guideline contains similar strategies and processes as outlined in the original operational NPCDCS (Government of India, 20011). The revised NPCDCS guideline proposed two main changes in the staff structure.

The first change was to discontinue the funding for a few positions, such as cytopathologist, cytopathology technicians and care coordinators, who were part of the cancer care component in the NPCDCS programme. With the revised guideline, the MoHFW discontinued the funding for these positions. This was communicated to the SHSB through the record of proceeding (ROP) in 2014. The ROP is another official text that contains evidence for approval of the budget for implementation of SPIP (State Programme Implementation Plan) and recorded in the National Programme Coordination Committee (NPCC) meeting. The intent of the ROP is to inform and instruct the SHSB to take further action and change the programme implementation structure in the state. The ROP 2014 included no budget for the above positions.

The second change in the revised NPCDCS guideline was related to the remuneration package, eligibility criteria and designation of some positions in the NPCDCS programme. For example, the district programme officer position was discontinued; a new position was conceptualised of Epidemiologist or Public Health Specialist. The eligibility criteria were similar to the district programme officer, but the salary was higher for the new position. Similarly, the designation of "Finance cum Logistic Officer" was changed to "Finance cum Logistic Consultant" in the revised NPCDCS guideline, but the eligibility criteria remained the same. The salary package for the finance cum logistic consultant was increased. The ROP only highlighted the salary for the epidemiologist, district programme coordinator, finance cum logistic consultant and data entry Operation for each district NCD cell established under the NPCDCS programme.

Following the ROP, the SHSB interpreted these changes in the revised NPCDCS guideline as new positions. In December 2014, the SHSB issued a letter to the DHS

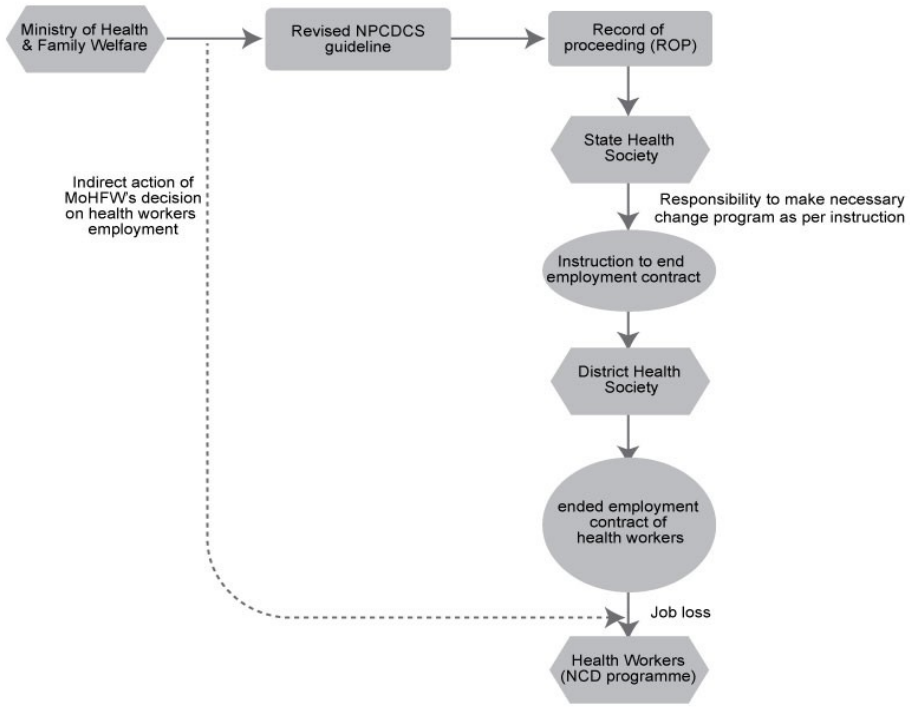
instructing them to end the employment contract of health workers in the NPCDCS programme (see Table 19)

Table 19 Reason stated by SHS Bihar for termination of employment contracts

Sl.	Designation	Reason for termination
1	Cytopathology	Position removed from ROP
2	Cytopathology technician	Position removed from ROP
3	Care Coordinator	Position removed from ROP
4	District Programme Officer	Changes in salary, job description and eligibility criteria
5	Programme Assistant	Changes in salary, job description and eligibility criteria
6	Staff Nurse	Changes in salary, job description and eligibility criteria

Following the instruction from the SHS, the DHS issued letters to health workers in the NPCDCS programme, informing them of the end their employment contract with the DHS. As a result, most of the employees from the NPCDCS programme were terminated; this impacted service delivery in the NPCDCS programme. I will be discussing the implication on service delivery in the next chapter. Figure 16 highlights the direct affect action of the ROP on health workers' employment contracts.

Figure 16 Institutional process and relationship behind the termination of health workers



The changes in the revised NPCDCS guidelines were seen in the ROP which was communicated to the SHSB. The textual work practice can be observed here. The changes in the revised NPCDCS guidelines are consistent with the budget allocation and approval for the health workers' positions in the NPCDCS programme. The allocation and approval process are documented in the form of the ROP and then communicated to the SHSB. The SHSB further takes action and instructs the DHS to make necessary changes, citing changes in the ROP 2014-15. These regulatory texts form a text-action-text sequence and bring the MoHFW, SHSB, DHS and health workers in an institutional chain of actions. Here we can see the work of the DHS is to end health workers' employment contracts, whereas the SHSB's work is to ensure that the district health society ends the employment contract of health workers. The revised NPCDCS guidelines have created an institutional process, and other texts, ROP and letters are used to connect SHS, DHS and health workers into an institutional process without their direct knowledge. When I further explored, I found that the rationale behind the revised NPCDSC guideline to discontinue financial support for some positions was not communicated to the SHSB, DHS or employees working in the NPCDCS programme. The textual coordination not only brought changes in the programme delivery mechanism but also shaped the health workers' experience.

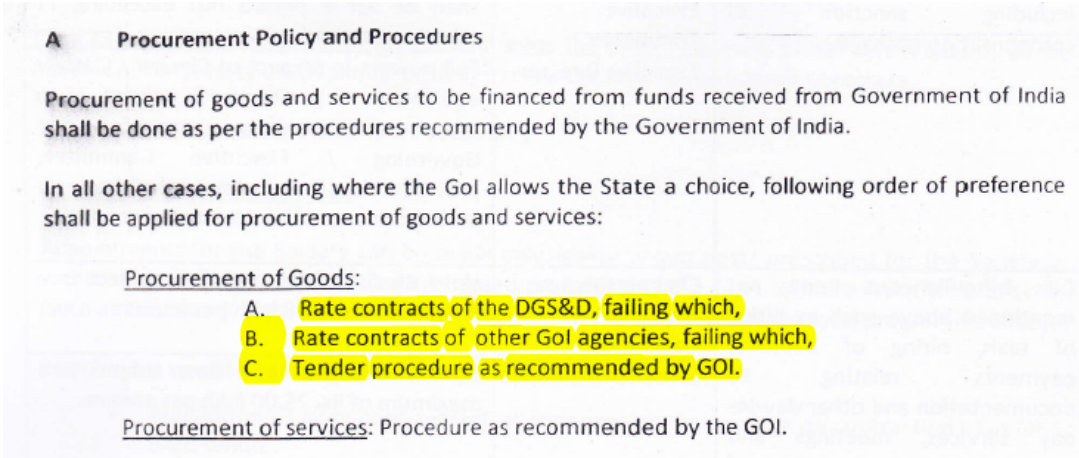
6.4.1 Drug procurement for the NPCDCS programme

In this section, I analyse the drug procurement present in the integrated NPCDCS programme in the district hospital, West Champaran. I analyse the following texts, which govern and regulate the procurement of goods and services in Bihar:

- Memorandum of understanding (MoU) signed by the department of health and the MoHFW
- The Rules and regulations of state health society
- Bylaws of the State Health Society
- Memorandum of association of state health society Bihar
- The Bihar financial (Amendment) Rule 2005

These texts work in conjunction with each other and provide direction to state officials for the procurement of goods and services at state and district levels. As an autonomous organisation and registered agency, the SHSB can establish its own procurement procedure and policies. However, my text analysis shows that the procurement of goods and services of the state health society is indirectly coordinated and controlled by the MoHFW. The SHSB's memorandum of association as a legal document provides an overall framework to its members about the SHSB's power, responsibilities and organisational activities. The SHSB's memorandum of association (MoA) states that the SHSB can "*establish its own procurement procedures and use the same for procurement of goods and services" (Government of India, 2005a)*. It highlights the autonomous nature of the SHSB, where it can decide its organisational rules, regulations and policies, whereas generic bylaws of the state health society (as part of the MoU between the Department of Health and MoHFW) state that the "*procurement of goods and services to be financed from funds received from the government of India shall be done as per the procedure recommended by the government of India" (Government of India, 2005a)*. Figure 17 shows the conditions of the MoU related to procurement of goods and services under NRHM.

Figure 17 Extract of the MoU highlight agreement related to procurement under NRHM (MoU, p.52)



A Procurement Policy and Procedures

Procurement of goods and services to be financed from funds received from Government of India shall be done as per the procedures recommended by the Government of India.

In all other cases, including where the GoI allows the State a choice, following order of preference shall be applied for procurement of goods and services:

Procurement of Goods:

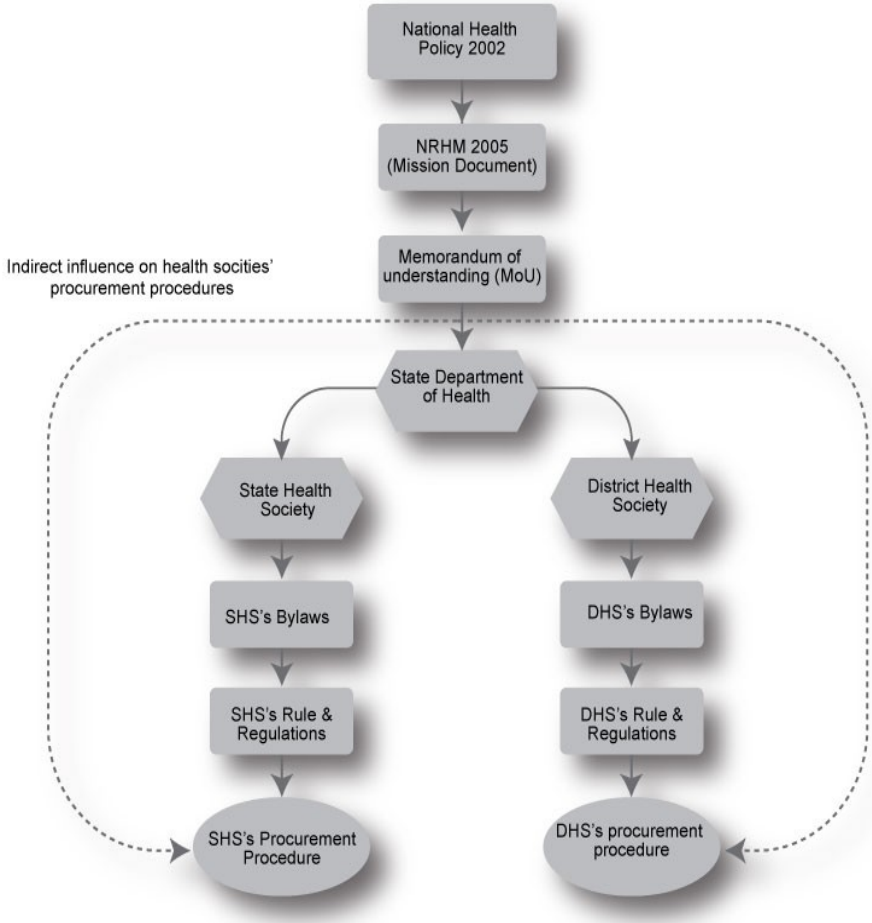
A. Rate contracts of the DGS&D, failing which,
B. Rate contracts of other GoI agencies, failing which,
C. Tender procedure as recommended by GOI.

Procurement of services: Procedure as recommended by the GOI.

There is a contradiction between the SHSB's memorandum of association and the model generic bylaws of the state health society (produced by the MoHFW and given to the department of health at the time of signing the MoU). The department of health is required to adhere to the generic bylaws as a part of the MoU signed by the department of health and the MoHFW.

By signing the MoU, the state government agreed "*to abide by all the existing manuals, guidelines, instructions and circulars issued in connection with implementation of the NRHM, which are not contrary to the provision of this MoU*" (Government of India,2005a p.6). The MoU as an official partnership document limits the SHSB's authority and created a dependency on the MoHFW's instruction for procurement of goods and services for national health programmes. Figure 18 illustrates how the MoU between the MoHFW and the Department of Health, indirectly coordinates and controls the procurement policy for both state and district health societies.

Figure 18 Textual coordination for the procurement of drugs for health societies



This dependency of the SHSB on the MoHFW's instruction for procurement of goods and services is evident in the NPCDCS programme in Bihar. Below, I will present and discuss the drugs supply and procurement procedure and illustrate how text produced at the different time and space constantly coordinate drug procurement in the NPCDCS programme and shapes the experience of staff members' at the district hospital.

6.4.1.1 Contradictions in drug procurement at national and state level

Under the NPCDCS programme, the government ensures free drugs for common non-communicable diseases, such as diabetes, hypertension and cardiovascular disease, to patients attending the public hospital. For each district NCD clinic established under the NPCDCS programme, the government has allocated Rs.50,000 (approx. $714[7]) per month for drug procurement for diabetes, cardiovascular disease

7 The exchange rate between the US dollar and the India rupees changes. I used $1 equivalent to Rs.70 for estimation purposes

and stroke (NPCDCS guideline, 2011). The state government is expected to procure drugs for the NPCDCS programme through the state's procurement mechanism. Table 20 presents the list of drugs for the diabetes, CVD, and Stroke as per the NPCDCS guideline.

Table 20 Indicative List of Drugs for Diabetes, CVD & Stroke (NPCDCS guideline, 2013)

Drugs	Drugs
Tab Aspirin	Inj.Digoxin
Tab .Atenolol	Tab.Digoxin
Tab.Metoprolol	Tab.Verapamil(Isoptin)
Tab. Amlodipine 10mg	Inj.Mephentine
Tab Hydrochlorthiazide 12.5, 25 mg	Tab Potassium IP (Penicilliln V)
Tab.Enalapril 2.5/5mg	Inj. Normal saline (Sod chloride) 500ml
Tab Captopril	Inj.Ringer lactate 500ml
Tab. Methyldopa	Inj.Mannitol 20% 300ml
Tab Atorvastatin 10mg	Inj.Insulin Regular
Tab Clopidogrel	Insulin Intermediate
Tab.Frusemide 40mg	Tab. Metformin
Inj.Streptokinase 7.5 lac vial	Inj. Aminophylline
Inj.Streptokinase 15 lac vial	Tab Folic Acid
Inj.Heparin sod.1000 IU	InjBenzathine Benzyl penicillin
Tab.IsosorbideDinitrate (Sorbitrate)	Carbamazepine tabs, syrup
GlycerylTrinitrateInj, Sub lingual tabs	Inj Lignocaine hydrochloride
Diazepam Inj& Tab	Inj.Dexamethasone 2mg/ml vial
Inj.Adrenaline	Tab Prednisolone
Inj.Atropinesulphate	Promethazine Tab, Syrup, Caps, Inj

(Source: NPCDCS guideline, 2013)

Despite having free medicine provision under the NPCDCS programme, patients are asked to buy medicine from local private shops. I observed patients being told that the district hospital does not have adequate medicine for diabetes and hypertension patients. Following this observation, I asked a health worker about medicine and consumables supplies at the district hospital. He said,

> *do you know… in the beginning we used to do diabetes screening at the NCD clinic… all the supplies (lancet, strips and glucometer) was supplied by the Indian government (the MoHFW), Later, we received a lot of strips which were close to their expiry date… that time the nodal officer asked us to use all the strips in the medical camp. We organised medical camps in the local market, bus stand, train station…. later we got nothing (drugs and consumables) from the government… now we buy everything (strip, lancet, diabetes drugs) from the local market.* (Health worker, NCD clinic)

Following the health workers' description of consumables supplied by the MoHFW, I traced and identified the official documents and letters at the DSH and SHSB that illustrate the consumable supply procedures. The documents illustrate that since the launch of the NPCDCS programme, the MoHFW played a significant role and supplied consumables to the state between June 2011 and September 2013. These consumables were stored at state drug storage facilities n Patna. In January 2013, after receipt of the consumables procured by the MoHFW and supplied by Abbott Health Care Ltd, senior government officials at the state drug store officer found that supplied consumables were not up to standard (close to expiry date). Two batches of strips, supplied in January 2013, had a few months left before expiry. One batch expired in March 2013; the second lot was due to expire in May 2013 (see Table 21; field notes, Patna)

Table 21 Expiry dates (months/years) of supplies procured by the MoHFW

Supply Lot No	Glucometer	Strip	Lancet	Reference (letter date/supply date)
1	03/2012	02/2012	09/2015	30/06/2011
2	03/2012	06/2012 & 07/2012	09/2015	20/10/2011
3	-	03/2013 & 05/2013	11/2016	12/04/2012
4	-	03/2013	11/2016	05/02/2013
5 (Directly-delivered to DHS)	-	08/2013 & 09/2013	-	-

Source: Extract from the NPCDCS programme file at SHS Bihar

The state drug storage officer wrote a letter to the Executive Director, SHSB, informing him about the sub-standard quality of consumables procured by the MoHFW. Following the complaint by the state drug storage officer, the SHSB wrote a letter informing the MoHFW about the substandard supply of consumables (i.e. expired strips) and requesting advice. In response to the complaint, the MoHFW wrote a letter instructing the SHSB to use all the supplied strips (close to expiry) through health camps and health fair in the district before the expiry date.

The intent of the MoHFW's letter was to ensure that the state utilised all supplied strips through health camps before their expiry. But the letter gave emphasis on the utilising strips through health camps. Organising health camps was a major task at the district level. Nonetheless, the letter did not contain any information about the

health camps except for directing the state to organise them. It did not provide details on who would organise the health camps, or which category of staff should be deployed in the health camps. How will the hospital manage the screening services at the NCD clinic if the staff were deployed to health camps? Which health budget state or district should be using?

Here, the official letter initiates a "text-reader conversation" process, where the administrator must take action to accomplish the task outlined in the letter. Following the MoHFW's letter, the SHSB reproduced a letter to inform district health administrators to utilise the strips through organising health camps. The reproduced letter also did not contain any information related to the resources for organising health camps. The district administrator, the reader of the letter, read and understood the text as "*an administrative order which needed to be followed*" (manager, DHS). In response to the administrative order (in the form of an official text), the district health administrator deployed the health workers at the NCD clinic to organise health camps at various locations in the district. The purpose of the health camps was to *"increase awareness and provide diabetes screening services to the general public"* (health worker, NCD clinic). Because of the health workers' deployment to the health camps, services such as screening and counselling at the NCD clinic were interrupted. Despite all efforts by the district health administrator and health workers, *"most of the strips were not utilised because of a shortage of health workers and resulted in huge wastage"* (programme manager, DHS). We can see how the authoritative text (i.e. letter) from the MoHFW brought the SHSB, DHS and health workers into a social relationship with a focus on accomplishing the task of utilising strips through health camps without acknowledging or discussing the local capacity or resources.

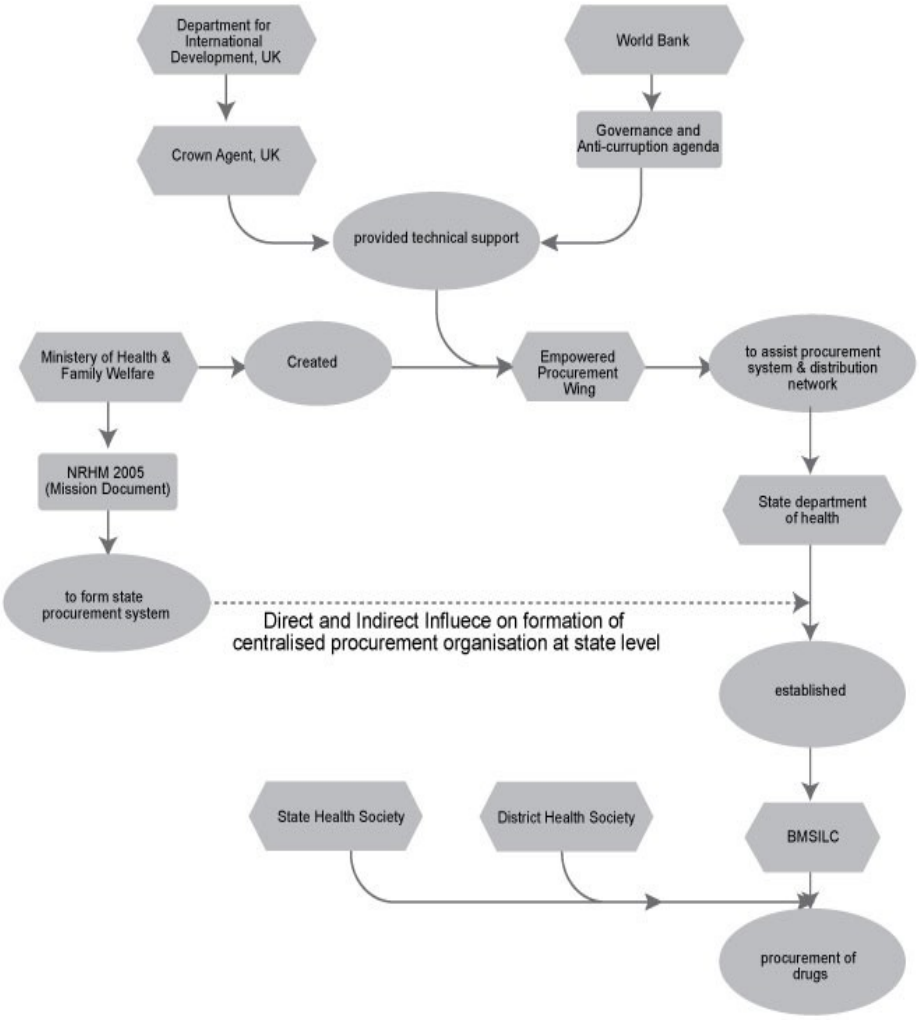
Following the incident of sub-standard supplies, the MoHFW wrote a letter instructing all the State Department of Health to buy consumables and supplies through their own procurement system. This instruction immediately shifted the responsibility for procurement from the MoHFW to the state government for the NPCDCS programme. However, the state was "*not fully prepared for taking over procurement responsibility from the MoHFW, which caused unexpected delays and interruption in procurement"* (programme manager, SHS). The procurement of consumables involves many invisible tasks and activities, including preparing a list

of required drugs, estimation of requirements, securing administrative approval, preparing standard guidelines, preparing the technical bid and inviting tenders, assessing bids and completing the bid, which take a considerable amount of time. The MoHFW did not offer any advice on how the state should ensure the availability of consumables until consumables were procured. The state programme manager responsible for NPCDCS programme implementation does not have any authority to procure drugs and consumables.

