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## Professionalization of Public Health in Nepal

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### ABSTRACT

**Background:** The need for a professionalized and highly skilled public health workforce is essential to improving and protecting the health of populations. This is fundamental in Nepal given the current burden of disease, both communicable and non-communicable. This study aimed to explore: (i) the current trends in public health in Nepal and (ii) the opportunities and barriers to the professionalization of the sector.

**Methods:** We employed an exploratory qualitative research design and used a combination of semi-structured interviews with senior public health professionals who had worked for more than two years. Besides, we convened a small focus group discussion with recently qualified public health practitioners in Nepal. A total of nine professional stakeholders were interviewed and five junior practitioners joined the focus group discussion. Data was collected via Skype due to COVID-19 restrictions. Thematic analysis was used to analyze the data.

**Results:** Four core themes emerged from the research: understanding the public health approach; health priorities; federalization and the impact on public health practice; professionalization and workforce development.

**Conclusion:** Political federalization and more recently COVID-19 have impacted the development, capacity, and employment of this often-neglected workforce. Public health graduates with their broad-ranging knowledge and skills are often overlooked in the health sector. This is related to a general lack of understanding of what public health is and what public health practitioners do amongst politicians and the general public.

**Keywords:** Federalization; Professionalization; Public Health; Workforce Development

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## INTRODUCTION

The development of public health practitioners (PHP) is critical for population approaches to health improvement and the prevention of disease. PHPs are not easily defined and their roles and responsibilities whilst similar will vary from country to country. Public health practice is a system-wide, population-focused, evidence-based approach to promoting, maintaining, and protecting health.<sup>1,2</sup> Public health professionals constitute a specialist health workforce who have university-level qualifications and 'occupy positions exclusively or substantially focused on population health'.<sup>3</sup> It is defined as 'those human resources who provide non-personal health services to protect and promote the health of populations'.<sup>4</sup> The public health workforce is utilized in public, private, and non-governmental organizations (NGO's). They are a small but growing network of professionals working in research, academia, policy development, program implementation, and community-based health promotion.

In many high-income countries (HIC), there is a standard career pathway from practitioner to specialist and consultant level. The UK has a clear underpinning structure for professional public health practice through the 'Public Health Skills and Knowledge Framework'.<sup>5</sup> This is similar to the USA who has developed a framework built around 'Core Competencies for Public Health Professionals'.<sup>6</sup> Although different contextually, both have similar domains of knowledge and skills to be attained and at different levels according to position, role and seniority. Nepal regarded as a low to middle-income country (LMIC) has seen a growth of public health graduates in recent years. However, like many other LMIC's public health approaches are overshadowed by biomedicine and curative approaches to health.<sup>7</sup> Despite the constant demand for 'prevention first' and a focused population-based health approach, public health as a profession, however, remains institutionally underdeveloped in Nepal.

Federalization is an opportunity to strengthen the whole health system including public health practice and to ensure that public health practitioners are well trained and employable.<sup>8</sup> This study emerged from discussions between UK based researchers and Nepalese public health practitioners who met in April 2019. A small grant provided by the GCRF via Liverpool John Moores University enabled this study which explored the public health approach and the opportunities and barriers to the professionalization of public health

practice in Nepal.

## MATERIALS AND METHODS

This was an exploratory qualitative study using semi-structured interviews via Skype with key professional stakeholders from public health practice in Nepal. The interviews were supplemented with one focus group discussion (FGD) comprising of five recently graduated public health practitioners. Data were collected from April to June 2020.

Ethical approval was attained from the Nepal Health Research Council (NHRC) (ref. no. 19/PHI/045) and Liverpool John Moores University. Verbal informed consent was obtained from each participant before data collection. Participants were reassured that all information attained would remain anonymous.

We applied maximum variation sampling techniques to invite senior public health practitioners from across all provinces for interviews. We involved senior practitioners working in the government, non-government sector, or academia with at least two years' work experience in public health practice. Participants were expected to hold a Bachelor of Public Health as a minimum requirement, and preferably either a Master's or Ph.D. in Public Health. The focus group discussion was a convenient sample (n=5) of recently bachelor of public health graduates working in the health sector.

The semi-structured interviews with key stakeholders lasted approximately 60 minutes. The interviews and FGDs were conducted in the English language (for the most part), audio-recorded via the Skype platform and transcribed verbatim. Any translation required was completed at the point of transcribing. Initial data analysis began by listening to the interviews, taking notes, and then reading through the transcripts. After a second reading, the researcher manually coded the data; this was checked and agreed upon. Further analysis and comparison of the data were coded in NVivo 12 for richer analysis and synthesis of themes and sub-themes.<sup>9</sup>

## RESULTS

Nine senior public health practitioners (SPHP) were interviewed, and five participants took part in the FGD. Four core themes emerged from the data: understanding the public health approach; health priorities; federalization and the impact on public health practice; professionalization and workforce development.