After the responsibility for procurement was delegated to the department of health, Bihar Medical Service and Infrastructure Corporation Limited (BMSICL) was asked to procure consumables for the NPCDCS programme. BMSICL was nominated as a State Purchase Organisation (SPO). BMSICL was established in 2010 under the India Company Act 1956, supported by EPW[8] (empowered procurement wing, MoHFW), with the technical support of the Crown Agent, UK (Funded by DFID, UK). The purpose of establishing BMSICL was to accelerate the creation and streamlining of existing infrastructure and services in the health sector. The NRHM 2005 conceptualised BMSICL as a "*state-led procurement system and distribution network*" for improved supply and distribution of drugs and medicines (NRHM, 2005). It is the sole procurement and distribution agency for goods and services for all establishments under the department of health, Govt. of Bihar. The Crown Agent UK was involved in training, needs assessment, development of procedures and systems for procurement, including storage, quality assurance and information management. The establishment of such a centralised procurement agency for the state was to bring transparency to the procurement process (World Bank, 2008). Figure 19 provides an overview of a coordinated effort to establish a state procurement system in Bihar.

8In 2005, the Ministry of Health and Family Welfare set up an Empowered Procurement Wing (EPW) at the national level to consolidate, streamline, strengthen and professionalise the procurement of health sector goods under NRHM. The World Bank and DFID jointly supported the drug procurement system and provided technical support. The main purpose of the EPW was to provide guidance on drug prices, undertake quality testing, prepare market intelligence and conduct surveys on drugs and vaccines.

Figure 19 Direct and indirect action for the establishment of BMSCIL in Bihar



Despite the effort to bring transparency and efficiency to the procurement of goods and services, in 2014, BMSICL was accused of corruption. The department of health found that BMSICL bought substandard drugs and medical supplies from a blacklisted company at a very high rate ("Bihar purchased drugs from blacklisted firms - Times of India," 2014). In response, the government suspended senior health officials and ordered an inquiry into the corruption charges. These suspensions at BMSICL affected the drug procurement in Bihar. Between April and May 2015, BMSICL issued a short-term tender to supply lifesaving drugs. However, it did not attract suppliers or pharmaceutical companies in the bidding process. Out of 25 drugs, BMSICL received only one bid for 23 drugs; it was rejected on technical grounds("Life-saving drugs' purchase bid fails - Times of India," 2015). According to the Bihar Financial Rule (Amended) 2005, a single bid cannot be accepted for deciding on procurement (Government of Bihar, 2005).

This corruption incident "affected the procurement for all health programmes in Bihar". In a discussion with a state programme manager, he expressed his frustration with BMSICL for not procuring consumables for the NCDs programmes on time,

> *... the BMSICL (officers) does not listen to us. We have sent many letters to the MD (managing director, BMSICL) but they did not respond to our request. We requested the rate contract[9] so that we can ask DHS (district health administrators) to procure on the rate finalised by the BMSICL.*

In the interview, the health official expressed his concern about the unexpected delay with BMSICL. Despite his effort to bring attention to the procurement of drugs and consumables, BMSICL did not response to his request. The delay from BMSICL "*affects many health programmes in Bihar*" (manager, SHSB). The officers' embodied experience of frustration was also observed during a discussion with health workers. The health workers felt *"helpless when they cannot provide medicine to poor patients at the NCD clinic"* (health workers, NCD clinic). These embodied experiences of "frustration" and "helplessness" were a result of wider institutional action that did not occur. In addition, these experiences coordinate the work of administrators and health workers while delivering NCDs health services to patients. While reviewing official documents, I found the SHSB wrote three letters to MD, BMSICL (letter no. 7181 on 29.10.2015; letter no. 867 on 08.02.2016 and letter no. 3924 on 08.08.2016) to request that BMSICL submit detailed project records for establishing the geriatric ward under the NPHCE programme. Despite several requests, BMSICL did not share the DPR, which affected the establishment of the geriatric ward in Bihar. Until August 2016, the BMSICL did not fix the procurement rate for consumables (strips, lancet, drugs, etc.) which further affected the programme implementation and service delivery. Because of the lack of a response from BMSILC, the SHSB instructed the DHS to purchase drugs and consumables for the health programmes at the district level, following the Bihar Financial (Amendment) Rule 2005 until the next order (from the SHSB).

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9 Rate contract is a technical term used in the procurement process. It means a fixed rate of goods or services, which is usually decided by BMSICL after reviewing all the bids or tenders (submitted by suppliers or businesses). For example, the rate contract of regent can be accessed from the BMSICL website: http://bmsicl.gov.in/uploads/Drugs/Rate%20Contract%20Details.pdf

6.4.1.2 Drug procurement at the district level

The district hospital in West Champaran did not have adequate drugs for patients with diabetes. Patients were asked to purchase drugs and medicine from private shops, which increased their out-of-pocket expenditure. I observed that small quantities of drugs were procured at regular intervals. When I asked a health worker about his viewpoint on the drug purchase, he referred me to a "local purchase system", which allows district administrators to procure drugs without dealing with administrative and bureaucratic processes. In an interview, a health worker said,

> *Since the government* [the MoHFW] *has stopped giving us medicine, we buy the medicine through "local purchase". Most of the time the account manager gives us money to buy lancet, strips and medicine for diabetes and hypertension. Most of the time we buy medicine on a weekly basis depending upon consumption. One time, I told a nodal officer that we do not have drugs at the NCD clinic… that time he gave his own money, Rs 5000* [$71.4], *and asked me to use the money to buy the medicine and consumables immediately… see here is the bill. I have not given it to him yet.* (Health worker, NCD clinic)

The health worker explained his experience in the drug procurement process, where he Repeatedly continuously observes a shortage of medicine at the NCD. According to the manager, "local purchase" means procurement from the local shop, without any bidding or quotation process for purchases of less than 15,000 (US $214.28). When I further explored, I found the manager's account of "local purchase" was a representation of the financial rule that permits procurement of goods up to Rs 150,000 without inviting any quotation or bids. Rule no 131C of the Bihar Financial (Amendment) Rule 2005 states,

> Rule 131C. Purchase of goods without quotation: Purchase of goods up to the value of Rs. 15,000/- (Rupees Fifteen Thousand) only on each occasion may be made without inviting quotations or bids on the basis of a certificate to be recorded by the competent authority in the following format. "I, _____, am personally satisfied that these goods purchased are of the requisite quality and specification and have been purchased from a

> reliable supplier at a reasonable price."(Rule no. 131C, the Bihar Financial (Amendment) Rule 2005)

The Bihar Financial (Amendment) Rule 2005 provides detailed guidelines for government departments to procure goods and services. Below, Table 22 illustrates the procurement process and requirements as per the Bihar Financial (Amendment) Rule, 2005.

Table 22 Procurement of goods as per the Bihar Financial (Amendment) Rule, 2005

Price range	Requirement as per financial rule	Documentation/Record-keeping Process
Procurement to Rs.15000	No quotation required	Certified and recorded by competent authority
Procurement between Rs.15,000 to Rs. 100,000	Recommendation for the purchase of goods from identified suppliers after a survey by purchase committee	Joint certification for the purchase by "Purchase committee".
Procurement above 100,000	Through the bidding process depending upon the estimated cost and specification goods: (i) Advertised Tender Enquiry; (ii) Limited Tender Enquiry; (iii) Single Tender Enquiry	Assessment of bid by examining eligibility criteria, product specification and other criteria

Source (Bihar Financial (Amendment) Rule 2005[10]

This "local purchase" process has been adopted to "*minimise administrative and bureaucratic involvement"* (manager, DSH). The local purchase system offers flexibility to buy medicine and drugs as per local requirements. I found managers were reluctant to buy large quantities of medicine and consumable supplies at a time because of a shortage of staff. One manager said,

> *There is no point in buying strips and drugs in large quantities because only a few staff members are working on the programme* [NPCDCS]... *Who will distribute the drugs and who will manage the programme? If something goes wrong, then who will be responsible and be held accountable?* (Manager, DHS office).

The manager views the procurement of large quantities of consumables as an additional responsibility. When he says "who will be responsible and hold accountable" for procurement occurs, he refers to the notion of accountability in

10http://finance.bih.nic.in/Documents/New%20GFR2005.pdf

health care. He worries that few staff members would not be able to manage drug distribution. By contrast, health workers view this as a problem causing out-of-pocket expenditure to patients. They believe that there could be other possible ways to ensure transparency in the drug distribution process, such as handing over the task of drug distribution to Hospital Pharmacists or ensuring a proper record for distribution. These alternative mechanisms could ensure accountability in the drug distribution process. The notions of accountability and transparency are important aspects of good governance; however, it overrides the health workers' view and concern about the patients' affordability.

Medical drugs and consumables are regulated goods, procured under the supervision of qualified and competent authorities. In contrast, the health workers, working in the NCDs programme, are given money (in cash) to procure drugs and consumables to meet local demand. Their involvement in procurement ensures the availability of drugs at the district hospital. However, it negatively impacts the NCD programmes. In an interview, a health worker spoke about his work related to purchasing medicine from the local market,

> *Sometimes the nodal officer gives us money… we take the money and buy it from the local shop* [private medical shop]. *When we feel we do not have sufficient medicine and strips* [consumables] *then we call the nodal officer and tell him about the situation. Sometimes he gives us money and asks us to submit the bill to the account manager…sometimes we go to the DHS office and the accountant gives us money to buy medicine. This is how we buy medicine.* (Health worker, NCD clinic)

Health workers are regularly involved in purchasing medicine to ensure that consumables (and medicines) are available. They are brought into a sequential action where they are required to follow certain actions one after another, such as – assessing the weekly requirement – informing the nodal officer – coordinating with the account manager– visiting the DHS office – receiving money for procurement – visiting the local market– buying medicine (and consumables) – coordinating with the nodal officers to approve and sign the original receipt for drugs – visiting the DHS to submit the receipt for medicine purchase to the accountant – maintaining records of procurement in an inventory register at the NCD cell office – storing drugs

at the NCD clinic – informing other staff members about drug availability for distribution.

The involvement of health workers in the procurement process is related to managers' decision. Their decisions are based on various official texts, such as the Bihar Financial (Amendment) Rule 2005, the MoU, and NPCDCS guideline 2013. These texts lack specific information to guide officers in making informed decisions. Some gaps in the texts are:

1. Who will procure the drugs from the local market?

2. Criteria for the selection of shops and suppliers.

3. Knowledge and understanding of a person involved in purchase.

These gaps in the authoritative texts are filled by the manager's own interpretation of the texts. When the manager reads these texts, he engages in a text-reader conversation and forms his own interpretation. The texts orient him about the conditions under which he should make procurement decisions. The manager's work is to ensure that his action fits into the conditions outlined in the official text. Considering the lack of clarity in the text documents, the manager involves NCDs programme health workers in the procurement of medicines and consumables from the local market. This helps the hospital provide free medicine to patients. Nevertheless, their involvement in procurement tasks significantly affects their primary work in the NCD programme. For example, the counsellor's main role in the NCD programme is to offer counselling services to patients with common NCDs. However, he was involved in the drug purchase process outlined above. He spends time coordinating with the nodal officer and managers for procurement. Sometimes, he spends time "convincing managers" (counsellor, NCD clinic) to urgently procure medicine or strips.

These regulatory texts create an institutional process to receive and utilise funds for drugs for the centrally financed Health Programme in the state. The effect of the non-specific text or gaps in the documents is also evident at a district hospital with little or no effort at SHS that has the authority to establish and adopt its own procurement procedure.

6.5 Conclusion

In this chapter, I analyse the various institutional and regulatory texts that carry authority and instruction of the MoHFW and play a central role in shaping implementation of integrated programmes at the district hospital. In partnership with the state, the MoHFW designed and created the institutional arrangements to provide technical and managerial support to state. It was assumed that these health societies are autonomous in nature. In contract, despite being a legal entity and having an autonomous status, the governance, decision making, autonomy of health societies was restricted through textual practice.

The study shows that how the contractual and time bound employment was a condition for the partnership between the Department of health and the MoHFW which is practiced when health workers are recruited for the integrated health programme. Time bound contractual employment has a huge implication on the continuity of availability of health worker works in NCDs programme. The health worker experiences fear, frustration and struggle when institutional tasks of performance appraisal did not occurs as required. Since the launch of the NPCDCS programme, drug procurement task was shifted from the MoHFW to state and then state to DHS. The incident of corruption in the BMSICL has impact the centralised procurement in the state which affects the drug availability at the district hospital.

The MoHFW put a mandatory condition before state to constitute the governing board of the health societies for senior government administrators. This arrangement assists the MoHFW and state to maintain strict administrative control over programme management and implementation at the local level. The textual analysis shows that institutional texts such as MoU, NPCDCS guideline, official letters, and other texts function together and shape the staff recruitment and their employment in the integrated NPCDCS programme. When texts do not hold clear instruction, managers and administrators develop local practices to ensure that institutional tasks get accomplished.

Chapter 7

Service organization and Pathways to Care in Integrated NCDs and Mental Health Programmes

7.1 Introduction

Integration of NCDs and mental health programmes within general hospitals has become a central part of health policy in India, in the interests of delivering health care to rural populations and increasing universal health coverage. However, the integration of health programmes is not simply a policy strategy. Such integration is widely used by the state government and partner agencies to make decisions related to resource allocation, programme implementation design, provision of health services, health worker recruitment, and organising and delivering health services through existing public health infrastructure. Research participants view the integration of health services as an institutional process, whereby SHSB, DHS, hospital administrators and staff members are drawn into a series of actions to ensure that organisational goals to deliver services. It requires adherence to various declared and non-declared practices at each level. The decisions to integrate health services and organise health care are often based on empirical evidence, logic or rational thinking, assumptions, perceived benefits to patients and organisational efficiency. However, the decision to implement the programmes always imposed on administrators, managers and staff members through the production of institutional texts in the form of authoritative letters, written orders, official memos, and emails produced by staff members and ultimately used by them to organise integrated health care service delivery at public health facilities.

During the first phase of fieldwork, I found that both integrated programmes (i.e. NCDs and mental health) experience severe shortages of medical professionals and support staff. Despite the absence of an adequate workforce, health services were delivered to patients. Further discussion with NCD programme staff members revealed that they are working without adequate resources, and their request to improve programme implementation had been continuously rejected by district health administrators. A health worker said, "*the NCD clinic is not functional…there are no doctors in the NPCDCS*" (health worker, NCD clinic). I observed patients

with diabetes waiting several hours to consult a doctor and/or visit different care points for diagnostic tests. The data also shows that care pathways for patients differ from the NPCDCS' guidelines resulting in access challenges for patients.

A mental health worker reported that NMHP does not have permanent psychiatrists, which makes appropriate and regular assessment difficult. They also reported the unavailability of essential psychological assessment tools. Clinical psychologists could not confidently determine the severity of a patient's mental disorder. They reported a lack of administrative support for the mental health programme, and shared discontentment with case recording, assessment of mental illness and counselling. Although district health administrators and managers recognise these challenges but due to organisational priorities and administrative procedures, they were unable to address these issues.

In this chapter, I explore the service organization within the integrated NCDs and mental health programmes and explain how services are organised and delivered in a context of limited or no resources. I present observation (collected at the NCDs clinic and mental health OPD) and interview data from the following staffs:

Participant category	Participants
Mental health programme staff (DMHP)	Clinical psychologists, community nurse, psychiatric nurse
NCD programme staff (NPHCE, NPCDCS)	Sanitary attendant, hospital attendant, nurse
Health officials	Civil surgeon, hospital administrators, nodal officers
Managers	District programme managers, district programme coordinator, hospital managers

In the first section of the chapter, I discuss service organisation and the patient's journey while receiving NCDs care, highlighting various disjunctions in medical consultation, screening, counselling and critical care that exist in the integrated NPCDCS.

7.2 Service organisation and care pathways in the NPCDCS programme

Under the NPCDCS, the NCD clinic was established to provide comprehensive examination of patients referred by a lower-level healthcare facility, health workers or self-reported patients to rule out complications or advanced stages of common

NCDs. NCD clinics were set up to offer screening, diagnosis and management (including diabetes counselling, lifestyle management and home-based care services) in one location (Government of India, 2011, p. 6). A district level NCD clinic will have following staff members:

1. a doctor (specialist in Diabetology/Cardiology/M.D Physician)
2. Medical Oncologist
3. Cyto-pathologist
4. Cytopathology Technician
5. Nurses (4): 2 for Day Care, one for Cardiac Care Unit, one for O.P.D
6. Physiotherapist
7. Counsellor
8. Data Entry Operator
9. Care coordinator

Since its inception, the NPCDCS programme has experienced a shortage of medical doctors and health workers in West Champaran district. Except counsellor, all positions in the NPCDCS programme were vacant. In response to poor staffing problem, the district administrator made changes in service organisation to ensure that patients can access basic health services for management of their NCD disease. However, the district administrators' decisions to provide adequate health care service to the patients failed. In this section, I will explore the work of the service organisation and patient care pathway while accessing NCD treatments at the district hospital. I will discuss the core health care delivery points where a patient interacts with care providers and engages in clinical events such as medical consultations, diagnostic tests, counselling and critical

7.2.1 Registration and medical consultation

During my observations at the district hospital, I noted that, on average, a patient having a common NCD spends around three to four hours at the hospital. This

includes time spent on the registration process, receiving medical consultation, going through a diagnosis process and receiving medicine from the NCD cell office. Such long hours have implications for elderly patients, especially during the summer, when the temperature is over 40 degrees Celsius. There is no place for patients to sit near the registration counter; they have to stand in a queue, which makes senior patients *"frustrated when they come to the hospital"* (counsellor, NCD clinic).

There are staff shortages at 39% at Primary Health Centre and 91% at Community Health Centre in the state of Bihar (RHS, 2014). Because of the shortage of health facilities at block and community level, patients visit District Hospital for treatment, therefore patient load is always high at the district hospitals. According to District hospital manager, the patient load at district hospital would not be reduced until or unless the primary and secondary health facilities are strengthened. But another hospital staff had a contrast view about these issues, as per his opinion the situation would be improve if the hospital administration will open a few new registration counters. One staff member at West Champaran district hospital attributed the long wait time to a shortage of registration counters at the hospital. In an interview, one staff member said:

> *There are only two people at the registration desk. They (hospital administration) should increase the number of registration desks and staff. Patients have to in a long queue to get the registration number. For some patients, it takes a whole day to seek treatment from this hospital... All the patients stand behind one another in the queue. If a patient leaves the queue, then the person behind him will take his position in the queue.* (Hospital attendant, district hospital)

The NPCDCS's guidelines stress that all essential services should be delivered through one point of care through an NCD clinic, established under the programme, but this was not the case at the district hospitals in West Champaran, East Champaran and Vaishali. As described in Chapter 6, due to a delay in the recruitment process, positions for medical doctors, nurses and other support staff remained vacant for a long time.

District health administrators are required to *"take appropriate steps to ensure that a patient should have access to treatment"* (manager, DHS) to manage their health

conditions. In response to poor staffing, district administrators in West Champaran district temporarily deployed a medical doctor at the NCD clinic so patients could access medical consultation. But this temporary arrangement did not work. Within a few months of deployment, the health administrator transferred the doctor to a primary health centre in the district, and the position of medical officer at the NCD clinic became vacant again. Such deployment led to anxiety among frontline workers, who were concerned that the "*government will discontinue the programme"* (counsellor, NCD clinic) if patients do not receive services at the district hospital. In response to their concern, health workers met programme managers and administrators and requested them to deploy the medical doctor at the NCD clinic, but their request was rejected. According to a hospital attendant,

> *we went and met everyone (health officials) but no one gave us a doctor… first we met DPM (district programme manager), then we met Civil Surgeon… They said they do not have sufficient doctors in the districts, but they promised to do something. After a few days we went again but nothing happened… later we met DM sir (district magistrate). He also promised but did not do anything. DM is overall administrator of the district.* (Hospital attendant, NCD clinic)

The administrator's account orients health workers towards the shortage of doctors in the district level. In contrast, health workers view this as an influence of priority agenda at the district level. They believed that "*government is only focusing on maternal and child health programmes and ignoring NCDs programme implementation*" (hospital attendant, NCD clinic). The district administrator's decision on workforce deployment is linked to the government priorities which are formulated as the state and national level.

The vacancies of the medical officer position at NCD clinics led to the modification of care pathways in the NPCDCS. In the modified care pathways, a patient visits the general (medicine) OPD to consult a doctor about his or her problem, and later visits the NCD clinic for diagnostic testing and drugs. It is an iterative process, where patients move between different care delivery points for advice, testing, prescriptions and medicine. In an interview, a nurse at one NCD clinic explained the patient's journey at the district hospital:

> *After registration, patients go to the medicine (general) OPD for a medical consultation. If the doctor prescribes some tests, then they come to me for blood sugar check-up and blood pressure. After that, I write the blood pressure and blood sugar test results on the prescription paper. Then the patient takes his report and visits the same doctors (in OPD) and then, if the doctor prescribes medicine based on the test results, the patient again comes to me (at the NCD clinic) to receive the medicine. If I do not have medicine, then he has to purchase the medicine from outside (hospital and in the local market)… doctors at the medicine OPD know that medicine is available at the NCD clinic and they (a doctor) tell the patients to get medicine from me (at the NCD clinic)... Overall, patients spend a minimum of three to four hours from registration until they receive medicine. In addition, it also depends on how big the crowd is at the hospital.* (Nurse, NCD clinic)

The nurse's account about patients' movement at the district hospital resonates with my own observations, at the medicine (general) OPD. These were as follows:

> *...there is a long queue outside the medicine OPD room. Around 17 patients were waiting, one behind the other at the door to go in and consult the doctor. More patients were joining the queue after the registration. There is one person at the door, controlling the crowd. He was only allowing three to four people in the OPD room at a time. The man at the door is not a hospital employee. According to the hospital staff, he works as an assistant for one of the doctors at his private clinic. The weather is hot, as it is summer. Patients were standing in the queue for nearly 40-45 minutes for their turn for consultation. Inside the OPD room, four doctors are sitting around a long table, next to each other... A male patient, aged 53, moved toward the doctors for his turn for a medical consultation; the patient explained to one of the doctors that his hand, legs and face had been swollen for the last two days and he felt dizzy in the morning when he stood and tried to walk. The doctor asked him whether he had sugar (i.e. diabetes) and patient nodded and said, "I don't know. I have never done a diabetes check-up". The doctor prescribed him some lab tests for blood sugar, blood pressure, weight, and asked him to "visit the NCD clinic, on the first floor of the OPD building, for the test, where the staff nurses will take the required measurements". The*

> *patient left the OPD room and moved toward the NCD clinic for tests. After two hours, the patient returned to the OPD to see the doctor for a further consultation based on his clinical measurements. Before meeting the doctor, the patient had to stand for another 30-35 minutes in the queue for his turn. The doctor looked at his report and told him that his blood sugar level had increased, and he has diabetes. The doctor prescribed some medicine and advised him to exercise and eat healthier food and avoid oil and sweets. The medical consultation lasted three to four minutes.* (Observation general (medicine) OPD, district hospital, June 2016)

The patient's medical consultation process at the medicine (general) OPD differs from the archetype in the NPCDCS programme guideline. At the OPD, patients usually do not get sufficient time to share their medical condition. The communication between doctor and patient focuses on information related to physiological symptoms, diagnostic testing and interpretation of results and for the further process such as visiting the NCDs clinic for testing or buying medicine from the local market. Increased patient load at the medicine (general) OPD makes it challenging for doctors to provide adequate time for medical consultation, which usually lasts 3-4 minutes. The health services for NCDs patients are organised in a way that leads to experience of frustration and tiredness (while standing in the queue). These experiences are acknowledged by health workers and managers but "*do not form a basis for service improvement and are ignored by hospital administrators*" (nurse, NCD clinic).

In the East Champaran and Vaishali districts, the NCD clinics is not functional because of lack of staff members. Patients usually visit the general OPD and consult doctors for advice, and if the doctor prescribes a diagnostic test, then they visit the hospital laboratory or a private lab, located outside the district hospital. Later, based on the report, the doctor prescribes medicine, which patients "*buy from the local market"* (Hospital attendant, mental health OPD).

The administrator's decision at the district hospital, i.e. local site, was consistent with the NPCDCS guidelines, which represent the MoHFW's desire to make NCDs services available for patients. The role of staff members and doctors is to ensure patients follow the modified care pathways and visit different care delivery points, including general medicine OPDs (outpatient department), NCD clinics, NCD cell

offices, private laboratories and private drug stores, located within and outside the district hospital.

7.2.2 Screening and diagnosis for common NCDs

7.2.2.2 Diagnostic services at the district hospital

The NPCDCS provides screening of persons over the age of 30 at the point of primary contact with any healthcare facility, be it the village facility, CHC, district hospital or tertiary-care hospital. At the district hospital, diagnostic services should be provided by either the hospital's own laboratory or by one established under a public-private partnership. The free diagnostic test to be offered includes cardiac ECG, ECHO, LT scan, MRI and other laboratory tests (NPCDCS guidelines, 2011 p. 20). However, I discovered that patients were going to private laboratories, located outside the hospital for diagnostic testing. When I talked to a nurse about the availability of diagnostic services at the district hospital in West Champaran district, she said,

> *The district hospital has only a few free services, such as x-rays, ultrasound (sonography), the measurement of blood glucose levels, and blood pressure testing. But for other diagnostic services, such as ECG and ECHO, patients have to pay* [at district hospital]. *These services are available at the hospital (through PPP partnership), offered by national telemedicine centre... some patients prefer to go for private laboratory testing because the telemedicine centres are crowded, and patients often have to wait for reports.* (Nurse, NCD clinic)

The central government has provided financial assistance through the NPCDCS to strengthen district hospitals' laboratories and enable them to provide free diagnostic testing for cancer, diabetes, hypertension and cardiovascular diseases. If the lab or diagnostic services are not available, then tests can be outsourced (Government of India, 2011, p. 23). Strengthening the laboratory and diagnostic facilities at district hospitals requires careful assessment and involves the following processes:

- Identifying the services available at the district hospital
- Preparing a list of services that are unavailable and need to be outsourced

- Preparing an appraisal report for approving the procurement of goods and services

- Coordinating with the nodal agency, BMSICL, for guidance on the quality of the procurement

- Getting approval from the SHS for procurement as per the Bihar Financial (Amendment) Rules 2005

This involves active coordination among various actors, including hospital staff members, lab technicians, hospital administrators, programme managers, accountant, civil surgeons, state government officials and Bihar Medical Services Infrastructure Corporation Limited (BMSICL). All these actors have to participate and play an active role to complete the institutional procedure mentioned above. I found that the "coordination work" among various actors did not occur because of a lack of clarity on their specific role in strengthening laboratory facilities at the district hospital. When I spoke with a hospital administrator about his responsibility in the NPCDCS, he said:

> *...the civil surgeon has overall responsibility for the implementation of national health programmes. We don't receive the budget for the NPCDCS. All the procurements are done through the DHS... and if they send us any letter, then we will provide the necessary support to them.* (Hospital administrator, district hospital)

From the hospital administrator's perspective, it is the responsibility of the district health administrator-as DHS receives an annual budget for the NPCDCS programme-to spend budget on health program. In contrast, manager (at DHS) view this as a lack of guidance and instruction from SHSB for strengthening the laboratory services at district hospital. The NPCDCS guidelines outline the service provision for NCDs services but do not do not illustrate or provide any clarity about the roles and responsibilities of actors (administrators and officers) for strengthening screening and diagnostic services at the hospital but expect the Department of Health and SHSB to make appropriate arrangement for service delivery. The SHSB did not offer any guideline to district health administrators for strengthening the laboratory services at the district hospital.

It was expected that district health administrators will read and follow the NPCDCS guideline and coordinate with various actors to strengthen laboratory services at the district hospital. In the absence of clearly demarcated roles and lines of accountability, managers and health officials struggle to achieve the expected result of strengthening laboratory and diagnostic services at the district hospital.

Since the beginning of my fieldwork in West Champaran district, NCDs screening services have been modified, reduced or discontinued for patients because of staff shortage. In the second phase of my fieldwork, I observed that patients were receiving two types of screening services at the NCD clinic – blood pressure measurement and blood glucose measurement. During third phase of fieldwork, I noticed major changes in the location of screening services. Under the new, modified care pathway, patients are required to visit the NCD clinic for blood pressure measurement and then the geriatric ward for diabetes screening (i.e. blood glucose measurement). Prior to this arrangement, a staff nurse at the NCD clinic performed both tests (blood sugar and blood pressure) and the sanitary attendants used to work as office assistants at the NCD cell office, located within the district hospital. In an interview, a nurse explained these changes, saying,

> *Initially, both tests (blood sugar and blood pressure) were done here (at the NCD clinic). However, in the last 20 days, it has been changed. The sanitary attendant (name of staff) started the blood sugar test in the geriatric ward, and I did the blood pressure check up here at the NCD clinic… The geriatric ward was closed for a long time. We do not have doctors and nurses to run the (geriatric) ward... The newly appointed nodal officer asked us, why is the geriatric ward always closed?" He suggested starting the diagnostic services… Now everyone (patients) knows about the screenings at the geriatric ward. So, all the patients go directly there* [geriatric ward]. (Nurse, NCD clinic)

Under the new arrangement, a sanitary attendant manages and conducts the screenings for diabetes by using a glucometer, lancet and strip, whereas staff nurses perform blood pressure measurement. The sanitary attendants are *"not trained and qualified to undertake any clinical work, including the handling of body fluids"* (nurse, NCD clinic).According to the aforementioned nurse, sanitary attendants can

also measure patients' blood pressure if they are unable to walk to the NCD clinic located on the first floor of the OPD building.

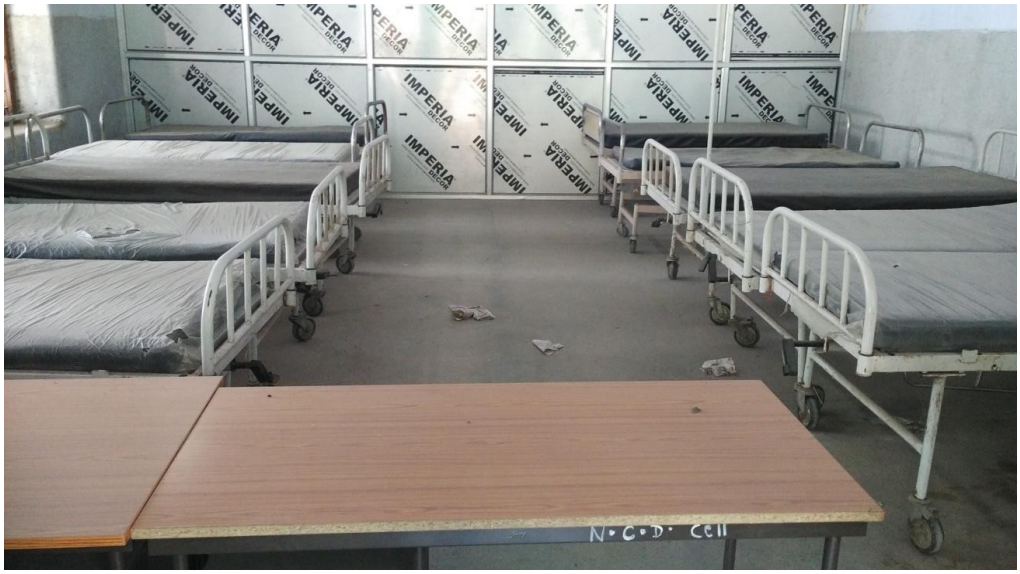
While observing the geriatric ward, I noted that a "*sanitary attendant put the used lancet strip and a blood-soaked cotton ball on the floor after the blood test. There was no bio-waste disposal bin in the ward for the safe disposal of waste"* (observation data, geriatric ward, 12 August 2016). When I asked a follow-up question about the waste-disposal practice during blood tests, the attendant said, *"... The district hospital has not given us the waste bin yet. We just started the screening in the ward a few weeks ago… The sweeper will come later today and will clean this garbage (lancet, strip, blood-soaked cotton*)." The sanitary attendants are non-clinical staff and have not received any training related to clinical safety or bio-waste management. As per clinical protocol, only "*qualified and competent medical professionals, such as nurses, medical doctors, and paramedics, can perform appropriate tests on patients, ensuring their health and safety"* (doctor, district hospital). In contrast to being screened by a qualified medical professional, patients are now being screened by sanitary attendants, which put both patient and staff at risk of infection. The decision to modify the care pathways and assigning some duties to attendant who is not qualified for the job demands compromises the quality and safety standards at the district hospital.

On further enquiry, the nodal officer cited an administrative pressure to report programmatic achievement as a reason for making these changes at the district hospital. In an interview, he said,

> *…in the State programme review meeting, we are always questioned about the achievement of the NPCDCS and NPHCE programmes. The budget utilisation always shows zero. They think we are not doing anything. In meetings they will always ask us to open the geriatric ward so that senior patients can benefit… but even if we open the geriatric ward then we do not have sufficient doctors and nurses in the programme…who will look after the patients in the geriatric ward… we have started diabetes screening at the geriatric ward so that gradually people get to know about the NPHCE programme.* (Nodal officer, NCD cell)

The geriatric ward was established under the National Programme for Health Care for Elderly (NPHCE) to provide in-patient services to elderly patients at the district hospital. The NPHCE was launched in 2011 with the objective of *"providing separate, specialized, and comprehensive healthcare to senior citizens at various levels of the state healthcare delivery system, including outreach services*" (NPHCE guidelines, 2011). Under this programme, there is provision for separate geriatric OPDs and geriatric wards to provide care to elderly patients in the district hospitals. In West Champaran and East Champaran district, the hospital administrators allocated space for a geriatric ward. The geriatric wards has all the basic infrastructure to provide care to elderly patients but because of shortage of medical doctors and nursing staff members the wards are not operation in West Champaran district (see figure 20) whereas in East Champaran district I found the geriatric ward closed due to shortage of staffs in the NPHCE programme.

Figure 20 Geriatric ward in West Champaran district, 16 March 2016



In above interview extract, the nodal officer presented the state officers' perspective on the implementation of the NCDs programme at the district hospital. The low level of budget utilisation in the NCDs programme is considered as "no work is being done". However, state health officers do recognise the shortage of health worker as a problem but expect district administrator "to figure out a way" to ensure geriatric services are available to senior patients. Following the state official instructions', the nodal officer deploys an untrained health worker to begin the diabetes screening services at the geriatric ward so that programmatic indicators could be reported under the NPHCE programme. We can see how administrative pressure to achieve

programmatic result organises the work of health workers and create condition were safety and quality standards of service provision are undermined.

7.2.3 Counselling

During my first phase of data collection (Nov 2015- Jan 2016), counselling services were offered through the NCD clinic, but by the third phase (May 2016-Sep 2016), I found that these services had been discontinued and counsellors removed from the NPCDCS. Following the state government's order, the health administrator deployed the counsellor in the alcohol de-addiction programme, a priority programme for the state government, which I discuss in the following chapter. However, during my second phase of data collection (Feb 2016- Mar 2016), I noted problems with the counselling sessions, their process and the way they were delivered to promote healthy lifestyle among patients. Here, I discuss how the wider institutional processes and factors shaped the counselling process and how the information was passed to patients.

The NPCDCS includes health-promotion strategies such as the delivery of health education and counselling to patients and their caregivers. These strategies are considered important for the prevention of NCDs. According to the NPCDCS' guidelines, doctors and nurses are responsible for imparting health education to patients while they attend the NCD clinic for medical consultations and screenings, whereas counsellors are required to counsel patients on diet and nutrition, the dangers of tobacco and alcohol use, and the warning signs of cancer (Government of India, 2011, p. 5). Key messages to be covered in the programme's counselling and awareness activities are:

- increased intake of healthy foods
- increased physical activity through sports, exercise, etc.
- avoidance of tobacco and alcohol
- stress management
- warning signs of cancer

However, as described above, the high demand and burden of patients in the OPD prevented doctors to offer health education to patients during medical consultation. Doctor refers patients to the counsellor for counselling. Patients can also consult the counsellor directly. Counselling sessions at the district hospital are provided on a walk-in basis. In the West Champaran district, the counselling session aims to improve patients' knowledge and understanding of disease management and to encourage them to adopt a healthy lifestyle. When I talked to the counsellor about his counselling process, he expressed his concern over the workload and reported shortening the counselling sessions to accommodate other patients. In an interview, the counsellor explained his daily routine for counselling sessions at the district hospital:

> *...if patients come around 8.30 in the morning, then it takes a longer time to do the counselling at that time. Because in the morning that patient load is less, that's why I get more time for counselling patients. If a patient comes between 10.30 a.m. and 12.30 p.m., then the number of patients increases at that time. I get less time to counsel patients. On average, I get five to 10 minutes to counsel them. During that short time* [10 minutes]*, I get enough time to do the counselling to the patients. In a day, on average, I counsel 10 to 15 patients.* (Counsellor, NCD clinic)

On average, between 20-25 patients visit the NCD clinic for medical consultations and screenings, which makes it difficult for the counsellor to counsel every patient. In addition, the patient load for counselling is not uniform during OPD hours. In this situation, the counsellor uses his or her everyday work experience at the OPD and estimates the patient's load for counselling. He tries to adjust and shorten counselling sessions so that he can counsel all patients without them having to wait too much. Figure 21 shows that patients are waiting for their turn for counselling at the NCD clinic at the district hospital.

Counselling is a two-way process, where the counsellor gathers information from the patient as well as offering advice on health-related issues. He or she records information about a patient's eating habits, eating habits, daily lifestyle, family history and medication. The counsellor assesses this information and then provides the patient with psychosocial support and encouragement to adopt a healthy lifestyle. He or she is also required to discuss achievable goals with the patient to help him or

her manage their disease. In shorter counselling sessions, the counsellor is not able to exchange in-depth information, and the session becomes merely an act of passing health information to patients.

Figure 21 Crowd at the NCD clinic cum counselling centre at the district hospital in West Champaran

Under the NPCDCS, there is provision for training all categories of health workers to build their knowledge and understanding of non-communicable diseases. The critical areas for training were identified as health promotion, NCDs prevention, and early detection and management of diabetes, CVD and stroke. This training could be delivered through didactic sessions, e-education or hands-on training at selected institutions, such as medical and nursing colleges (Government of India, 2011, p. 29). As per the NPCDCS training plan, counsellors and medical doctors should receive 15 days of training, while 21 days of training were planned for nursing staff. However, the SHS did not organise any training for counsellors or nursing staff. When I asked the counsellor about his training for the NPCDCS, he said that he had *"not received any training since beginning the job*". A member of the nursing staff echoed his comments; she said, "*There was no training given to us in the last four*

years. We are learning by ourselves. We read the guidelines and learn about the programme from other staff members" (nurse, NCD clinic, district hospital).

This lack of training opportunity for staff limits their ability to deliver appropriate health education to patients. However, health workers have adapted to this lack of training through self-directed learning. Their efforts are geared towards becoming more competent and enhancing their performance in the programme. However, their learning is limited to the material available to them. Here, we see an example where institutional process, i.e. the training of health workers, did not occur, leading health workers to become involved in a process of self-directed learning to meet their need for training. We can see a shift in responsibility from the institution to health workers themselves when support was not offered to programme staff.

Because counsellor did not receive training on NCDs counselling, he decides what information need to be shared with patients. He uses his personal experiences, perceptions and belief system to influence, shape and control the counselling session, which limits the scope of the session. In an interview, the counsellor said:

> *I tell patients that they should eat green leafy vegetables and tomatoes, which are easily available at home. During my counselling sessions, I focus on these points. They should reform their lifestyle. I take* [self] *interest at a personal level and tell them that people eat green vegetables so that they will be free from diabetes and tension. For example, now this is Holi season, and during this time, people will eat and consume excessive oil and spices. So, I mention this to patients in advance so that they can take care of themselves and use less oily food... I encourage people to wake up early in the morning, do their daily exercise, eat some beans in the morning, then take a shower and pray to God. By doing prayer, people feel good, and it increases the body's immunity.* (Counsellor, NCD clinic)

The counsellor's local work knowledge and understanding about NCDs forms a guiding framework for counselling. This decision-making power and control over the topics of counselling and subsequent information provision are linked to capacity building support, an institutional task, which are not easily visible at the local site.

7.2.4 Critical care at the district hospital

Patients who have NCDs and are diagnosed with life-threatening conditions, such as stroke, are entitled to receive critical care at the district hospital under the NPCDCS. The MoHFW provided financial assistance to set up a four-bed cardiac care unit (CCU) or to strengthen the existing care unit to offer supervised medical care at district hospital. However, I found that the district hospital had no critical care support available to patients. There was no CCU established and the existing intensive care unit (ICU) was also not functional. The majority of patients "*seek treatment and care at a private hospital or a tertiary-level hospital"* (doctor, district hospital). In an interview, one staff member explained the movement of patients with critical conditions:

> *In the hospital patients visit the physician (general medicine OPD), in case the facility (critical care services) is not available for the NCDs (patients), then patients go to Patna (Patna Medical College and Hospital and Private Hospital)… mainly these people go to the private hospital.* (Counsellor, NCD clinic)

In another interview, a staff member working for the NCD clinic said:

> *R: Patients are generally admitted to the general (male) ward. If they come in a very serious condition, then they will be directly admitted to the emergency ward. Otherwise, patients are referred to the private hospital or Patna (Patna Medical College and Hospital, a tertiary care hospital).*
>
> *I: Is there an ICU (intensive care unit) in the hospital? Is it functional?*
>
> *R: There is an ICU in the hospital, located next to the hospital's emergency ward. However, it is not functional due to the lack of doctors. It has all the equipment, advanced machines, beds with health monitoring system... but it is not operational. (Hospital attendant, NCD clinic)*

At the district hospital, I observed that the door to the intensive care unit (ICU) was always locked. Patients were not admitted to the ICU; they were sent to a general (male or female) ward for further treatment and recovery. There is an operating theatre available at the district hospital, but "*due to the lack of an OT assistant,*

surgeries are often delayed or cancelled" (sanitary attendant, NCD clinic). The surgeon only performs minor surgery, which can be managed with the support of the nursing staff. Patients who require critical care are referred to Patna Medical College and Hospital (PMCH) or the Muzaffarpur district hospital.

When I explored further to understand why the ICU was not functional, I discovered that the ICU has all the essential equipment, but it does not have an oxygen supply, which is an essential life support services for a patient with a complex need is admitted. In an interview, a programme manager explained:

> *The ICU is closed (at the district hospital). The ICU building was constructed with a grant from SHSB. A ventilation machine was required. It was purchased and installed. In the ICU building, pipe fitting is required for the oxygen gas, and local vendors are not readily available in this market (the district). For the pipe fitting, we contacted an agency in Patna and started the negotiation. They gave us an estimate of around Rs. 300,000 (approx. 4,400 USD). But the senior administrative officer did not approve the estimate (cost). He (administrator) thinks that the vendor is asking too high a price for the work. For these tasks, we need district magistrate approval. For this reason, the ICU matter is pending. If there is no pipe fitting and oxygen supply, then what is the purpose of making the ICU functional* (Programme manager, DHS)

The non-functional ICU makes it challenging to offer critical care to patients with NCDs, and doctors have no choice but to refer patients to the tertiary-care hospital or private hospital. Seeking treatment at the private hospital could be expensive. Sometime well-equipped ambulance services to support patients' critical need are not available in the district hospital that can put patients' life at risk while transferring them to tertiary-care hospital.

From an administrative perspective, it is essential to find a "*better price for procurement without compromising quality*" (manager, DHS). The administrators could have prioritised patients' needs and strengthened the ICU by outsourcing the pipe-fitting work at reasonable cost. This could have helped patients to access free ICU services at the district hospital. Instead taking appropriate decision, the district health administrator decided to pass the procurement file (for pipe-fitting work) to

the senior administrator for his approval. What should be the appropriate price for the pipe-fitting work is unknown and the administrative decision is still pending. We can see how notion of cost-efficiency and transparency came to influence the health administrator's decision around pipe-fitting procurement. His attention shifted from making a functional ICU available for patients to saving the organisation money. The organisational priorities of transparency and cost savings came to take precedence over patients' needs.