Table 1: Province-wide Key Informants of In-depth Interview

SN	Provinces	No. of participant	Organization
1	Province 1	1	University
2	Province 2	1	INGO
3	Bagmati	2	Government
4	Gandaki	2	Government /University
5	Lumbini	1	INGO
6	Karnali	1	INGO
7	Sudur-paschim	1	INGO

Table 2: Distribution of recently qualified public health graduates who participated in the focus group discussion

SN	Institutions	No. of participants
1	Under MoHP	1
2	Local NGOs	3
3	INGOs	1

## Theme 1: Understanding the public health approach

### 1.1 Defining public health

All participants provided broad and comprehensive definitions of the public health approach and regarded it as a population-based activity with a focus on the prevention of ill health and disease. Working to improve the health of the community was a strong element of the approach. Relating public health to broader Sustainable Development Goals (SDGs) and the social determinants of health (SDOH) were recognized by several participants. One noted that

'basic needs like food, education, water sanitation, housing, human rights, and social justice must be there to improve population health first and then come others like health services accessibility, and policy. It is more about social determinants of health which need to be tackled to keep people healthy' (SPHP5).

Most participants recognized the importance of public health in the COVID-19 response:

'All, whatever we are doing is public health. Starting from clinical management to risk communication, awareness, behaviour change, things like hand washing. I think these all are public health measures' (SPHP2).

'According to my working experiences, PH is beyond curative health that included preventive,

promotive, and rehabilitative. The coronavirus pandemic helps to recognize the positive aspects of public health' (SPHP3).

### 1.2 Governmental and population understanding of public health

Participants were convinced that neither government nor the population understood the public health approach. Health is largely viewed as clinical services, and this dominates decision making at all levels of government as noted here:

'They still do not know the full meaning and importance of the approach. They only have a partial understanding at all levels including local, provincial, and central government when we say anything about health they just look and think about the hospital and the doctors. There is a doctor or not?' (SPHP9).

'It is a big challenge. Generally, people do not understand what PH is and what PH professionals do. Not only the general public, most of the leaders, policymakers, also do not understand what PH professionals can do?' (SPHP7)

People are familiar with 'prevention is better than cure' yet the focus remains on technical and medical fixes rather than long-term strategies to promote health. 'The government stakeholders have not understood about PH. When we talk about the long-term plan, they do not care. They want something that has instant results' (FGD).

### Theme 2: Health Priorities

There was consensus on health priorities with most participants citing maternal, reproductive/sexual, child health, and non-communicable diseases (NCD).

'Right now, there are three areas where the government needs to think and give priority. One is maternal health including its components, another is maternal and child health including malnutrition since we have a high rate of malnutrition. Another area is the NCDs' (SPHP6).

NCD's are becoming more of an urgent problem in Nepal and many agreed on this:

'In my opinion, the most important priority is dealing with NCDs, including mental health and road traffic accidents. The burden is increasing, and this affects younger and middle age people who are economically active. There is a lack of awareness and limited programs that focus on NCDs' (SH7).

'The NCD burden level is also increasing in the community. If you see the register at the health

posts or district hospitals, then 67-80% of people are diagnosed with NCDs. It is an alarming state, but the government is delaying to start a specific intervention to control it' (SPHP4).

The government should focus on the SDOH which largely underpins these problems.

'Good quality of water and food, decent housing, and savings should be a big priority for lower and middle-income people. They even do not know about health and emerging NCDs' (SPHP2).

### **Impact of COVID-19**

COVID-19 has become a focus of attention and priority and there was a recognition of the impact this was having on critical health services, and maternal and child health programs (MCHP) in particular. Many participants were concerned about women delivering at home and the risk of a significant increase in maternal mortality. The disruption to immunization and nutrition programs for children was also of deep concern to many stakeholders. 'All levels governments are working on COVID-19 and all people were on lockdown. Programs like childhood immunization were being interrupted. This may lead to big problems in the future' (SPHP8).

'It has a very serious effect on service delivery and program implementation, mainly our programs related to capacity building, program review, and monitoring. We are not able to do the program like a gathering of people, health workers, and coordinators to the local government, to discuss and train with them. There is also a disruption in health service delivery' (SPHP9).

Despite the severe impact that COVID-19 was having on service delivery and program implementation, there were some positive comments about behaviour change.

'From time to time epidemics of diseases like diarrhoea, malaria, dengue, kala-azar needed PH intervention like sanitation, hygiene measures (WASH) but these are not always sustained. Now COVID-19 has changed the concept of people and government and realized that PH is needed. We have been saying to wash hands for many years, but now COVID-19 has changed behaviours of people and they understand the importance of sanitation and cleanliness' (SPHP6).