7.3 Service Organisation and Care pathways in the NMHP

In the previous section, I discussed service organisation and care pathways for the integrated NPCDCS programme, as well as how patients move between care points to receive treatment. In this section, I discuss the service organisation and care pathway in the mental health programme, as well as various disjunctions that exist between policy and practice while delivering mental health services. At the district hospital, mental health services are delivered under the integrated District Mental Health Programme (part of the national mental health programme). The programme aims to provide comprehensive health services through mental health OPD at the district hospital, including screening, assessment, treatment and psychotherapy.

Generally, patients are referred to the mental health OPD (district hospital) by local primary health centres and community health workers. At the district hospital, patients are registered at the registration desk, then he is clinically diagnosed by psychiatrist at mental health OPD. Later patients are referred to clinical psychologist for counselling and psychotherapy as per patient's treatment plan. At the mental health OPD, the case registry assistant registers patients for the mental health programme and provides them with a unique registration code for documentation and reporting purposes. As per the district mental health programme's (DMHP) guidelines, a psychiatrist is the first point for patients' assessment and treatment. However, I found that the clinical psychologist and nurses are the first point of contact for assessing patients' mental health conditions.

Similar to the NCDs programme, the mental health programme does not have a permanent psychiatrist at the district hospital. However, the SHS has temporarily deployed a psychiatrist from the nearby medical college to the district mental health programme. The purpose of deployment was to offer psychiatric consultation twice a

week at the district hospital. However, this decision brought changes to the service organisation and care pathway that shaped the assessment procedure and impacted the overall quality of the treatment. In this section, I present data from interviews and observations at the mental health OPD at three district hospitals to highlight the various service delivery disjunctions, which have implications for district hospital health workers' work experience.

7.3.1 Patient registration for mental disorders

The mental health programme suffers from a shortage of psychiatrists due to delays in staff recruitment by the SHS Bihar. However, SHS Bihar temporarily deploys psychiatrists from medical colleges twice a week. The purpose of the deployment is to offer psychiatric services to patients twice a week at the district hospital. In the West Champaran district, psychiatric consultation is provided twice a week. But when the psychiatrist is not present at the mental health OPD, the available staff record the patients' details and register them at the mental health OPD. Later, they ask patients to visit the general (medicine) OPD to consult the physician for immediate treatment and to return to the mental health OPD to consult a psychiatrist. At the mental health OPD in West Champaran district, I observed that mental health programme staff sometimes ask questions to patients to determine patient's eligibility for the registration at the mental health OPD. Some of informal questions are related to patients' health condition, mental health related issues, any physiological problem, home address, current medications etc. These informal assessments and health workers' instructions to patients could have huge influences on a patient's care pathway and their treatment procedures. During an observation, a staff member asked a patient to consult the physician at general (medicine) OPD. When I asked the staff about the reasons for such referral, he said, "*The patient required immediate treatment*". Further, he added,

> *I think the patient has some mental problem, and he should get treatment immediately. As you know, the psychiatrist doesn't come today. So, the patient should not wait for a long time… If I tell him to come in two days to meet the psychiatrist, then he probably won't come…he came from a very remote village* [name]. *So, I told him to see the doctor at the general (medicine) OPD and also asked him to come to mental health OPD on a day when the psychiatrist examines patients… at least the doctor at the general (medicine)*

OPD can see him and prescribe medicine. (Health worker, mental health OPD)

The notion of immediate treatment discursively organises the care seeking process. The health worker worried that the patient would not turn up for treatment after two days, when psychiatrist is available at mental health OPD. They needed to see a qualified medical doctor at the general (medicine) OPD. Such assessments are aimed to assist patients in receiving immediate medical care. As patients move from the mental health OPD to the general (medicine) OPD, where NCD patients also seek treatment, it adds to the patient load. Physicians at the general OPD are general physicians and "*are not qualified nor trained to examine patients with mental illness"* (manager, SHSB). They can only diagnose patients with physiological problems, and they cannot prescribe drugs or therapy to patients. In the East Champaran and Vaishali districts, staff members shared a similar care pathway, where they encourage patients to consult a doctor at the general OPD when a psychiatrist is not present at the mental health OPD.

The DMHP guidelines highlight the ideal conditions for programme implementation and inform the health administrator about how the programme should be implemented at the district hospital level. They do not, however, offer any information about what staff should do when the reality differs from these ideal conditions. It is left open for programme staff to "figure out" a way to resolve the problems they encounter in their everyday work at the district hospital. The referral of mental health patients to the general OPD is a result of a lack of clarity, guidance and support for health workers.

7.3.2 Diagnosis and assessment of mental illness

According to the district mental health programme (DMHP), all patients are required to be clinically examined by a trained and competent doctor, i.e. a psychiatrist. The assessment is focused on clinical diagnosis (as per the International Classification of Diseases -10 or Diagnostic Statistical Manual of Mental Disorders -l V guidelines) and formulating a treatment or intervention plan.

7.3.2.1 Documenting mental disorder

Like the NPCDCS programme, there is not permanent psychiatrist associated with/working at the mental health programme. However, the SHSB deployed psychiatrists from nearby medical colleges on a temporary basis to ensure services are being offered at the mental health OPD at the district hospital. A psychiatrist usually attends twice a week to offer psychiatric consultation. However, this time is not adequate for him to accomplish his tasks according to the DMHP guideline. The psychiatrist's responsibilities include recording history of mental illness, clinical examinations and recommending treatment to patients. Because of the psychiatrist's limited availability in the mental health programme, the responsibility for patient documentation and assessment was transferred to the clinical psychologist.

In all district hospital, there are wide variances in the case recording practice for mental disorder. In the Vaishali district, the psychiatric nurse only performs case recording for patients with symptoms related to dementia, schizophrenia, anxiety and/or depression. The clinical psychologist, on the other hand, records case histories of patients who have intellectual disabilities, such as autism, a learning disability or mental retardation. When I further explored this case recording processes, I found a lack of clarity among the programme staff. They reported confusion among staff members. The clinical psychologist in Vaishali, for example, stressed that recording patient case histories is a grey area and that no one knows who is responsible for this task:

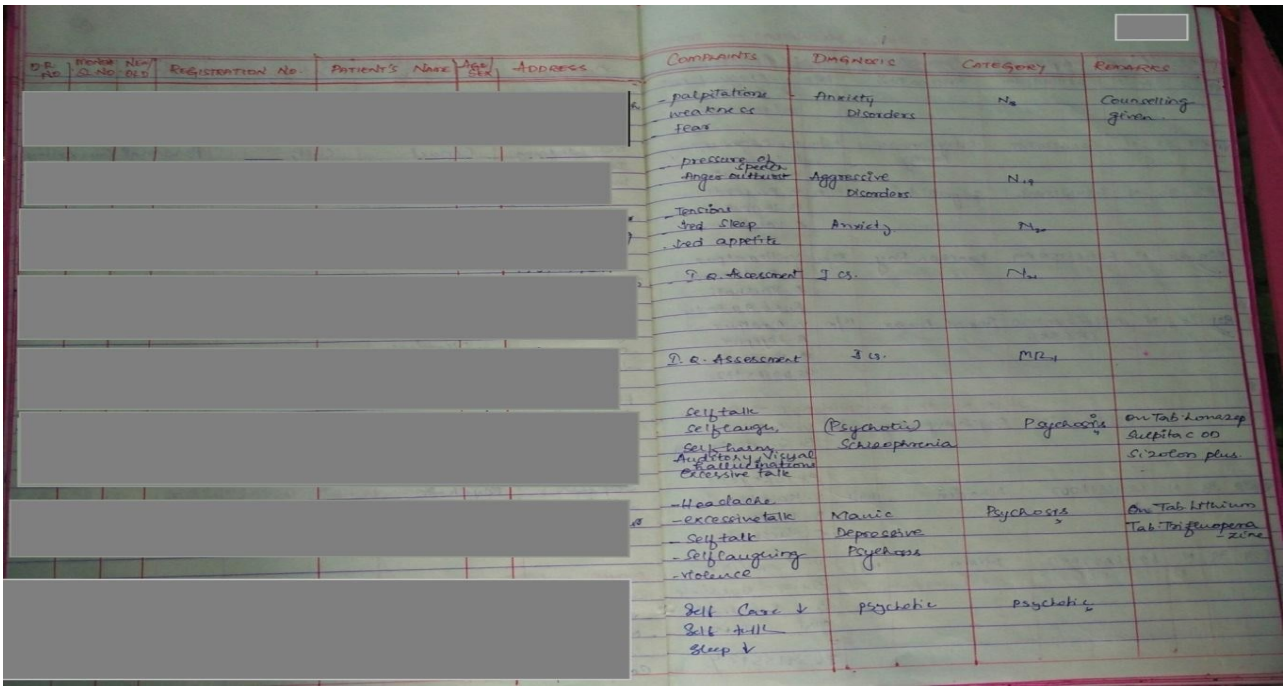
> *Recording the case history of the patients is an issue. The psychiatric nurse takes the case history for some patients, and not for other patients. For example, she does not take down the case history for patients who have an IQ (intelligence quotient) problems… The lack of clarity about who is responsible for taking the case histories creates conflict among staff. Recording a case history is a time-consuming task… Some days more than 15 to20 patients arrive at the OPD (out-patient department), I cannot do the assessment (including recording a brief case history) for all the patients. But I try my best to do the assessment for seven to eight patients (in a day) … one patient takes over 30 mins... The case-registry assistant told me that taking the case history is the responsibility of the doctor (psychiatrist). Who is*

responsible for taking case histories is a very confusing subject? (Clinical psychologist, mental health OPD)

As discussed, a psychiatrist is responsible for recording the case history and making an initial assessment of mental illness. However, in reality, staff members (nurses and clinical psychologist) were completing recording and assessment. They *"did not receive a clear guideline or communication from a supervisor about their role in recording"* (nurse, mental health OPD). During the first phase (Jan 2016) of my visit in Vaishali district, I observed a nurse recording basic details of patients' mental illnesses. These care records include information about a patient's symptoms, family history of mental illness, medical treatment, use of drugs, etc. But subsequent visit over the course of field work (July 2016, third phase of field work)revealed changes made to the reporting system; where nurse maintained patients' case history in a tabular way and most of the details, such as family history and previous treatment, were no longer recorded.

When I asked about changes in case recording, a staff member said, "*we are not aware about the length of the case history… and no one (psychiatrist) uses the case history when prescribing drugs or treatment to patients*" (nurse, mental health OPD). In West Champaran district, I found that the clinical psychologist takes the patient's details, talks to them and discovers the onset of disease (without case history). Patient details are maintained in a register with columns for the date and the patient's registration number, age, sex, address, mental disorder or problem, and symptoms. Patients' case histories and other relevant information, such as current medication and any previous treatment, are not recorded. In the East Champaran district, I observed a similar system. The staff only record patients' registration details, not their case history. When I looked at the register, I noted that patient records are maintained in a register for reporting purposes only. These records do not provide sufficient information to understand a patient's mental illness; they only list a disease category.

Figure 22 Sample of case recording in a district



It is important to note that in all NMHP programme district, staff members were give not given training on how to record patient details. They complete case recording tasks per their own understanding and knowledge. The locally developed case recording format (see figure 22) which includes serial number, monthly serial number, new or old patient, registration number, patients' name, age, sex, address, complaints (e.g. weakness, fear, pressure, anger, tension, lack of sleep), diagnosis (e.g. anxiety disorder, aggressive disorder, psychotic, depressive, psychosis), and remarks (e.g. counselling given, prescribed medicine).

The categorical recording system is designed to assist psychiatrists to quickly determine the patient's problem and offer treatment within a given time. During the psychiatric consultation, the clinical psychologist sits next to the psychiatrist and verbally briefs him about the patients' assessment. This verbal assessment process has locally evolved to *"accommodate all patients attending the mental health OPD at the district hospital, which usually last for 5-10 minutes"* (clinical psychologist, mental health OPD). My observation data at the mental health ODP shows that a psychiatrist offered consultations to 28 patients in less than three hours (approx. six minutes per patient).

A staff member attributed the poor recording to a lack of training support from the SHSB. They believe that case recording could be improved if they were "*given proper training*" (case registry assistant, mental health OPD). According to the

DMHP guidelines, all mental health staff should receive training for the early identification, referral, diagnosis and management of mental disorders, and to help families understand mental illness. In the past 18 months, SHS Bihar did not offer any orientation or training to staff regarding their role and responsibility in programme implementation and service delivery.

7.3.2.2 Assessing mental disorder

According to the DMHP, a psychiatrist should be the first point of contact at the district hospital to assess and diagnose a patient's mental disorder based on the International Classification of Diseases -10 (DMHP, 2013). However, clinical psychologists are performing assessments for mental disorders and offering treatment plans. In an interview, the clinical psychologist at the West Champaran district hospital described the assessment process, saying:

> *... we take the patients' details and write them in the register with a unique code. After registration, I diagnose the patients and give them treatment. If a patient needs medication or if we feel the problem is severe, then we ask the patient to come on Tuesday so that the psychiatrist can diagnose the patient and recommend appropriate treatment.* (Clinical psychologist, mental health OPD)

When I observed the assessment process at the mental health OPD in Vaishali district, the clinical psychologist expressed her frustration, particularly about the lack of support from health administrators. She explained how difficult it was to assess a patient's mental health without any assessment tools or standardised tests:

> *We have not received any test material (assessment tools). We face challenges in assessing patients (when they come for treatment at the mental health OPD). There is an extensive list of assessment tools, such as a personality test or IQ test. There are separate types of testing material for intellectual disability, personality disorder, mental illness... These are the essential tools/tests (for correct assessment and diagnosis). Without these tools, it is hard to work or provide (assessment) services to patients… For those who are psychotic it is ok, they need medication (first), later they will receive therapy. They don't need any diagnosis in the beginning. But those*

> *who are neurotic, for them, it is important that their personality factors should come out. We need to know whether they are telling the truth or lying… If we give them a test, then we find out which area is getting hampered (affected). For example, we see whether the social area is getting affected or marital life is getting affected, or if they have any emotional issues. We find out this information, and then we provide counselling. If we don't have the correct tools, then it affects the right diagnosis and treatment... I do not have any option... I am pressured to diagnose the patients. If I don't do (the assessment), then they will say I don't want to do it (assessment and diagnosis).* (Clinical psychologist, mental health OPD)

The clinical psychologist expressed her concern over the patients' mental illness assessment. She had not received the appropriate assessment tools to determine the patients' mental disorder. She feared that her assessment might put patients at risk of a wrong diagnosis. Despite her request for appropriate tools, the senior administrator did not take appropriate action to provide them. In the absence of these tools, she uses assessment tools that she developed herself to write case histories and analysis, so that *"no one can question"* her capability (see figure 23 and 24). The clinical psychologist's everyday work and experience of clinical assessment and therapy are constituted by external factors, such as the unavailability of assessment tools and the lack of training opportunities. Her work is located within the institutional relationship that involves the DHS, the district hospital, SHS and MoHFW. Each institution involved in the mental health programme has specific roles in its implementation.

Figure 23 Sample of psychological assessment tool used at district hospital

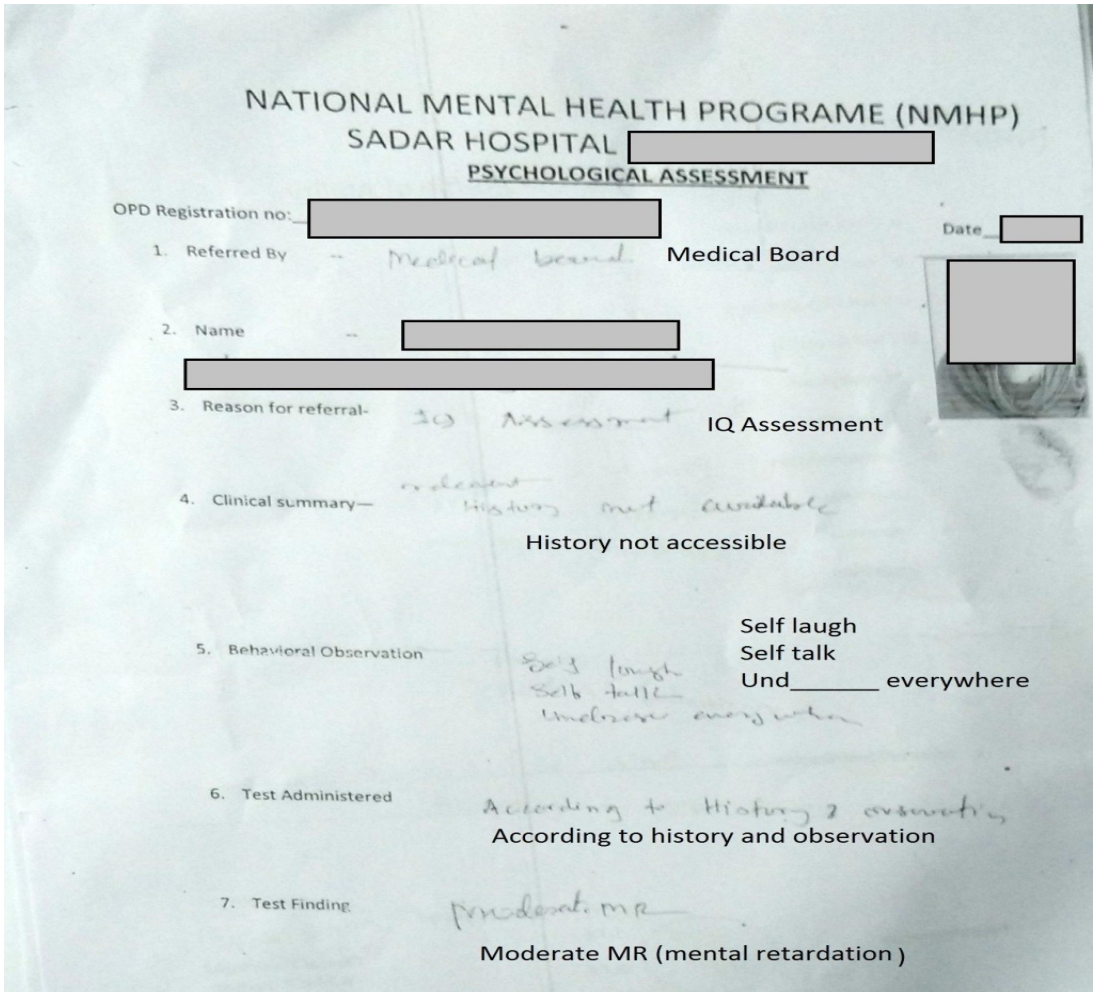
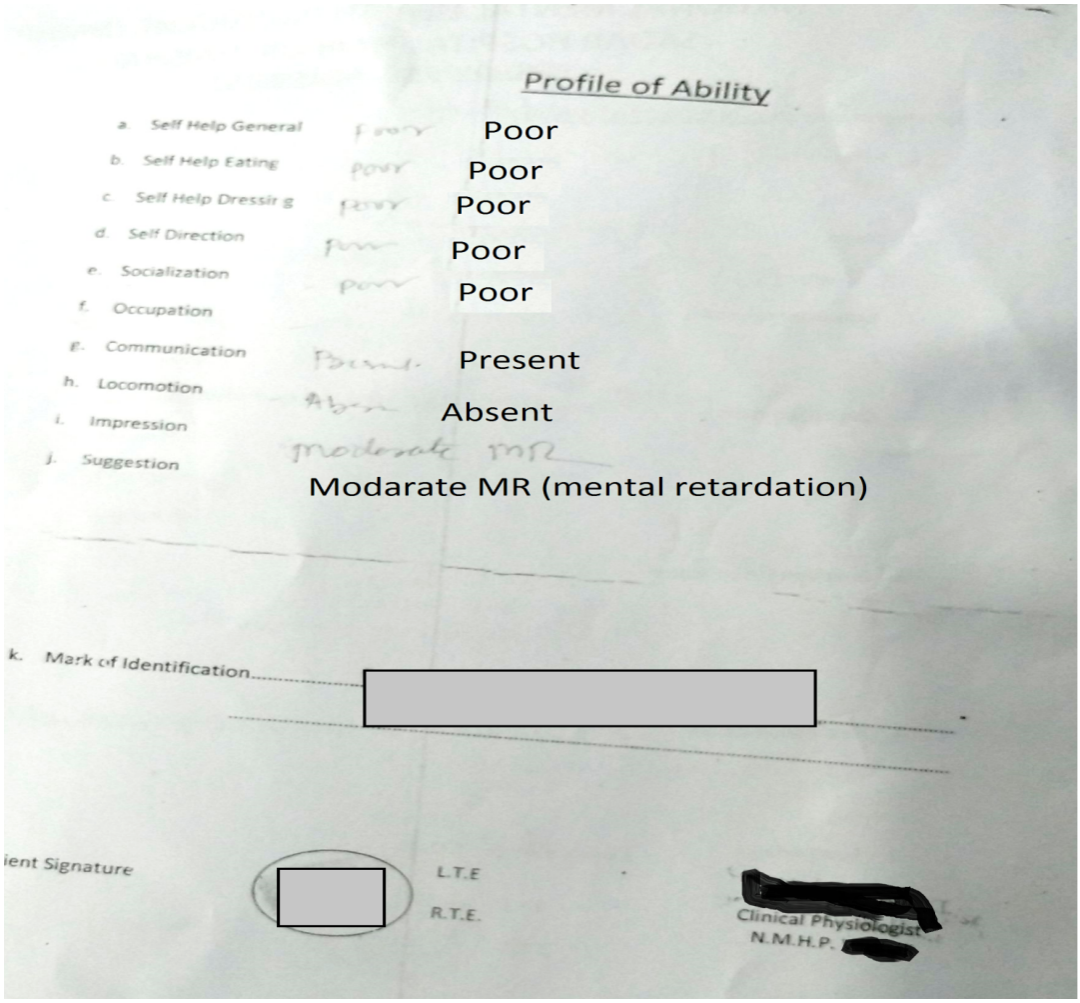


Figure 24 Sample of disability assessment tool



The clinical psychologist in the Vaishali district also shared her concerns regarding the appropriate diagnosis of patients with disabilities (including mental disorders). Her primary role as a clinical psychologist is to counsel and provide therapy to patients, recommended by the psychiatrist. Recently, health administrators asked her to *"perform the disability assessment for people applying for disability certification*" (clinical psychologist, mental health OPD).

According to the guidelines issued by the Ministry of Social Justice and Empowerment on evaluating and assessing mental illness, medical boards should be comprised of three members:

a. a medical superintendent/principal or head of the institution

b. a psychiatrist

c. a third physician (medical doctor)

The medical board undertakes the assessment of a person's ability to manage self-care, interpersonal activities, communication, understanding and work related to employment, housing and/or education. If another individual or institution performs the assessment instead of the medical board, this is a violation of the disabled individual's rights as described in the Person with Disability Act, 1995 (Government of India, 1995). The government of India has recommended an Indian Disability Evaluation and Assessment Scale (IDEAS) for measuring and quantifying disability of a person. The outcome of this assessment is presented via five categories, which are: no disability, mild, moderate, severe and profound. The medical board endorses and certifies an individual's degree of disability based on his or her ability to perform tasks. This certification allows a person with a disability (including a mental disorder) to receive welfare entitlements under various government schemes.

District health administrators are responsible for ensuring that people with disabilities (including mental illness) receive their medical certification from the medical board on time. The shortage of psychiatrists at the district hospital makes it difficult for health administrators to meet this deadline. So, they have instructed the clinical psychologist to examine people with disabilities to determine the severity of their disability for certification purposes. When she undertakes the medical board's task of assessment, she is violating the procedures outlined by the Ministry of Social Justice and Empowerment. This could have legal implications for any members of staff involved. The validity of the assessment is also questionable. In the interview, the clinical psychologist shared her fear, saying:

> *I was asked to sit on the disability assessment board. I did not sit for a long time. Now all the patients are sent to me at the OPD. This is perilous work, as I am doing IQ assessment work without any assessment tools/test. Whatever I give them will go directly on the patient's disability certificate. Tomorrow, if I make* [categorise]*) mild problem to moderate problem by mistake (because I do not have the correct assessment tool), then later it will become an issue. I am doing this assessment based on my previous experience. I was working as a clinical psychologist in a hospital. Initially I was not performing diagnosis when patients were referred to me from the office. I told the senior official that I do not have any assessment tools. He*

> *replied that I should do the assessment and diagnosis based on my experience. Equipment and tools would come later. However, to date, the equipment has not come.* (Clinical psychologist, mental health OPD)

The clinical psychologist is unaware of the legal issues related to assessing the capabilities of people with disabilities. Disability assessment is not part of her TOR (terms of reference) or job description. She was given additional responsibility to undertake the work of the disability assessment board.

These issues, such as the increased workload of the staff, the competing demands of different programmes and their involvement in substandard practice, are not discussed and are kept hidden at the district level. The above interview extracts highlight how professional autonomy is undermined in the bureaucratic and administrative setup, where a clinical psychologist is asked to assess patients' mental disorder and disability without appropriate assessment tools. Such individuals fear departmental disciplinary action if "*they do not follow the administrator's orders*" (clinical psychologist, mental health OPD). They adjust their actions to their work environment and compromise their professional standards of practice to avoid conflict with health administrators.

7.3.2.3 Privacy and counselling

Providing counselling or psychotherapy to patients is an important aspect of mental health treatment. Clinical psychologists are responsible for offering this to both patients and family members. As I observed, however, the infrastructure of the mental health programme in the districts of East Champaran and West Champaran is not adequate. In West Champaran and East Champaran, for example, only one room is provided to the mental health programme. All activities, such as patient registration, counselling, medical consultation, planning, meeting and discussion among staff, take place in the same room. In an interview, the clinical psychologist explained the challenges of counselling patients with mental disorders under these circumstances:

> *...counselling of the patient cannot be done in a group. Counselling requires a silent place where we can create an atmosphere in which patient can share their personal feelings and family situation. However, my counselling area is*

> *also in the OPD. There should be a separate room for counselling. Some patients who have just walked in (do not wait) while counselling is going on with another patient. We don't have any additional employees who can ask the patient to wait until the counsellor has finished counselling another patient. This reduces the effect of therapy and counselling (gets interrupted). We need privacy for counselling. My own concentration is diverted, and the patient's trust in the psychologist gets lost*. (Clinical psychologist, mental health OPD)

Both the clinical psychologist and the psychiatrist experience inconveniences while providing therapy to patients. The infrastructure support offered by the district hospital is not appropriate for mental health patients and the programme. There is no designated patient waiting area. Patients stand and wait outside the mental health OPD room for their turn for a medical consultation with the psychiatrist. Noise and the crowd around the mental health OPD room interrupt counselling sessions and affect the therapeutic outcome. When I talked to the programme manager in West Champaran, he highlighted the district hospital's lack of additional infrastructure to support the mental health programme. In East Champaran, the staff expressed the same concerns, reporting a lack of infrastructure for the mental health programme. They expressed their frustration with the hospital administration for not providing adequate infrastructure support. By contrast, when I spoke with the hospital administrator, they said the "*hospital is over-pressured with many health programmes. Unless the government creates new infrastructure, we are not able to allocate any additional space to the mental health programme*" (administrator, district hospital). The DMHP guidelines emphasise the availability of adequate infrastructure for patients' comfort and privacy. Here we can see how this lack compromises patients' counselling and invades their privacy.

7.4 Conclusion

This chapter explores how NCDs and mental health services are organised and delivered at district hospitals. The chapter highlights various disjunctions that exist between the programme guidelines and its implementation. These disjunctions emerge when institutional processes do not occur. The care pathway outlined in the NCDs programme guidelines emphasises that patients with NCDs should receive comprehensive services at NCD clinics, including medical consultation, screening,

drugs and counselling. In reality, due to a shortage of medical doctors and health workers, health administrators have modified service organisation so that patients can access services. These modified pathways offer some advantages, ensuring that patients have access, even if limited and to poor quality, to medical consultations, but patients also have to spend a long time at the hospital. These decisions did not consider health workers' skills and capabilities or available support, and therefore undermines the safety and quality of service, as we saw when an untrained staff undertakes the clinical role of screening patients for diabetes.

Similar to the NCDs programme, health services under the mental health programme have also been modified due to the absence of a permanent psychiatrist and support health workers. The deployment of a psychiatrist enabled provision of medical consultation and treatment to patients for their mental illness. Despite lack of training on case recording, staff members developed local practices of documentation and assessment as per their knowledge to ensure the institutional tasks occurs. However, these locally developed practices (of case recording, psychological assessment) offer support to meet the organisational goal of service delivery but undermine patients' health, safety and privacy. These concerns and substandard practices are overlooked when reporting on programmatic achievement and do not constitute a topic for discussion to improve service provision in the mental health programme. The micro level processes and issues that health workers experiences are not taken into account; thus, health workers are left alone to cope and best figure out how to deliver care in their area of expertise.

The programme guidelines are written to inform the reader, i.e. health administrators and managers, about how the programme should be delivered. However, the institutional texts do not provide adequate guidance or clarity about how these institutional tasks will occur or who will coordinate and accomplish them. These institutional tasks include staff recruitment, training, procurement of drugs and services, laboratory strengthening and infrastructure development at the district hospital. These tasks are linked to different actors (i.e. DHS, SHSB, DoH, BMSILC), who have financial and administrative authority to make decisions. These actors need to work together so that institutional tasks occur, and services can be delivered at the district hospital.

Chapter 8

Organisation of health workers' work in the Integrated NCDs Programme

8.1 Introduction

This chapter explores how the work of health workers are organised in the integrated NCDs and mentation health programme at district hospital. When health workers are recruited to an integrated programme, they are expected to work as per their job description. It is assumed that they will understand and learn the work practices; this involves adhering to administrative orders in relation to service delivery. The health workers' supervisors and nodal officers are notified about their appointment. The role of the supervisors is to ensure that newly recruited staff members are oriented towards their work. This forms health workers' perceptions about their role, responsibilities and work environment.

It is commonly anticipated that job description or terms of reference (ToR), an authoritative text, will orient health workers about their work at the district hospital. These authoritative texts are produced with consideration of required skill or abilities in line with desired programme results. When health workers read their job description then are drawn into text-reader conversation that oriented them about their expected roles and responsibilities in the integrated programmes. By contrast, there are also various local managerial and administrative practices that orient health workers about their work in the integrated NCDs and mental health programmes.

Since the beginning of my fieldwork, I have observed that health workers recruited specifically for work in the NCDs and mental health programmes, but they were deployed in other programmes (maternal and child health and de-addiction programme). Their deployment (away from NCDs and mental health programme) affected core NCDs and mental health service delivery. The actual reason for their deployment is unknown to the staff members. The health workers' deployment and their overall work at the district hospital (within or outside the scope of integrated programmes) are problematic for the inquiry. Countless enquiries arose related to the health workers' deployment and organisation of their work at the district hospital. When I spoke with health officials, I was repeatedly informed about a "shortage of staff members", an "urgent need for service provision" or the "ED's letter" (a letter

from the Executive Director of the State Health Society Bihar). The ED's letter on health workers' deployment was written to the district administrator directing them to take further action in relation to the management and implementation of health programmes at the district hospital. I also observed that agendas of maternal and child health and reducing alcohol additions were influencing the health workers' deployment, which affected the health workers' work in the integrated NCDs and mental health programme.

This chapter explores the organisation of the health workers' work; I also discuss the invisible forces and practices that shape their everyday experience at the district hospital. Using a social organisation of knowledge and IE approach, I analyse how text-based extended relations draw health workers into the administrative process. The chapter explores the pattern in which these texts shape their everyday work and experiences at the district hospital. Interview transcripts, observational data and official texts are used as data sources to analyse the organisation of health workers' work. I present extracts of interviews with health workers (e.g. counsellor, clinical psychologist, ward attendant, psychiatrist nurse, and case registry attendant), managers (district programme managers, HR manager, monitoring and evaluation officer) and health administrators (nodal officer, Civil Surgeon). Using Smith's notion of work, I interviewed participants to learn about their everyday work, including paid and non-paid work, workload, deployment process and their interactions with supervisors and managers at the district hospital.

8.2 Priorities agendas and their influence on the NCDs and mental health programmes in Bihar

Since the launch of the MDGs in 2000, India has made significant progress in achieving its targets, especially on maternal and child health indicators. Reducing maternal and child mortality, along with population control, remains a priority for the Indian government (Government of India, 2017b). This is a priority in specific states like Bihar, Jharkhand, Uttar Pradesh and Chhattisgarh, where health indicators are below the national average. In these states, addressing maternal and child mortality has been challenging due to numerous social factors such as poverty, malnourishment, early marriage, high fertility rate, a patriarchal mind-set and significant gaps in gender inequality. Child immunisation is considered one low-cost public health strategy for reducing IMR. In 1948, the government of India introduced

a BCG (Bacillus Calmette Guerin) vaccination as a protective measure (Lahariya, 2014). However, the Indian government has experienced various challenges, such as insufficient funds, a focus on polio eradication over other programmes, low demand for vaccination and the presence of anti-vaccine advocates (Laxminarayan et al., 2011). Also, the Indian government launched several initiatives to increase immunisation coverage, such as the Expanded Programme for Immunization (1978), the Universal Immunization Programme (1985), the Technology Mission on Immunisation (1986), Child Survival and Safe Motherhood (1992), Reproductive Child Health (RCH 1 in 1997) and the National Rural Health Mission (2005).

In 2014, the government launched a new immunisation mission called 'Mission Indradhanush', which intended to immunise pregnant women and children under the age of two against seven preventable diseases: diphtheria, whooping cough, tetanus, poliomyelitis, tuberculosis, measles and Hepatitis B. In 2014 and 2016, the GoI added new vaccines in the 'Mission Indradhanush' to prevent women and children in selected states from developing diseases, especially Japanese encephalitis, rubella, injectable polio vaccine bivalent and rotavirus. The mission followed the "Pulse Polio Immunisation" model that involved micro-level planning at the community level as well as a monitoring and supervision framework by health officials at block and district levels. This planning, monitoring and service delivery under the "Mission Indradhanush" involved many tasks at different level. In an interview, the State Consultant working on strengthening routine immunisation in Bihar presented his observations:

> *...the state is giving priority to routine immunisation. And in all the review meetings, 50 per cent of the time goes on taking feedback on routine immunisation activities. Twenty-five per cent of the time goes on the discussion around ASHA and JSY payment, and in the remaining 25 per cent, the chairperson discusses other health programmes… in Bihar, many international organisations (non-state actors and private foundations) are working on maternal and child health issues. Everyone is conducting the monitoring and supervision of the maternal and child-related services at the community level, which is good.* [State consultant, UNDP]

This resonates with my field observations and textual analysis of DHS's meeting minutes. In the district of West Champaran, the agenda for district review meetings has always been around the issues of institutional delivery, routine immunisation, child health, family planning, payment of community health workers and incentives for institutional delivery. The agendas and discussion points of all these meetings are related to maternal and child health. The district administration has limited time to discuss the implementation of other disease control programmes. When I spoke with a programme manager about his view of discussions of the disease control programme in monthly meetings, he said:

> *during the review meetings, all the development partners (international organisations) shared their field observations and pointed out the problem in the maternal and child health programmes in the district…and most of the time we discuss these issues. We did not get sufficient time to review these programmes (mental health and NCDs).* (Manager, DHS)

Since 2011, the Bill and Melinda Gates Foundation (BMGF) has provided financial assistance to international organisations such as CARE, PCI and BBC Media Action (part of British Broadcasting Corporation, i.e. BBC) to strengthen maternal and child health services in Bihar. In addition, international organisations like the WHO and UNICEF provide feedback to district health administration on immunisation coverage and related problems during the review meetings. The effort of health administrators goes into understanding these concerns raised by representatives of international organisations and addressing them by instructing programme managers to take appropriate action. This limits the time health administrators have to discuss disease control programmes during review meetings. It shows that how the advocacy and support of international organisations influences the administrators' work and their attention towards health care delivery.

Similar to maternal and child health, alcoholism became a political agenda item in Bihar. Civil societies and women-based organisations demanded a ban on alcohol sales and consumption in Bihar. During the 2015 State assembly election, the ruling government, under the leadership of Mr Nitish Kumar, promised a complete ban on alcohol sales in Bihar. His political manifesto played an important role in mobilising women's votes for his party on the alcohol ban issue. In 2015, Nitish Kumar's party, Janata Dal (United), won the election and formed a government with their political

alliance. On April 5, 2016, the state government declared a complete ban on the consumption and sale of alcohol in Bihar. In addition, the government launched a de-addiction program to raise awareness among people about the harmful effects of alcoholism. The Department of Health also instructed district health administrators to establish a ten-bed de-addiction cum counselling centre in each district hospital across Bihar. The purpose of de-addiction centre was to provide medical services to patients experiencing alcoholism withdrawal symptoms. The letter outlines the following instructions for health administrators (Letter number 72 (1) Government of Bihar, 2016):

a. Use of existing infrastructure and human resource for establishing de-addiction centre without creating a new infrastructure or recruiting additional staff.

b. Allocated funds for renovation and maintenance of de-addiction centre and procurement of goods and supplies.

c. Outlined daily programme review and monitoring mechanism.

d. Instructed sub-divisional commissioners and district magistrates to ensure the availability of doctors and health workers in the alcohol de-addiction centre.

e. Emphasised that all the doctors and staffs for the de-addiction centre will be deployed from various programmes and health facility.

The letters made clear the expectation to establish these centres but did not offer clear information or guidance about how to do so. The letter did not specify how administrators should make decisions around health workers' deployment; these choices were left up to administrators. In the district of West Champaran, the health administrator deployed health workers working in the integrated mental health and NCD programme into this de-addiction programme. The decision was based on the administrators' understanding and *"assessment of opportunity cost of health workers' deployment*" (manager, DHS). The health workers' deployment in the de-addiction programme has interrupted service delivery in the integrated NCDs and mental health programme at the district. Staff members claimed that the "*government was paying more attention to drug-addiction programme compared to NCDs or mental*

health programme" (counsellor, de-addiction centre). In an interview, one health worker said,

> *The health administrators have deputed NCDs programme staff in the alcohol de-addiction programme. As a result, NCDs programme activities are becoming compromised. De-addiction programme has no permanent staff. All the employees working in the de-addiction programme are deployed from either health facility or national health programme such as mental health, family planning, NCDs programme. The drug de-addiction programme is one of the priority programmes of the state government. The chief minister is directly monitoring the programme. The District Magistrate and Principal Secretary, of the Department of Health, has given a strict order that programme should be monitored on a daily basis.* (Counsellor, NCD clinic)

The deployment of counsellor in the de-addiction centre reduced NCDs programme services. The counsellor was not available to provide counselling to patients attending the NCD clinic. Similar to the counsellor, because of deployment, the health workers were "*not able to conduct outreach activities and training programme in community, schools and colleges"* (nurse, de-addiction centre). From an administrative viewpoint, they *"do not have any choice, as the Department of Health has not given them any additional manpower"* (health administrator, DHS). Their decisions are based on the rationale of causing minimal disturbance to service delivery without affecting the priority programmes. In an interview, the health administrator shared this viewpoint about health workers' deployment in the de-addiction programme, saying,

> *…We need to follow the government's orders. It is our responsibility to make sure we provide health services to patients (coming to the de-addiction centre) … we face challenges, but we have to do the best with the available resources. The NCDs and mental health programmes (NPCDCS, NPHCE) is a relatively new programmes and they are doing nothing at the moment. So, I thought it would be better to deploy them in de-addiction programme…at least they will work in the programme. I want to strengthen the NCDs programmes, but de-addiction programme is the state government's immediate priority, so we have to make immediate decisions for deployment. (*Health administrator, DHS)

The health administrator emphasised his interest in strengthening the NCDs programme at the district hospital; however, the government's order to establish a de-addiction programme affected his administrative decisions. His administrative decision to deploy health workers from the NCDs programme to the de-addiction centre is based on his own understanding and assessment of minimising service delivery interruption.

In Bihar, the health agenda has been shaped by the national health agenda to reduce IMR and MRR, the presence and support of national and international agencies, and political determination to ban the sale and consumption of alcohol. Here we can see a direct link between healthcare priorities and NCDs programme implementation; the government's priorities have a direct effect on administrator's decisions at district level. Following the state's order, local administrators divert resources and deploy health workers from NCDs and mental health programmes, to provide extensive support to prioritise agenda programme despite limited resources. However, this institutional process of deploying health workers has a negative implication on NCDs and mental health programme service delivery at the district hospital.

8.3 Organisation of health workers' work

The National Health Policy 2002 emphasises the authority and autonomy of the district health administration to allocate staff members' time to support health programmes as per local need:

> *"The Policy envisages that apart from the exclusive staff in a vertical structure for the disease control programmes, all rural health staff should be available for the entire gamut of public health activities at the decentralized level, irrespective of whether these activities relate to national programmes or other public health initiatives. It would be for the Head of the District Health administration to allocate the time of the rural health staff between the various programmes, depending on the local need.* (Government of India, 2002)

This text makes a connection between the MoHFW, the state and the district health administrator for programme implementation. It aims to inform and coordinate the administration of the work of allocating health workers' time to address local needs.

At the district hospital, it is observed that many health workers working in the integrated NCDs or mental health programme were deployed in other work sites, such as DEIC, the de-addiction centre, or female or emergency wards (see table 23).

Table 23 NCDs programme staff members' deployment in West Champaran, East Champaran and Vaishali districts, Bihar

Programme	Staff	Deployment	District
NPCDCS	Counsellor	Alcohol De-addiction centre District early intervention centre	West Champaran
NMHP	Community nurse	Alcohol de-addiction centre	West Champaran
	Clinical Psychologist	District early intervention centre	West Champaran East Champaran Vaishali
	Ward assistant	Emergency room (Hospital)	East Champaran
	Case registry assistant	Emergency room (Hospital)	East Champaran
NPHCE	Nurse	District Early intervention centre Female ward (Hospital)	West Champaran East Champaran
	Hospital attendant	Operation Theatre (Hospital)	West Champaran
	Sanitary attendant	Female labour ward (Hospital)	West Champaran

The NHP 2002 also states that *"to implement such a change, not only would the public health administrators be required to change their mind-set, but the rural health staff would need to be trained and reoriented*" (Government of India, 2002). The text is used as objectified knowledge that forms a basis for decision making at a local setting. The policy text constitutes and organises the social, i.e. the work of the state, the health administrator and staff members in relation to their work-time allocation. In this section, I explore how institutional texts play an important role in organising health workers' work at the district hospital.

integrated programme staff members' work at the district hospital is socially connected with the work of others, explaining how participants and their work are organised through textual practice which forms an institutional logic and rationale for administrative action.

8.3.2 Textual practice, deployment and health workers' work

The NPCDCS programme guidelines briefly outline the health workers' work at the district hospital. The state is expected to adopt and modify the programme guidelines as per local need to achieve desired program results. In contrast to the NPCDCS guidelines, when I spoke with health workers, I found they perform many additional

roles and undertake extra tasks which go beyond the document outline and programme requirements. Following this disjuncture, I discovered health workers in the integrated NPCDCS and NMHP programme continuously being deployed and ordered to work in other health programmes and hospital units. At a district level, participants referred to "instruction", "order" or "letter" from the Executive Director, SHS Bihar or Principal Secretary, the State department of health for such deployment. At the district hospital, I observed many health workers from the integrated NPCDCS, NPHCE and NMHP programmes being deployed in the District Early Intervention Centre (DEIC) under the Rashtriya Bal Swastha Karyakram (RBSK) programme.

The Rashtriya Bal Swasthya Karyakram (RBSK) programme was launched in February 2013. The Programme aimed at early identification and early intervention for children from birth to 18 years covering four D's viz. defects at birth, deficiencies, diseases and development delays including disability. The district early intervention centre (DEIC), established at each district hospital, is an integral unit of RBSK. It aims to treat children aged 0-18 years identified during health screening camps at the Anganwadi centres (AWC), which are community-based units providing community health and welfare services to pregnant women and children aged 0-6 years (ICDS).

In June 2015, the SHS issued a letter to district health administrators with a list of health workers (including staff members from NMHP, NPCDCS and NPHCE) to be deployed in the DEIC. The list included a counsellor, a physiotherapist, a clinical psychologist, a ward assistant, and some nurses from the NPCDCS, NPHCE and NMHP programmes. Further, the SHS's letter became an authoritative text and reproduced by the district health administrator for the health workers and nodal officers to inform them about changes in their work and work site. Their deployment is coordinated through a series of actions taken by administrators and managers at different levels. This action involves:

- Interpretation of official texts produced by the MoHFW at SHSB/the Department of Health,
- Producing administrative texts for state health administrators,

- Receiving and reproducing texts for health workers and nodal officers by the district health administrator

- Interpretation and action by health workers at the district hospital

In the letter, the administrators' role is to follow the instruction received from the State Health Society and implement it at the district level at the district level regardless of changes or disruption in service delivery. The counsellor working in the NPCDCS programme told me that the health administrator had deployed him in three different programmes at the same time. In an interview, he said,

> *Last year, I was deputed to the District Early Intervention Centre (DEIC) at the hospital... the Civil Surgeon ordered me to work in the DEIC twice a week (Friday and Saturday) … the letter, given to me, clearly said I would not be given any additional remuneration or incentives. Last month, I got another letter from the State (SHS Bihar) to work as a counsellor in the drug de-addiction centre at the hospital…now I cannot work in the NCDs programme (as a counsellor in the NPCDCS programme).*
>
> (Counsellor, NCD clinic)

The counsellor was recruited for the NPCDCS programme and simultaneously deployed in three health programmes. The letter recently given to him highlights the "*start date for his deployment but it did not have any end date*" (counsellor, NCD clinic). He is not aware of the end of his deployment. The counsellor's deployment in the RBSK and drug de-addiction programme may have offered counselling services to patients attending DEIC and the de-addiction centre. But it reduced counsellor's work hours at the NCD clinic and affected counselling to patients having NCDs at the district hospital.

The clinical psychologists working in the mental health programme in the West Champaran and Vaishali districts shared a similar experience. One of the clinical psychologists explained her work situation and said,

> *I am working in the National Mental Health Programme (NMHP), and I am also deputed in the RBSK Programme. Under this programme, I have to spend two days at the district early intervention centre (DEIC) to counsel the*

> *carers and families of the children. I am required to work on Friday and Saturday at the RBSK programme. Apart from this, we are doing a lot of different work as per the instruction of nodal officers (mental health programme). These additional tasks are temporary… it has been a year since we are working alone (in the programme*). (Health worker, mental health OPD)

In the above interview extract, the clinical psychologist says her "deployment" is temporary, but she has been working in the DEIC centre for almost one year. Like the NPCDCS counsellor, she is also not aware of the end date of her deployment. Her knowledge about her work and work environment has emerged through her interaction with the official texts and the nodal officer's instruction. The clinical psychologist was recruited for the mental health programme. Her work at the DEIC is not outlined in her job description and was never discussed prior to her deployment. The authoritative text, produced at the state health society, is reproduced by the district administrator for nodal officers and health workers to inform them of their new role at the hospital. The text was produced away from her work site and entered in her work environment through text-act-text practice. Here we can see how the textual practice occurs at a distant place and shapes health workers' deployment and their work at the district hospital without their knowledge.

The RBSK programme was launched in February 2013. However, the state health society did not recruit any staff member for the programme until three years after its inception. A programme manager who applied for a DEIC manager position in early 2014 commented,

> *I applied for DEIC manager for the RBSK in 2014. I did not receive any communication from them (SHSB)…Just a few weeks (August 2016) before I received an interview call for the position, almost two years later.* (Manager, SHS Bihar)

The RBSK programme is one of the Government of India's priority programmes aimed at diagnosing and treating childhood disability. The delay in staff recruitment for the DEIC programme reduces the state's ability to deliver services under the RBSK programme. The state administrators decided to deploy existing health workers (from another national programme) into the RBSK programmes. Though

state administrators could have also initiated the recruitment process and recruited the health workers for the RBSK programme. The reasons behind such delayed recruitment are unknown to the health workers, district health administrator and other staffs in the hospital.

8.3.3 Managerial practice and the notion of human resource utilisation

The notion of human resource utilisation was a major factor in the administrator's decisions around health worker deployment. Health workers working in the integrated programmes are seen as additional resources for the hospital that could be managed and utilised regardless of their will or interest. In East Champaran district, two health workers in the mental health programme were deployed in the emergency department to provide care for patients with life-threatening conditions. In the same district, hospital administrators deployed nurses and ward attendants (from the NPHCE programme) in various hospital wards and activities. In an interview, a hospital attendant said,

> *In March 2014, I was deputed in the labour room (female ward) … I worked there for one month… I told them I would not work in a female ward… Later, I was sent to the outpatient department (OPD). I worked there for around three months… then they sent me to the accounts department* [account department of the hospital]*to assist the accountant to prepare and distribute the JSY*[11] *(Jannani Suraksha Scheme) cheque. I worked there for six months. Then I went (was transferred) to the surgical ward for two months. After that, I worked in OT for 1.5 years. After that, I came to the NCD cell to work. I joined the NCD cell in September 2015 when nodal called all the NPCDCS and NPHCE programme staff to work in the NCD cell*. (Hospital attendant, NCD clinic)

The hospital attendant was initially recruited for the NPHCE programme, which aims to provide care to patients in the district hospital's geriatric ward. In contrast, for the past three years, he has been ordered to work in various hospital units and wards. His work and work environment have been continuously changing and re-organised as per the "instruction" of the health administrator. Another NPHCE health worker

11 JanananiSurakshaYojana is a cash transfer scheme aiming to promote institutional delivery under the NRHM programme

shared a similar experience of being deployed to the administrative officer's residence for domestic work. In an interview she said,

> *I was working only in the labour ward. I worked in the labour ward since March 2013, and I worked there until September 2015. For a few days, I was then sent to the district magistrate's house. I worked there for two days helping him to bring his daughter from school. After that, they were trying to transfer me to the PHC. Then, the newly appointed nodal officer for the NCDs programme asked all the staff to come to work for the NCDs programme.* (Sanitary attendant, NCD clinic)

Similar to the hospital attendant, the sanitary attendant was recruited for the integrated NPHCE programme to work in the geriatric ward. The official "instruction" to work at the administrator's house differs from her job description and employment contract with the district health society. In West Champaran district, "*all the health workers were engaged in other work (not in NCDs service delivery*" (hospital attendant, NCD clinic) for 2.5 years, between March 2013 and September 2015. During this period, the NCD clinic was not operational. NCDs services, such as screening, medical consultation and diagnostic services were not offered to patients.

The administrative "instruction" reproduced in various authoritative texts forms a basis for organising health workers' work at the district hospital. The health workers do not have any agency or space to negotiate their service and work environment. They are not consulted regarding local needs, their preferences or choices for improving health services at the hospital. Rather, they are always told what to do. Their professional role to organise and strengthen NCDs service delivery disappears from the discussion.

The health workers work under pressure and "*worry about their employment and the future of the NCDs programme" (counsellor, NCD clinic)* because of their continuous deployment outside the NCDs health programmes. In the absence of medical doctors, the administrator perceives that staff neither work nor deliver services; this is a de-motivating factor for health workers. According to a nurse working in the mental health programme,

> *...health administrator assumes that health workers did not work when a programme did not have any medical doctor. They think that without a medical doctor, health workers (nurses, paramedics, ward assistants) do not have any work…and this is the reason they deploy us in various programmes and activities.* (Nurse, NCD clinic)

The lack of medical doctors in the integrated health programme crafts a rationale for the deployment of health workers. The psychiatric nurse, working in the NMHP in the Vaishali district, shares a similar experience. The health administrator deployed her in the sick and new-born care unit (SNCU). She worked three days a week to provide additional support to the unit. According to the nurse,

> *I joined the mental health programme in November 2015, and in January 2016, the health officer deputed me in the SNCU* [sick and new-born care unit]. *I was providing additional support to the new-born children...the mental health programme did not have any psychiatrist doctor. The senior health officer thought I was not engaged in my work. Without even consulting me, they deputed me in the SNCU*. (Nurse, mental health OPD)

The administrator perceives health workers' work as a non-productive employee when services are not delivered in the health programme. Such perception about the heath workers' work forms a rationale for their deployment in various activities in hospital to justify their work. We can see this notion of utilisation of human resources come to dominate and shape administrative decisions. This is evident from an interview with a health administrator from the District Health Society:

> *…when there is no doctor, and there is a lack of staff in the programme, then what services will be delivered? Who will see patients? The remaining staff members are required to work in the hospital ward and do their duty*. (Health administrator, DHS)

Health workers are viewed as they need to be engaged in meaningful work or activities. The institutional problem of staff recruitment, lack of staff and other resource deficiencies are framed in a way that reflects staff as inefficient and incapable of producing effective results. This viewpoint creates a condition in which institutional problems are categorised as individual problems; in this case,

problematising the health workers as non-productive. Here we can see the activation of a managerial discourse that put organisational priority over health workers' subjective experiences.

8.4 Managing workload

As discussed earlier, due to a delay in staff recruitment at State Health Society Bihar, the integrated health programmers experienced a shortage of health workers and programme management staff. The district administrator asked the remaining programme health workers to take up the responsibilities of vacant positions. Such decision was taken to ensure programme activities are not affected by the staff shortage. However, health workers viewed the "transfer of work" as extra work that did not correspond to their employment contract or job description.

In an interview, the counsellor shared his frustration and talked about the additional work he has been doing,

> *1 (Interviewer): What kind of work you do at your work?*
>
> *R (respondent): I do all the work which is generally done by a senior clerk* (at the DHS)… *any bank related work such as cheque deposit, cash withdrawal or any administrative work... work related to (preparing or issuing) any letter. All these jobs I have to do.*
>
> *I (Interviewer): If you were not there, who would be responsible for this work?*
>
> *R: The NPCDCS district programme coordinator (DPC) and logistic cum finance officer are responsible for these tasks. But they are not working in the programme anymore. These positions have been vacant since January 2014 (over 2.5 years). These tasks, given to me, are temporary in nature. I will hand over these responsibilities to the new staff members when they join the programme. However, for the last 7-8 months, I am doing all these tasks and supporting the programme. I do not get remuneration for these additional tasks.*
>
> *I: What is your work time?*

> *R: I work in the morning from 8.30 to 2 pm, I work at OPD. At 2 pm I take my lunch. After 2 pm, until 4-5 pm, sometimes till 6 pm, I do other office work related to the programme, such as salary preparation, preparing purchase request, attending the programme meeting.* (Counsellor, NCD clinic)

The counsellor explains how he undertakes all the programmatic work of the finance-cum-logistic officers and the District Programme Coordinator to facilitate the programme activities. When I examined his job description, it was discovered that his prime role in the NPCDCS programme is to offer counselling services to patients and caregivers. However, he also undertakes multiple additional tasks, such as preparing letters and reports, organising supporting documents for salary preparation for the account manager and purchasing drugs from the local market. He also works extra hours each week to ensure all the given tasks are completed as per the given timeline. However, he is not paid for these additional tasks. This incident depicts the managerial practice of work transfer at the district hospital; despite a vacancy in the integrated programme, multi-tasking was preferred over staff recruitment. District health officials are aware about health workers' workload and their problems. In context when resources are not available to health administrators, they try to motivate and encourage health workers to support the programme implementation. In an interview he said,

> *...we encourage and motivate health workers to take responsibility and play an active role in the programme implementation. They are asked to follow guidelines and protocols issued by the SHS or Ministry of Health and Family Welfare (MoHFW).* (Programme manager, DHS)

The district administrator uses motivation as a technique to encourage and orient health workers to undertake additional tasks. This ensures that health workers comply with the administrative order and do not question the administrators' authority. The health workers' frustration, workload and extra-hour work (unpaid overtime) do not form a topic for administrative discussion for improving work conditions; it is largely the organisational priority to complete the programme activities that shape administrative discussion and decisions. We can see how management practices and motivation come to play an important role in programme implementation in a resource-constrained setting.

Despite managing workload, health workers are not paid on time. They move back and forth and coordinate with various officers in an effort to get their salary. Their salary cheques need to be signed by administrative officers in different locations (with a three-kilometre distance between two offices). While talking to health workers in West Champaran district, I found staff salaries were three weeks late, and staff were regularly visiting the DHS to get paid. When I reviewed the administrative texts at the DHS, I observed NPCDCS staff waiting long hours to meet the account manager for salaries. Below is an extract from the observation:

> *Both counsellor and ward assistant were waiting outside the accountant's office for a long time. I was reviewing NCDs programme files and meeting notes at the district programme manager's office. Both staff had been waiting at the DPM office since 1 pm. The health workers told me that they were waiting to get their salary cheque from the accountant. I observed that they were regularly going inside the account manager's office and talking to him about their salary release. The account manager assured them that he would look after his salary file once he finishes his work. The salary of the staff was 20 days overdue, and they were hoping to receive their pay by the end of the day. In the next four days, there is a big festival, Holi, a Hindu festival* (Observation at DHS office, 6.35 P.M, 20th March 2016)

When I asked the counsellor when he was expecting to get the salary cheque, he said,

> *…it will take time. Once the account manager prepares the cheque, I need to meet the nodal officer, NCDs programme, for his signature on the cheque. After that, I will bring the signed cheque to the accountant for his signature and record the cheque number in the register. Then he will collect the cheque and deposit it into the bank for clearance. It will take at least 2-3 days for the salary amount to reflect in my bank account.* (Counsellor, DHS)

The counsellor daily takes on many additional tasks, such as preparing letters, following up with the account manager, carrying documents and cheques to be signed by the health administrator, and assisting the account manager to complete the organisational procedure for salary release. These tasks are usually taken by a clerk or office assistant; the counsellor, as a professional, does not have any role to play in

the salary preparation and documentation process. Despite the availability of an accountant and office assistant at the DHS, the counsellor and hospital attendants are summoned to the DHS to coordinate with the administrative officers for salary release. Besides delays in salary payment, the counsellor also reported not being compensated for their travel expenses when they visit the administrative office. The time spent waiting at the DHS and travelling between the hospital, DPM office and ACMO's (additional chief medical officer) office are considered personal work which "*does not count as staff's work as it is not productive for the hospital*" (Counsellor, NCD clinic, district hospital). This situation highlights that the work linked to the counsellor's job description is considered productive and official, whereas other work not linked to the job description, such as waiting time, salary preparation or coordination, are considered as personal, non-productive tasks.

In all three districts, NMHP programme staff reported similar experiences of undertaking additional reporting work. When I examined the case records and registration register at the mental health OPD, I found that case recording process differs in each district which I discussed in Chapter 7. In an interview, a mental health programme staff member reported,

> *I just follow the officer's order to complete the work. We need to show them that we are working in the programme even if we do not have enough resources... if we do not send the report on time, then officer asks us why you not submitted the report. Submitting report is not my responsibility. It is the responsibility of district programme officers* [and M&E officer], *and that position is vacant after staff termination. So, we got no choice.* (Health worker, mental health OPD)

The clinical psychologist shared similar experience and said,

> *I am managing the documentation, reporting and data related work. I prepare the report for submission to the SHS on a monthly basis. I am appointed as a clinical psychologist, and sometimes I have to do administrative work, which is not part of my job... these tasks have to be done by an M&E person. In the mental health programme, there is a position of case registry assistant, and this position has been vacant since the launch of the programme* [NMHP]. *His role is to register and record all the patients*

attending the mental health clinic. As his position is vacant, I am also doing his work. (Clinical psychologist, mental health OPD)

Because of shortage of health worker, existing staffs are given responsibility of manage the workload. The health workers are aware that preparing the monthly report is not their responsibility as it does not correspond with their job description. They view "reporting" as additional work which was given by the senior officers. The monthly reports, prepared by the clinical psychologist, are sent to the SHSB; they specify the number of patients that attend the district hospital, categorised by gender and diagnosis type. Some of the reporting indicators include number of new patients seen at mental health OPD, number of follow up cases seen, and number of male and female patients. From a managerial perspective, reports "*need to be prepared and shared with the state (SHSB)"* (programme manager, DHS). The work of "reporting" is viewed as a task to be completed rather than a programmatic activity that can add value to monitoring programme implementation at the district level. These numbers are generated and recorded in the form of text to assist State Programme Officers at state and national level to monitor NMHP programme implementation and make necessary decisions towards implementation strategies. It is important to note that in all the NMHP programme districts, staff members were never trained on how to record patient's case history and prepare monthly reports. They complete these reporting tasks according to their own understanding and knowledge. The data reported in the monthly report might not be accurate.

8.5 Negotiating authority and dealing with administrative pressure

On many occasions, staff members described their work conditions as *"exploitative and depressing*" (ward assistant, mental health OPD, district hospital). The narratives of some mental health programme staff members highlighted that they were forced to work in the hospital's emergency ward. This was done through the production of administrative texts that formed a rationale for their deployment in the emergency ward. Their consent and employment contracts were all ignored; this reflects the dominance of the managerial perspective in shaping the health workers' experience in the integrated programme. In an interview a health worker described his experience at the district hospital:

> *In the NMHP programme, I was appointed to work in the psychiatric ward, and the ward has not been established yet... the manager*[12] *asked us to work extra shifts in the emergency room. But we refused to work there (emergency ward) as I was already working in the mental health programme. But later we found that he put our names in the hospital duty roster.*[(1)] *Once our name is in the hospital duty roster, then we have to work in the emergency ward, we can't say no... at the moment, I work in both the mental programme and the emergency room… today after finishing my work (in the mental health OPD) I will go to work in the emergency duty from 2 pm until 9 pm.* (Health worker, mental health OPD)

The duty roster is an official document, again an institutional text, which is produced to organise and arrange staff members' shifts. The manager produces an official account for health workers' deployment without seeking their consent or assessing their workload. Later, this official account is authorised by the hospital superintendent and takes the form of an institutional order, which staff members must adhere to. According to a staff member, *"21 vacancies for nursing staff are vacant in the district hospital for a long time, and almost all staff are working long hours or doing extra shifts in the district hospital" (nurse, mental health OPD).* Despite the staff shortage, the hospital administration has a responsibility to ensure adequate staff availability at every hospital department, including emergency services, which are offered 24 hours a day.

Working in the emergency ward could be challenging. Health workers do not *"want to work in the emergency ward at night. For female staff members it is not safe. In some cases, patients' families become violent and beat the hospital staff members if the patient dies during treatment"* (nurse, mental health OPD). They are concerned for their safety, and do not want to work in threatening conditions. Despite these challenges, the administrator views health workers' deployment in emergency ward as a rational decision to deliver emergency services to patients. The health worker's resistance and refusal to undertake work in the emergency ward was suppressed and ignored. It shows that the institutional requirements are given priorities over the health workers' resistance and consent.

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12 The hospital manager prepares the duty roster, which is an administrative document produced to inform hospital staff about their work shifts in the hospital wards.

Another NHMP staff member explained a similar problem while doing overtime (two shifts in one day) at the hospital,

> *I am just coming from work. I was working the whole night in the emergency room. Now, I am feeling very sleepy, and I have a severe headache. After working the whole night, I went home at 8 o'clock, took a shower and returned to start work (at the mental health OPD) till 2.p.m… I already told the Civil Surgeon and Additional Civil Medical Officer (ACMO) about my work conditions… But they (hospital administrators) are not doing anything. I do not know what to do. I just want a letter saying I don't have to work in the emergency unit. We workday and night without taking a rest.* (Health worker, mental health OPD)

The health worker explained his physical condition after his shift experience; he described a lack of rest and multiple back-to-back shifts while working morning shifts at the mental health OPD. The health worker expressed his frustration and helplessness. Even after complaining about his work condition, the hospital administrator did not take any appropriate action, leaving him infuriated. His grievances were disregarded; his requests were rejected to ensure that he continued working in the emergency room. According to the human resource manager, "*staff are generally required to work for approx. 48* [8 hours per day] *hours per week from Monday to Saturday, but there is no written guidelines about the number of hours a staff member has to work"* (manager, SHS Bihar). At district hospital in East Champaran, health workers work over 66 hours per week without any additional financial incentives or non-monetary reward. The staff expressed their helplessness and frustration with these additional tasks during interviews. They unwillingly work in the emergency ward. Health workers fear that they will be punished if they do not follow orders, which is evident in the interview extract below.

> *...we cannot say "no" to the hospital administrator… otherwise they will not approve our leave application when we need it. We blindly follow their order so that we can work continuously at the hospital.* (Health worker, mental health OPD)

When I spoke to the health workers, he sounded dejected and stranded. He described his struggle to keep his job to earn a living for his family, who live in another district.

The economic hardship and lack of jobs in the market forces health workers to adjust to poor working conditions. Contradicting the administrator's viewpoints, the nodal officers of the NMHP programme stressed that mental health workers should not work in the emergency room, as it puts both health workers and patients at risk. He suggested health workers that they are neither trained nor capable of providing care in the emergency ward. He also emphasised that health workers are recruited for the NMPH programme, not to work in the emergency ward. In an interview, he said,

> *the hospital manager was telling both (case registry assistant and ward assistant) to write a letter and declare that they both (health worker) are working voluntarily in the emergency room without any pressure. When I became strict on both (health workers) and asked, "why are you taking the letters (duty roster)?" They become silent… they* [health workers] *do not have clinical training and relevant experience. They will face trouble and also put patients at risk. Many times, I told them (health workers) that even if your name is on the duty roster, don't go to work in the emergency room. Don't do it in any situation! Whatever happens, I will see and take care... if these staff are going, then the hospital manager will keep allocating them shifts in the emergency room. Every time I told them not to work, they promise me they will not go from the next shift. Twice a week, I try to make them understand, but both do not listen (to me)… every evening, I get the message on WhatsApp (notification on WhatsApp group for hospital employees) that both (health workers) are working in the emergency room.… I tell them, help them understand that they do not have to go to work in the emergency ward as you were recruited to work in the NMHP programme.* (Health worker, mental health OPD)

The nodal officer emphasised that health workers are forced to sign a written declaration that they are working in the emergency ward of their free will, on a voluntary basis. This highlights the poor management practice where the manager uses his position and authority to pressure health workers to follow their command. However, these practices emerged when resources are too scarce (human resources, equipment and tools) to manage service delivery at the hospital. This is a systemic deficiency which converts into a managerial call for action. Despite the support of the nodal officer, the health workers are "*afraid of disciplinary action for not*

following the administrator's order" (health worker, mental health OPD). When I explored further, I found that managers and administrators use various practices to ensure health worker adhere to administrative orders. Some of these management practices include asking for a self-declaration letter for their deployment, issuing duty rosters without discussion with staff members, threatening not to approve leave applications, delaying documents for salary release and public verbal abuse (and humiliation). These are some forms of the exploitation that health workers experience in their everyday work life while employed in the integrated programme at the district hospital.

8.6 Conclusion

In this chapter, I analysed how the programme priority agenda of maternal and child health and alcohol ban in the state influence the implementation of NCDs and mental health programme. The priority programmes create a context where staff members are pulled from integrated NCDs and mental health programmes and deployed into priority health programmes like the de-addiction centre. The health administrators' work is embedded into managerial discourses which continuously orient health workers to take up additional work and compensate the works of staff members whose positions are vacant for a long time. Despite having clear job descriptions and employment contracts in the integrated programme, health workers are seen by the district administration as additional resources for health care delivery. Health workers are continuously deployed in priority health programmes determined by the state and health administrators based on the latter's own understanding and assessment of healthcare needs. They are also seen as under-performing employees, when doctors are not available in the integrated health programme. This becomes the basis for their deployment in other hospital wards and units. Mental health programme staff, for example, was deployed to the emergency ward without any training. These deployments increase the risk to patients as well as staff. Health workers that are forced to work without their consent view their work conditions as depressing. This is usually done through multiple declared and non-declared management techniques, such as delaying salary release, refusing leave approval, allocating extra work shifts and publicly humiliating staff.

Chapter 9

Discussion and Conclusion

9.1 Introduction

The study explores the organisation of health care services in the integrated NCDs and mental health programmes by drawing on the standpoint of health workers working at the district level. The study illustrates many tensions and contradictions between policy claims and the implementation of integrated NCDs and mental health programmes when examined through the health workers' experiences and knowledge. While discovering the institutional relationship within the integrated health programmes, I showed how health workers are employed in a way that serves organisational interests and priorities that are embedded into the governance and management practices. This chapter summarises and discusses key results and presents the broader implications of my study for future policy, practice and research. In the first section of the chapter, I will summarise the main findings and contextualise them in relation to the existing literature. In the subsequent sections, I will discuss the significance of these findings and the limitations of the study and conclude by highlighting future directions.

9.2 Key Findings: Discussion

The study examined the organisation of integrated NCDs and mental health programmes by taking standpoint of participants located at sites of service delivery and discovers the institutional forces that coordinate and shape the work and activities in the integrated programmes. The study found that implementation of integrated health programmes is influenced and shaped by various discourses and ideas. Some of these few ideas include decentralisation, public-private partnerships, managerial practices, administrative control, accountability and human resource management. Textual practice plays an important role in inserting these ideas into the local sites and connecting them with others located at the distant locations. The study demonstrates that the texts (i.e. guidelines, policies, MoU) are developed, replicated and used at the different sites for intended institutional chain of actions. These texts not only coordinate the institutional tasks but also draw participants into institutional

relations where their everyday work and activities in the integrated programmes are organised and shaped by forces, which are invisible to them. In the next section, I discuss the key findings of the study in relation to the existing literatures on health systems.

9.2.1 New public management and delegation of work

The New Public Management (NPM) discourse has significantly shaped programme implementation by promoting the ethos of business management strategies in public service delivery. It brings the idea of economic efficiency into public administration (Larbi, 1999). NPM introduces various concepts, such as purchaser-provider splits, hospital autonomy and decentralisation to increase local managerial autonomy and accountability to govern health care. Decentralised planning and project management strategies have been emphasised in the NRHM to deliver integrated health programmes (see Chapter 6). The project management approach has become an integral part of decentralised planning and implementation of health programmes, which represents a modernist and rationalist view of management (Hodgson, 2004; Packendorff, 1995). Researchers argue that project management approaches could help organisations to achieve expected outcomes in a fixed timeframe by using labour control strategies such as labour utilisation and improving human performance (Clegg & Courpasson, 2004; Gleadle, Hodgson, & Storey, 2012; Peticca-Harris, Weststar, & McKenna, 2015). By contrast, this study found that delegation of work, decentralisation, application of public-private partnership in health care is organised in a way that affect the autonomy and authority of local institutions (see Chapter 6). Text-based knowledge become part of their knowing about their everyday world and coordinates the health workers' activities in the integrated programme at the district hospital.

9.2.2 Textual coordination in implementing integrated health programmes

Scholars have argued the importance of text-based guidance in the form of guidelines, protocols and checklists in integrated health programmes to guide the organisation of service delivery (Cretin et al., 2001; Reddy et al., 2019; Uwimana & Jackson, 2013). They consider that the lack of such guidelines in integrated programme service delivery may hinder service delivery to patients. This study presents a different viewpoint on the use of texts and textual practice in the integrated NCDs and mental health programmes. The study highlights that the work and

activities of people (both providers and patients) in the integrated health programmes is coordinated through textually mediated practices that draw them into an institutional relationship.

The MoU (memorandum of understanding) between the Department of Health and the MoHFW organises the working relationship between the two parties. It outlines many mandatory conditions and institutional arrangements that the Department of Health must adhere to in order to receive funding for implementing national health programmes. One of the mandatory conditions was to restructure the state health system. This institutional restructuring and institutional reforms are based on the principle of decentralised health care, where the MoHFW delegates the work of management and implementation of integrated health programmes to newly established health societies by providing them with financial resources. These health societies are considered to be autonomous organisations (NHRM, 2005; NHP 2002). However, what autonomy stands for in these health societies is rarely discussed or understood among health administrators, managers or health workers.

The findings of this study suggest that these health societies had limited autonomy over their institutional tasks and procedures. These institutional tasks and procedures are coordinated and controlled through textual practice. The analysis shows that MoHFW's interests were inserted into the MoU, which outlines the partnership conditions for the Department of Health. Some of these interests include the notion of administrative control and transparency, contractual employment, performance-based financing, and adherence to administrative protocol for procurement of goods and services. These interests and ideas (which form part of the MoU) were reproduced and embedded into the MoA (memorandum of association), rule and regulations, and the bylaws of the health societies that affects the management and implementation of integrated health programmes.

The health societies are registered under the Society Registration Act, 1860. This law provides authority to health societies to develop and adopt their own constitution, rules and make decisions about institutional procedures and tasks. By contrast, the conditions outlined in the MoU enforce the Department of Health to adopt the model MoA (memorandum of association), generic rules and regulations, and bylaws for establishing health societies at district and state level. The institutional arrangements

and administrative hierarchies, outlined in the MoU, are designed in a way that limits the autonomy and authority of health societies over their organisational procedures.

Scholars have argued that decentralisation in health service management increases local autonomy and accountability toward user needs in terms of both quality and service access (Bossert & Beauvais, 2002; Bossert, Larrañaga, Giedion, Arbelaez, & Bowser, 2003). They argue that decentralisation and delegating financial, administrative and managerial decision making to local bodies could improve delivery of health care. This study shows that the decentralised health care delivery mechanism at the district hospitals does not contribute to an efficient health system, especially in the delivery of integrated NCDs and mental health programmes. Rather, it gave rise to a range of issues and challenges to local administrators and health workers because resources were not available. In Chapter 6, the textual analysis shows that the MoU organises institutional arrangements in a way that creates and enforces dependency and institutional hierarchy among the DHS, SHSB, the Department of Health and district hospitals. The data shows that the executive positions within the health societies are reserved for the senior administrators, working in government departments to ensure administrative control over health societies.

9.2.3 HR Recruitment in integrated health programme in a decentralised health care setting

9.2.3.1 Staff recruitment for NCDs and mental health programmes

Previous studies show that health workers recruitment in decentralised health care is often complex and cause delay (Gill et al., 2009; Munga et al., 2009; Sinha et al., 2019). Kaur et al. (2012), in their study on decentralisation of health services in the state of Haryana find that district health administrators do not have authority to recruit specialists or doctors, but only lower-level staffs. State rules only permit staff recruitment through private recruitment firms and non-profit organisations, which were not available at the district level. Munga et al. (2009) find that decentralised recruitment allows the health authority to recruit health workers in a timely manager but do not attract high skill qualified medical professionals to work in remote areas. This study resonates with findings from previous studies and adds a new perspective on health workers recruitment. The study shows that the institutional task of staff

recruitment for the integrated health programmes are coordinated by texts produced at national level.

Despite being a legal and independent organisation, the DHS cannot recruit its own employees. Institutional texts (i.e. MoA) limit the DHS's involvement in health workers recruitment and transfer the recruitment responsibilities of the DHS to the SHSB (see Chapter 6). The work of the SHSB was to complete the candidate selection procedures and produce a list of selected candidates, whereas the work of the DHS was to issue employment contracts after verifying candidates' certificates. It was argued that centralise procurement on behalf of district health society would be efficient and cost effective. The data shows that the SHSB did not recruit health workers for integrated NCDs and mental health programmes timely, which negatively impacted service delivery at the district hospitals.

9.2.3.1 Contractual Employment

Previous studies examined the health workers' experiences in relation to their motivation (Awases, Gbary, Nyoni, & Chatora, 2004; Chikanda, 2005; Kotzee & Couper, 2006), employment, training, distribution and recruitment (Dieleman, Cuong, Anh, & Martineau, 2003; Munga et al., 2009). Previous studies also highlight the shortage of trained health workers in the integrated programme as a barrier to integration and service delivery (Atun, De Jongh, et al., 2010; Chuah et al., 2017; Watt et al., 2017). However, none of these discuss the effect of contractual employment on management and delivery of integrated health programmes. The findings of this study show that health workers were recruited on a fixed 11 months employment contract. The condition of contractual employment is part of the MoU and inserted into the staff recruitment procedure, affecting the health workers availability in the integrated NCDs and mental health programmes at the district hospitals (see Chapter 6).

The 11 months contractual arrangements limit DHS's ability to offer long term employment to health workers. The data shows that there were other forms of employment condition that were imposed on health workers when they joined the integrated health programmes. This includes submission of affidavit by health workers, stating that they will not claim any future employment (see Chapter 6). Such employment conditions are designed to protect health societies and reduce their liability for health workers' demand for permanent employment. The data also

shows that the DHS did not organise performance appraisals of health workers on time, which resulted in the termination of health workers' employment contracts. The time-bound employment contracts in the integrated health programmes are persistent with annual allocation of funding to the DHS and SHSB, which involves the exchange and compilation of standard texts in the form of district health action plans (DHAPs) and state programme implementation plan (SPIP). The approval of an annual SPIP by the MoHFW is a determining factor in resource allocation for the national health programmes. Any changes in budget allocation could have a direct implication on integrated programmes and service delivery.

Previous studies show that health worker recruitment in a decentralised health care system is complex and time consuming (Kadam et al., 2016; Munga et al., 2009; Ssengooba et al., 2007). Munga et al. (2009), in their qualitative study on recruitment and distribution of health workers in decentralised heath care in Tanzania, found that decentralised recruitment helped the district health organisation to recruit health workers as per local needs. They found that local recruitment decisions were influenced by local politicians and influential personality to recruit their family members. On many occasions, local district administrators did not receive permission to recruit health workers on time, which caused severe delays in appointing health workers and had negative implications on service delivery. This study resonates with previous studies and shows that institutional rules related to the 11 months contractual employment caused delay in staff recruitment and affected service delivery at the district hospitals.

9.2.4 Procurement of drugs for the integrated NCDs programme

Scholars have argued that a centralised procurement system can reduce cost, improve efficiency, and bring transparency and accountability to procurement procedures (Bossert & Beauvais, 2002; Singh, Tatambhotla, Kalvakuntla, & Chokshi, 2013; Tatambhotla et al., 2015). Despite such rationale, this study finds that the centralised procurement system could be affected by various local factors, such as corruption in purchase organisation and a supply of sub-standard drugs. Chapter 6 shows that initially drugs and consumables were procured by the MoHFW and later, the responsibility for procurement was transferred to the Department of Health. But the Department of Health failed to procure the drugs procurement because of an incident

of corruption in the BMSICL, a nominated agency for procurement of goods and services. This caused the shortage of drugs in the integrated NPCDCS programme.

The availability of drugs and supplies has been considered a determining factor for success of integration (Watt et al., 2017). A lack of drugs at health facilities also increases out-of-pocket expenditure for patients (Binnendijk, Koren, & Dror, 2012; Prashanth et al., 2016). The findings of this study are consistent with previous studies and show that despite the provision of free medicine for common NCDs, most patients purchase drugs and consumables from the local medical shops located outside the district hospitals. At the district hospital, drugs are often procured in small quantities to avoid or minimise administrative work. Such small quantity procurements do not meet the demand of drugs at the district hospital, resulting in a shortage of drugs. The manager ensures his procurement decision is consistent with the Bihar Financial (Amendment) Rule 2005, which permits him to purchase drugs and consumables in smaller quantities.

The study shows that managers and officers involve health workers to purchase consumables and drugs from the local market, which goes beyond health workers' job description. Involvement of health workers in drug procurement ensures drug availability at the district hospital but temporarily removes workers from the hospital, which cause interruption to service delivery. The financial rule is a standard text prescribed for the procurement of goods and services in Bihar. The rule only outlines the details on the procurement procedure (i.e. local purchase, quotation and tender). The rule does not specify which cadre of health workers or manager should get involved in the drug procurement process. Thus, allowing scope for local managers and officers to interpret the rule and "work out a way" around procurement. Large-scale procurement at district level could ensure drug availability in the integrated health programmes.

9.2.5 Health workers' experience in administrative setup

9.2.5.1 Health workers' orientation in integrated health programmes

When an employee gets hired, the human resource manager plans their induction and orientation about their work and work environment. Such orientation includes organisational policy, work conditions, entitlements, employment benefits, nature of work, reporting structures, performance review system and other important issues

related to employment. This study finds that the DHS did not organise any induction or training programme for health workers. Health workers came to know about their work and work setting from their peers and supervisors. The study finds that such everyday training orients health workers towards the organisational priorities and demands their readiness and attention in their everyday work even if the resources are not available to them.

The study reveals that despite having a specific job description, administrators continuously deployed health workers into various activities and work without seeking their consent. Managers and health administrators view health workers in the integrated health programmes as additional human resources that can be deployed and utilised in priority health programmes. The health administrators and managers use various management techniques to encourage, motivate and sometimes force workers to take on additional tasks, regardless of their consent. We saw this when the hospital manager allocated additional shifts to mental health workers in the emergency ward to support emergency services by adding their names to the duty roster, an authoritative text endorsed by the health administrator. Despite their normal work hours, managers gave them additional shifts, increasing their hours without any compensation (see Chapter 8). The environment and health workers' work are organised in a way where they are seen as someone who needs to "follow" and "adhere to" administrative orders, regardless of their contractual employment agreements. The NHP 2002 represents and enforces a similar viewpoint and provides authority to district health administrators to deploy health workers to any public health activities and programme (Government of India, 2002, p. 23).

9.2.5.2 Health workers' embodied experience and organisational priority

The findings of this study show that health workers in the integrated NCDs and mental health programme are continuously subjected to deployment and given multiple tasks without any clear guidance. The data shows (see Chapter 8) that, on many occasions, health workers experience fear, frustration and stress when they work in an under-resource setting. The manager orients health workers toward the organisational priorities of service delivery and asked them to work for longer hours to address patients' need. Such orientation and managerial practices exhibit the notion of "nothing can be done" or "do what you are told" or "wait until the situation improves". This mind-set is also noticeable when health workers asked

administrators to cancel their deployment in the emergency ward. Despite responding to health workers' needs, the administrator oriented them towards the organisational priorities and patients' health needs (see Chapter 8). The health workers are left alone to manage their work and experiences while focusing on the work given to them.

Researchers have studied health workers' experience in relation to work environment, job satisfaction, motivation, attitude, teamwork, leadership style and adherence to clinical guidelines. They emphasised that a clear job description, open performance review and an appraisal system are effective ways to manage the health workforce in a low-resource setting. In Ghana, researchers called for a comprehensive intervention for health workers' motivation to improve quality at the health facility where working conditions are perceived to be the worst (Alhassan et al., 2013). These studies illustrate that health workers with low motivation and job satisfaction are seen as a problem to be fixed through various institutional interventions, including capacity building, motivational training and workshops (Franco, Bennett, & Kanfer, 2002; Grant et al., 2018). The knowledge claims are primarily aimed to generate evidence to improve the work and working conditions by health workers training in the poor resource setting (Grant et al., 2018). These studies look at health workers' subjective experiences and their accounts to measure their motivation, satisfaction and attitude, without looking at the forces that constitute the conditions in which such experiences emerge.

This study departs from such theorised explanations. I argue that health workers' experiences need to be understood from their site of experience. Our focus should be on understanding how their experiences are formed and shaped in their everyday life rather than examining their experiences using pre-determined conceptual and theoretical frameworks, which enforce a particular way of thinking and dominate how studies are conducted and data are analysed.

9.2.6 Reorganisation of health services and implication for integrated care

9.2.6.1 Managerial decision and service delivery

Managers and administrators are accountable for ensuring service availability and service uptake, as per NPCDCS and NMHP guidelines. They are required to offer to patients through mobilising internal or external resources. Because of a shortage of health workers in the NCDs and mental health programmes, administrative control and managerial efficiency become important instruments to develop local practices to

re-organise health care delivery at the district hospitals. In Chapter 7, data shows that the administrator deployed non-clinical and untrained health workers to perform diagnostic tests on patients to provide instant screening reports that form the basis of medical treatment. The purpose of such re-organisation is to ensure service availability at the district hospital. However, health workers' knowledge and skills were not considered important when making such administrative decisions. The administrator's decisions to re-organise health services do not take into account of the safety and quality standards. Also, patients were brought into an institutional relationship where they were unaware about potential risk of being screened/diagnose by untrained health workers.

9.2.6.2 Patient-provider interaction

This study explicates institutional relations within the integrated NCDs and mental health programmes, where the work of patients (waiting time, travelling between care points) and the work of health workers (managing patient load, directing patients, having less time for consultation, cutting short communication, counselling and consultation) is organised and related to the institutional process of staff recruitment and drug procurement. In Chapter 6, the data shows that medical consultation at the general (medicine) OPD lasted a few minutes, where doctor-patient interaction was limited to exchanging information about the health problem or obtaining test results. The patients' medical history, lifestyle and health behaviours were not discussed and largely undermined during the medical consultation. The doctor-patient interaction was limited to interpreting laboratory test reports and prescribing medication for health conditions. While offering medical consultation to patients, the doctors' work also involved assessing patients load, estimating consultation time, and guiding patients to the next care point to receive services. The doctors' workload and shorter medical consultation is a linked to the lack of doctors in the NPCDCS programme and related to the delayed staff recruitment process that occurs outside the district hospital (see Chapter 6).

Previous studies on doctor-patient interaction report similar findings. Lall et al. (2019) in their study on primary care for diabetes and hypertension, find that doctors at public hospitals provided an average of 75 (up to 150 patients) medical consultations to patients within four hours. Patients were dissatisfied with the level of doctor interaction (Lall, Engel, Devadasan, Horstman, & Criel, 2019) which was observed in this study. Besides, they had negative attitudes toward healthcare

providers and fragmented health service delivery systems that offer inadequate care (Bhojani et al., 2014). Previous studies present patient-doctor interaction as a concerning area and call for intervention to improve this interaction through training for service providers i.e. doctor-patient communication (Maynard & Heritage, 2005; Meryn, 1998; Paul & Bhatia, 2016) and patient satisfaction (Ferrand et al., 2016; Kamra, Singh, & Kumar De, 2016; Padmanathan et al., 2014; Pandve & Pandve, 2013). This study shows that the doctor-patient communication, patients' satisfaction is a result of wider institutional processes which is linked to the institutional task of recruitment, programme management, infrastructure development. On another occasion, to manage the patient load at the mental health OPD, the psychiatrist instructed clinical psychologist to perform initial clinical assessment of mental disorder before psychiatric consultant. This arrangement was against the clinical norm outlined in the DMHP guideline (Government of India, 2015). Such reorganisation was aimed to ensure the psychiatrist provides consultation to all patients during the OPD time. However, these changes resulted in a shorter duration for psychiatrist consultation, which compromised the treatment process. These managerial and administrative decisions to re-organise services in a way that patients are directed and navigated through locally designed care pathways (see Chapter 7). They are frequently asked to move between general (medicine) OPD, NCD clinic and geriatric ward for medical consultation, diabetes screening, blood pressure measurement and receiving medicine, which differs from the NPCDCS guideline. The patients become passive receivers of health care, without knowing how services are organised. They are seen as individuals with problems to be fixed through medical intervention rather than individuals who require proper care with quality and safety standards.

9.2.6.3 Biomedical view and the health workers' work

Patients' observed experience of frustration and trouble of visiting multiple delivery points resonates with previous studies (Dixit et al., 2018; Jha et al., 2016). Despite the NPCDCS programme emphasising the principle of a patient-centred approach and continuum of care, the study reveals that a biomedical view of health care shapes the care pathways for patients with mental disorders at the district hospital. The data shows that health workers direct patients with mental disorders to seek treatment from a qualified physician at the general (medicine) OPD when a psychiatrist is not available at the mental health OPD. The physician does not have the capacity or

expertise to assess and treat mental disorder. Despite knowing that the doctor at the general (medicine) OPD cannot provide appropriate treatment to patients with mental health conditions, health workers believe that doctors should prescribe medicine for temporary relief. The health workers' decision and work to guide patients with mental disorders is discursively shaped by the biomedical view. Lipsky (1969) calls it street-level bureaucracy, where frontline workers have some degree of discretion over the service delivery to the patients or service users. The findings of this study contribute to Lipsky's notion of street-level bureaucracy and demonstrate how the health workers' discretion is shaped by dominant ideologies and discourses which remain outside the local site where heath workers interact with patients.

9.2.7 Policy priority and integrated NCDs and mental health programmes

In India, NCD and mental health have been priorities for over four decades. In past decades, the Government of India has passed several laws and implemented programmes towards providing support to patients having NCDs and mental health related disorders (NPCDCS, 2011; NHP, 2002). The findings of this study suggest that NCDs and mental health service delivery have not become a key priority in Bihar. The data shows that institutional texts (in the form of guidelines, circulars, a letter) produced by the Department of Health or the MoHFW, enters into the local environment (i.e. district hospital) and organise the work and activities of health workers in integrated health programmes. These textual practices shape and change the priorities at district level. District administrators adhere to these texts because they need to comply with administrative protocol in the decentralised institutional hierarchy. The study reveals that adherence to administrative orders suppresses local needs and changes priorities at the district level.

In Chapter 6, we saw that the district health administrator gave priority to the de-addiction programme over the integrated NCDs or mental health programme. Health workers were removed from integrated NCDs and mental health programmes and deployed in the de-addiction programme. Despite being aware of the need to strengthen NCDs and mental health services, the health administrator followed the administrative order and arranged the de-addiction services by pooling resources from various programmes. His decision was linked to instruction and orders sent by the Principal Secretary of the Department of Health.

Similar to the de-addiction programme, maternal and child health has been considered a key priority in Bihar. Since 2010, BMGF has financed various health projects that aim to improve access to maternal and child health services along with strengthening the local health system. These efforts have brought positive changes in the community and increased awareness on MNCH issues. However, such priorities have also influenced the implementation of the disease control programme in the state. In Chapter 8, the data shows that district level partner agencies such as Care India, WHO, UNICEF, UNFPA play an important role in providing feedback on maternal and child health related services in the district. However, their regular feedback draws administrator attention to the maternal and child health issues. The data shows that in the district level review meetings the administrator gave priority to issues related to maternal and child health, routine immunisation, family planning programmes. The NCDs and mental health programmes were not discussed (see Chapter 8). The strong presence of advocacy and international organisation at district level also shapes service delivery priorities at the district level. The data shows that health workers in the integrated NCDs and mental health programme were continuously deployed in the female delivery ward and Sick and New-born Care Unit (SNCU) to support various activities related to the maternal and child health programme. These deployments occur due to a shortage of health workers in the SNCU unit in the district hospital.

9.2.8 Mechanism of knowing and decision making in decentralised health care

This study reveals that the mechanism of knowing at the district hospital is embedded in the institutional hierarchy. The district health administrators' knowing is linked to the information they receive from higher authorities about organisational interests, and priority programmes, which is formulated outside the local sites of programme implementation i.e. the district hospitals. The knowledge and description around priority programmes is often driven by epidemiological studies and categorical decision-making procedures, used by the administrators and technocrats to bring intended change. Only systematically recorded and analysed data are considered for decision making and form a basis for an administrative action for change. The knowledge and experience shared by local participants do not constitute substantial evidence for administrative action.

This study finds that health workers' feedback and suggestions to organise health care delivery are not taken into account. On numerous occasions, health workers met district administrators and described the challenges and issues in the integrated NCDs and mental health programmes and requested to allocate adequate resources so that they could deliver services as outlined in the programme guidelines. Despite having the authority to allocate resources into the integrated NCDs and mental health programmes, administrators did not pay attention to these requests and suggestions. This shows that the mechanism of knowing and decision making at district hospital is highly organised in a top-down way, where authoritative accounts or institutional orders form a basis of knowing and decision making. Researchers have argued that health workers' feedback is essential for improving services, but we can see how the administrative (data driven) way of knowing plays an important role in shaping decisions at the local site i.e. the district hospital.

9.3 Research implications

In this section, I discuss the implications of the study findings. In particular, I will focus on the implications for policy, practice and future research.

9.3.1 Implications for policy and practice

The findings from the study have significant implications for understanding how the implementation of integrated health programmes is socially organised. Institutional texts play a significant role in bringing people together in an organised institutional relationship, which is invisible to participants. The study highlights that texts constitute a one-way communication within the administrative setup where texts from higher authorities dominate work and activities of health workers at the local site. The Department of Health could develop a clear communication and information sharing strategies to provide clear guidance to managers and health administrators in a timely manner. This can reduce confusion and uncertainty among staff members. Also, managers and administrators should seek clarity about institutional processes or tasks when instructions are not clear or when institutional texts conflict with ongoing work at the local site of programme implementation.

One finding suggests that a centralised recruitment and procurement system may not produce effective results, as argued in the literature (Munga et al., 2009; Singh et al., 2013). The findings suggest that the decision-making abilities of health societies are

controlled and governed through textual practices. Providing complete autonomy and decision-making authority to health societies over their organisational procedure can speed up health workers' recruitment and significantly improve NCDs and mental health service delivery. Also, health societies should consider changing staff recruitment policy from an 11-month employment contract to a long-term employment contract. This could potentially reduce delays in contract renewal process and ensure health workers availability in the integrated health programmes.

The study suggests that despite having good intentions to strengthen service delivery, some health administrator's decisions could put health workers and patients at risk. Medical negligence and occupational hazard have been well documented in hospital settings. There should be an effort to control and reduce such incidents. I suggest that administrative and managerial decisions should be reviewed to avoid any health and safety risk to patients or health workers. The administrators and managers should assess the implication of administrative decisions on health workers, and patients and seek their feedback. The study highlights that untrained health workers were deployed to perform clinical work. I suggest that all health workers should receive appropriate training as per their job description. Only health workers who are trained or have appropriate skills should be employed in clinical activities (screening, diagnosis or treatment). Also, administrators or managers should ensure that health workers should have are adequate training before their deployment in the hospital setting.

In the study, I find that priority programme (i.e. maternal and child health programmes, de-addiction programme) affects the implementation of integrated programmes at the district level. The feedback from local and international organisations draws health administrators' attention towards the priority programmes. Health administrators have a responsibility to oversee all programmes equally and take necessary steps to resolve any problem. The integrated NCDs and mental health programmes should be given the same attention as other health programmes. This could be done through organising separate review meetings with staff members.

The study suggests that health workers are continuously removed from integrated NCDs and mental health programmes and deployed in different work. The managers and administrators consider health workers' deployment necessary to meet

organisational priorities, but they seem to ignore health workers' desire, preference. On many occasions, health workers are forced to work long hours with no incentive or reward. The health workers' experiences are important and can affect their emotional state and stress level. A clear human resource policy with clarity on working hours, incentives and leave provision should be developed and adopted. This could reduce health workers' negative experiences. In addition, administrators and managers could also organise regular consultations with health workers to address their grievances in their work setting. This may improve their work experiences and contribute to positive organisational culture. The evidence from this study suggests that integrated programmes do not have required infrastructure and human resources for service delivery. I suggest that there should be a careful assessment of health facilities to understand the available resources and support mechanism to deliver integrated health programmes.

9.3.2 Implications for future research

This study raises several opportunities for future research. The administrators and health workers are located in a complex institutional relationship, where they continuously read and interpret texts in the form of guidelines, policies or other forms of communication. We need more institutional ethnography studies to understand the decentralised approach from the standpoints of the health workers and administrators. Some further areas for exploration could be decision making at a district level, interpreting institutional and authoritative texts, and how managerial and administrative decisions affect patients and health workers in a hospital setting.

The study frequently reports that the health workers' experience of fear, frustration, workload in relation to their work at the district hospitals. Future studies could explore and examine institutional structures and processes that cause such troubling experiences. However, further studies are also needed to understand the conditions in which these experiences emerged. Such findings can produce evidence for policymakers and give voice to health workers in the public policy arena.

9.4 Reflection on conducting institutional ethnographic project

Institutional ethnography (IE) is proposed as an alternative sociology that does not begin in theory but in people's experiences. It differs from the studies that use theoretical and conceptual lens to collect, analyse and interpret participants' accounts

and present the findings as objectified knowledge. IE rejects the domination of theory. Institutional ethnography begins with participants' standpoint at the local site and explores how participants' everyday work and activities are organised and discovers forces that shape their embodied experiences. The focus of institutional ethnography is on "how things works" and "how things are actually put together" as opposed to "what happened" or "why things happen" (Smith, 2005).

Institutional ethnography approach not only documents the work processes but also illustrates the "mechanism of control" and the way knowledge is produced to influence people's consciousness and their knowing. This approach also allows researchers to begin the research in people's experiences and understand the phenomena under inquiry by discovering the forces that constitute the conditions where such experience emerges. It allows researchers to question the way knowledge is created and produced for the reader. In IE, the notion of "ruling relation" allows researchers to analyse structure of power and its organisations in contemporary society. Smith (1990) argues that ruling in contemporary society is organised through knowledge production and construction of truth that relies on a complex process of documentation, accounting and analysing *particular aspect* of peoples' work and their life. Such knowledge comes through the process of abstractions and are detached from actual participants' experiences. IE's approach to text differs from other forms of traditional qualitative methods. In IE, texts are never looked at in abstraction. Text serves as an instrument for the social organisation of ruling and plays a significant role in maintaining ruling relations. It carries meaning and power that are replicable. They can be "read, heard, and watched by more than one individual, in different places, and at different times" (Smith, 2005, p. 165).

By adopting institutional ethnography approach to study health systems, researchers can discover the dominant discourses that continuously coordinate and connect people's work and their activities in their everyday world to the work of others who are located at distance locations. It offers a distinct perspective on health systems and their organisation. Institutional ethnography depart from health system theories and frameworks and allows researchers to take up people's standpoint to explore the organisation of health care delivery and discover how work and activities of people (i.e. patients, health workers, managers, policy makers) are continuously shaped at the local setting. Beginning from the health workers' standpoints, IE allows researchers to discover disjuncture and concerning problems at the site of experience.

The mismatch between people's embodied experiences and institutional version of story about the phenomena is essential for researchers to examine how health systems and related phenomena is organised.

This institutional ethnography allowed me to suspend my previous knowledge about health system frameworks and theories, mainly informed by research that categorised subjective experiences into pre-defined categories and placed researchers' observation and interpretation at top. In my own experience while working in a community health project in Bihar (India), I observed the complexity in the health system where health workers do not get paid on time. There were continuous shortages of manpower at the health facilities. My own mental frame always concludes that government is not recruiting health workers on time because of bureaucratic process, which has been theorised in previous studies on organisational behaviour and public administration. I was not aware how my consciousness was bifurcated through constant reading and knowing from research papers and articles that enforces and authorise the managerial perspectives. They appear as a true fact as it resonates with actual reality. My own consciousness was also somehow shaped by this notion until I start interacting with health workers and managers during field work. This Institutional ethnography project allows me to develop a critical perspective to examine how the work and activities of participants are coordinated within the health programme across health system (local, regional and national level). By undertaking this institutional ethnography project, I was able to explain how texts are used as a coordinating tool in the health system to control and shapes people's experience and their activities without their knowledge.

While conducting this study, I experience various methodological challenges. IE do not offer a step-by-step guideline for conducting the study, but it relies on its epistemological assumption that "all knowledge is socially constructed" and it carry interests that are embedded in its construction. However, Smith (2006) offers guidance on how to undertake the institutional ethnography including conceptualising research, conducting fieldwork, and analysing and interpreting different forms of data. At many occasions, I missed the analytical focus while analysing interview transcripts. My own consciousness was drawn into participants' story about their experiences. After many attempts and discussions with some institutional ethnographers, I learn how to maintain the analytical focus while

reading or analysing interview transcripts. This includes focusing on participants' account and establishing connection with institutional processes.

Institutional ethnography examines the participant's work and activities in relation to institutional processes within an institutional setting. However, it ignores their participants' past learning experience, which could determine how they respond to a particular situation. Individual personality traits and previous learning play an important role. However, IE acknowledge the people's subjective experience but always view it in relation with how it forms. While conducting interviews at many occasions, participants' share their experience and explain how in past they manage their work and develop local practices to support the health programmes and managers. These were important dimensions which could be explored further to understand how health workers organise themselves and share the responsibilities. However, the methodological guidance does not allow interpretation of subjective experience to theorise or describe how participants work together at the local site. The analytical focus of the IE is always aimed at discovering trans-local forces or explicating relation of ruling within an institution.

9.5 Significance of study

This might be one of few studies on integration that adopt institutional ethnography to examine organisation of health services in the integrated NCDs and mental health programmes. Also, perhaps the only that look at these two programmes in India. This institutional ethnography study has successfully foregrounded health workers' experiences at a local site that moves away from theoretical frameworks. This study makes a unique contribution to institutional ethnography and health system studies. In discovering a social organisation, Smith (2005) emphasises that participants may not be fully aware of forces that coordinate their consciousness and their work. They may not see the relations that "extend outside the everyday world and are not discoverable within it" (Smith, 1987, p. 152).

The study provides evidence on the current state of implementation of integrated NCDs and mental health programmes in Bihar. It shows the fragmentation of health services and the efforts of health workers and patients to adjust to the care delivery process. The health workers' experiences and their work differ from the managerial viewpoints of implementation strategies presented in the policy documents. The ethnographic gaze shows that the notions of project management and human resource

management embedded into managerial practices and coordinate health workers' work at the district hospital. It offers an alternative approach to understand the implementation of integrated NCDs and mental health programmes from health workers' standpoint that differs from studies that begins with theory or conceptual framework such as patient-centred approach, continuum of care, coordination.

However, I would assert that health workers and managers may not be aware of the external forces and discourses embedded into institutional processes of recruitment, deployment, etc., shaping their work. In fact, they can identify issues such as a shortage of health workers, drugs unavailability as problems fuelling tension and conflict in their work. Further, they disclose their ability to change and adapt according to these issues. Health workers expressed that they were not well positioned to change the current arrangement but rather make efforts to adjust and perform their tasks (despite many difficulties).The significance of this research lies in the empirical description of health workers' work in the integrated NCDs and mental health programmes. This has not been previously explained, and it provides a foundation for tracking institutional relations and textual coordination of health workers at the district hospital. Health workers' ability to adapt and learn enables them to respond to the organisational priorities and local needs at the district hospitals. However, what they know and what they do has not been well described in previous studies. In addition, the current approach to health system studies leaves out the significance of what health workers know and do to deliver health care to patients.

9.6 Limitations of the study

Healthcare system is a complex social organisation involving various actors and institutions. These actors and institutions are interconnected and interdependent across multiple layers within the domain of healthcare. The matrix of institutional processes and their interconnection offer institutional ethnography multiple threads for exploration. However, this study only traces a few of these threads, which are related to integrated programme implementation at the district hospital.

Within this IE inquiry, one limitation is the lack of clear boundaries of the health care institution I studied. The data I collected has many stories, insights and experiences that helped me to discover new interconnection and relationships within the health system. I made a conscious choice to focus on a few stories in my thesis and not to

follow all data, which may have shifted the focus of my inquiry. One decision was to forego analysis of a very interesting subset of data on monitoring and evaluation of the integrated programmes. This piece of analysis was related to how data are collected, interpreted and used to serve organisational interests. Other interconnections include decentralised planning, transparency and accountability mechanisms, and the work of health workers. These are areas for further analysis and writing. During the fieldwork, I took an internship at SHSB. Taking up an internship position helped me gain access to health workers and managers working together to deliver healthcare at the district hospitals. I explained my role and work as a graduate researcher and intern to all the research participants. They may have had limited understanding about both roles. These roles helped me to participate in participants' everyday work with or without their acknowledgement at the time of our interaction.

In the study, I did not seek patients' perspective on NCDs and mental health programmes. However, while conducting my fieldwork, health workers and managers routinely asked whether I needed to interview patients. Patients' perspectives may have given me an opportunity to explore how patients' work is organised when they receive care at the district hospital. Because of my interest in mapping the social organisation of the integrated approach, it was a conscious choice to begin with health workers' experiences rather than administrative viewpoints of service delivery. The focus of the study was to explicate the social organisation of the integrated programme and starting with administrative accounts may not have provided a true picture of programme implementation. My own professional experiences in Bihar informed the methodological choice to adopt IE approach. My lack of experience working as a health care provider may limit my ability to pursue this perspective effectively. However, I argue that this opens up new opportunities to take up the research from a care provider perspective.

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Appendix 1: Information sheet for participants

Queen Margaret University
EDINBURGH

Information sheet for participants

My name is Vikash Kumar and I am a postgraduate research student at the Institute for International Health and Development at Queen Margaret University in Edinburgh, UK. I am undertaking a research project entitled "**Health Systems Integration in Non-communicable Diseases (NCDs) Service delivery in India: Examining Assumptions and Pathways to Care**".

The study attempts to understand the rationale and practices of the policy of health systems integration under National Programme for Control of Cancer, Diabetics, Cardiovascular Disease and Stroke in India. It is expected that the finding from this research will offer input for health system integration in context of NCDs service delivery in India and add empirical evidence to current debate around best healthcare delivery models and practices.

If you agree to participate in the study, you will be invited to share your opinion and respond to questions related to planning, implementation and service delivery of the integrated NPCDCS programme. I would like to observe the implementation and service delivery of NPCDCS programme at health facilities. I would really appreciate your participation and contribution in this research project.

I assure utmost confidentiality to all research participants. The information gathered in the research process will be anonymised and no name will be quoted at any stage. You can withdraw at any stage or choose not to respond to a question. Your decision will be respected. The result of the study may be published in a journal and/or presented at conferences.

If you have any questions regarding the study, please contact me for further details. The consent form is attached and please return the signed form if you choose to participate in this study.

Thank you.

Contact Details of the researcher:

Vikash Kumar
PhD student
Institute for International Health and Development
Queen Margaret University
Edinburgh
Email/Telephone: vkumar@qmu.ac.uk / +44 (0) 131 4740000

In case if you required further information. You can contact independent person who knows about the research project but not involved in it, please contact them at the details given below:

Contact in the United Kingdom:

Dr. Alastair Ager
Director,
Institute for International Health and Development
Queen Margaret University
Edinburgh
UK, EH21 6UU
Email/Telephone: Aager@qmu.ac.uk/ +44 (0) 131 4740000

Contact in India:

Mr. Ajit Kumar Singh
State Facilitator
National Health System Resource Centre
Patna Bihar.
Email/telephone:Ajitva@gmail.com / +91-8252748749

Appendix 2: Consent form - interview

Queen Margaret University
EDINBURGH

Consent Form – Interview

Study title: Health Systems Integration in Non-communicable Diseases (NCDs) Service delivery in India: Examining Assumptions and Pathways to Care

I have had the information sheet explained to me / read and understood the information sheet. I have had an opportunity to clear doubts regarding my participation.

I understand that I am under no obligation to take part in this study and that I have the right to withdraw from this study at any stage without giving any reason.

I understand that by signing this form, I would consent to:

- My participation in the interviews/ discussions/ other activities initiated by the researcher in pursuit of the information
- The recording (audio/ written) of the information shared by me.
- The publishing (or other forms of dissemination) of parts of the information shared by removing identifiable information (name, designation etc.) and the results of the study.

I agree to participate in this study.

Name of the participant: _____

Signature of Participant: _____

Signature of researcher: _____

Contact Details of the researcher:

Vikash Kumar

PhD student

Institute for International Health and Development

Queen Margaret University

Edinburgh

Email/Telephone: Vkumar@qmu.ac.uk / +44 (0) 131 474000

Appendix 3: Interview guide

Topic: Health System Integration in non-communicable disease service delivery in India: Examining Assumptions and Pathways to Care

Queen Margaret University
EDINBURGH

Interview Guide

Theme 1: Work Experiences (All participants)

a. Tell me about your educational background and work experience?

b. How long you have been working with department/unit (NCD cell/ health society/health facilities)? What are the changes in department since you join the work?

Theme 2: Role and Responsibilities (All participants)

a. What are your roles and responsibilities in current position? What are the tasks/activities you accomplished?

b. Apart from your current role and responsibilities, what are additional task you accomplish? Are these additional responsibilities being permanent/temporary in nature?

c. What is the support available to you for accomplishing these tasks?

d. What are your roles and responsibilities in the implementation of the NPCDCS programme?
(Challenges/opportunities/benefits/workload/programme implementation etc.)

e. Can you please describe your normal day routine? What do you do generally? What activities you take part in or conduct?

Theme 3: Coordination with departments (State, district and block level managers)

a. What are the units/departments you generally work with? What is the purpose of these collaboration (improve programme implementation/client's health outcomes, cost effectiveness etc.)? What are the contents of discussion or collaboration? Give me some explore?

b. How do these collaborations related with organisational preformation and serving target population? Can you provide any example?

c. How do they share the information you share with other departments?

Theme 13: Monitoring and Evaluation of the NPCDCS programme

a. Please tell me about reporting under NPCDCS programme? What types of data are being collected? Where it is stored? What are the formats (online, hard copy etc)? Who collects the data?

b. How are the data being utilized? Please elaborate any example.

c. What is the quality of data? What are gaps in data collection?

Theme 14: Understanding about NPCDCS programme (All participants)

a. Tell me the role of the NPCDCS programme in terms of control and preventions from NCDs in India?

b. How target population are being benefited by this programme? How this programme is helping population with their current need related to NCDs?

Theme 15: Service delivery under NPCDCS programme (doctors, staff nurse, physiotherapists, counsellors etc.)

a. What is the patient intake process? Describe the stages of patient flow in the hospital/health facility?

b. How long the patients stay in the hospital and with whom they interact with? What is the general consultation process in the hospital/NCD clinic (diagnostic, treatment, prescription)?

c. What are the services (diagnostic, treatment etc.) available to patients under NPCDCS programme and hospital? What are the services not available in the hospitals (drugs/ diagnostic tests, etc.)? Where do patients go if services are not available in the hospital?

d. Are the services affordable to patients? How much do patients pay for the different services?

e. What are the problems faced by patients in accessing health services offered under NPCDCS programme? At community, health facility, district hospital? With diagnostics services, clinical services, drugs, referral?

Theme 16: Implementation of NPCDCS programme at community level (ASHA/ANM/ASHA supervisors)

a. Have you heard about NCD clinic/NPCDCS programme in recent years? Can you please describe it?

b. What are the activities you conduct under NPCDCS programme? Awareness generation, counselling, referral, screening, diagnostic etc.?

c. Please tell me your experience with this programme (benefit to population, challenges in programme implementation, workload, other issues)

d. What are the roles of frontline workers (ASHA/ANMs/AWW) in the implementation of NPCDCS programme?

Theme 17: Unintended consequences (district manager/service providers)

a. I have come to know that health facilities are much focused on providing MNCH services rather than other programmes? Why?

b. What is the attitude towards implementation of other health programmes?

c. How do the technical skills (clinical) influence the service delivery/programme implementation? How does involvement of medical and non-medical staff/component influence the service delivery and programme implementation?

d. Since the implementation of NPCDCS programme, what are the you have experience in service delivery and infrastructure, new health workers, New programmes etc?

e. How you are experiencing these changes? About colleagues; Fear, challenging?

Appendix 4: Support letter for field work

Dr. Phuleshwar Jha
State Programme Officer
Maternal Health

राज्य स्वास्थ्य समिति, बिहार
An ISO 9001:2008 Certified Agency
स्वास्थ्य विभाग, बिहार सरकार

File No.SHSB/MCH/105/Part-V
Letter No. 280 ....Dated: 12.01.16

To,

Civil surgeon-cum-Member Secretary
District Health Society, Vaisali, Muzzafarpur,
West Champaran, East Champaran, Rohtas and Kaimur

Sub : To provide necessary support to Mr. Vikash Kumar in his research project.

Ref : Letter from Director-Institute for International Health & Development, Queen Margaret University, Edinburgh.

Sir/Madam,

With reference to the above mentioned subject, this is to inform that Mr. Vikash Kumar is doing internship in State Health Society, Bihar. He is a Ph.D. student at Queen Margaret University, Edinburgh. He is undertaking research project towards fulfillment of Ph.D. requirement is entitled "Health systems integration in non-communicable disease service delivery in India."

In this regard, Mr. Kumar is spending six months as an intern at State Health Society, Bihar to understand the implementation of health programs at district and community level. His work includes reviewing the program implementation documents, guideline and policy; observing the program implementation and service delivery and conducting interview with program managers and service providers.

In view of the above, you are requested to provide necessary support during the district visit to Mr. Kumar to conduct his study.

Your Sincerely,
12/01/2016
(Dr. Phuleshwar Jha)

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