### **Theme 3: Impact of federalization on public health practice and capacity**

Federalisation has impacted the public health function and whilst positives have been noted there

are many challenges for public health practitioners.

'We have three levels of government and actually, all the capacity is at the federal level government. There is a big gap between the provincial level and the local level. We can say at the local level, we have no capacity' (SPHP1).

Previously districts were a key government level for public health functions such as monitoring and supervision, and program implementation. Now the focus has been moved to the Local Government. Despite the provincial level, power and resources are either focused centrally or locally which hinders decisions and functions at the provincial level. However, participants did recognize opportunities for public health within the federal structure and particularly at the municipality level.

'Now, most health decisions have gone to the local level. Before we have a District Health Office but now, we have a health office at the local level. If we convince the local representatives about focusing on providing safe water and sanitation, then we have more chance to have the prevention approach. It depends upon how we sensitize or convince the local level' (SPHP5).

'We are in the third year of the federalism. In the first two years, more focus was on infrastructure development like making roads, buildings, and offices at the local level. The health sector was not much prioritized. Now, I am closely working in planning with the provincial and local governments. We have to advocate a lot for health and nutrition programs' (SPHP6).

'The new federal system has both aspects –positive and negative. The positive thing about the federal system is that the local level is given more authority and more power to plan and implement the health programs as per the local needs. They also have the authority to plan the budget for health. At the same time, we have challenges. Now at the local level, there is a health section, but it is not driven by PH professionals; it is led by those who have not studied PH approaches. They do not know how to mobilize the community and the resources available. We are worried because the health indicators we have achieved after so many years may worsen' (SPHP7).

This is something that concerned the majority of participants including the younger professionals in the FGD. Nepal has increased its public health graduates but positions to utilize their skills are not being developed. Less qualified auxiliary health workers are utilized at the local level but do not

have the competencies required to function as public health practitioners.

'The local government has the authority to have its plan. They need human resources. All 753 local governments need public health graduates. They can conduct monitoring and supervision, implement regular programs, organize workshops, mobilize human resources, and policy recommendations' (SPHP1).

#### **Theme 4: Professionalization and workforce development**

Despite the focus of the SDGs clinical and biomedicine health services dominate the public health approach. Increasing the visibility and profession of public health practitioners is a key area for discussion.

'First, governments should accept and recruit public health professionals in an appropriate position and utilize them in evidence-based public health program design and management. We need to advocate to create those posts' (SPHP9).

The demand for Public health is increasing in Nepal despite the lack of job opportunities. Similar to other countries the marketization of university courses has fuelled unemployed graduates. Besides, there are limited opportunities for continuing professional development and career progression.

'Round the country, there are 70/80 people are like me. But it is not enough. We have roughly 1500/1600 BPH graduates annually. What about them? All these graduates should be provided necessary skills under the university curriculum. Besides updating the curriculum, they should need real exposure to learning more' (SPHP1).

There was discussion around the curriculum and the need to update and ensure that students receive practical exposure to the real world and not just focus on the theoretical elements. The public health practitioner requires multiple skills and competencies to function in Nepal.

'You must know how to manage a disease outbreak. How to measure the outbreak? How to mobilize people to contain and manage the outbreak? They need to engage with politicians so must have good communication and advocacy skills. They must know about basic epidemiology, statistics, and computer skills' (SPHP2).

'There is a public health identity crisis. After four years of the program, we do not know where to contribute or develop expertise' (FGD).

Public health practitioners require ongoing professional development, yet master's programs are scarce, and many younger professionals are leaving Nepal to seek master's programs overseas; often at great expense. Many senior professionals keep updated through workshops academic papers and reports via the internet. Those working with International NGOs (INGOs) and senior government officers receive more training and exposure visits than those working in the education sector. 'Public health professionals must keep updated. But we do not have any sort of personal development program' (SPHP8).

The role of professional organizations is recognized in supporting the workforce although without more resources and a clear vision there are limitations to this role. 'In Nepal, Nepal Public Health Association (NEPHA) is there where PH professionals are associated with it. There is also a public health physician association. The NEPHA has central and provincial structures. These two are important for doing necessary advocacy and lobbying with the government, politicians, and other authorities. They are doing it, but it is not enough' (SPHP3).

#### **DISCUSSION**

This research revealed that the public health approach is not well understood amongst the population nor government, yet it remains critical to reducing the burden of disease in Nepal. A lack of understanding about the Social Determinants of Health on one hand, and the domination of biomedicine on the other, weaken commitment to prioritize preventative health measures at all levels.<sup>10</sup> There was a consensus about the current health priorities in Nepal, including improving maternal and child health and reducing/preventing communicable and non-communicable diseases. Added to this were health system improvement and preparedness for health emergencies like COVID-19. Whilst the research was not focusing on the impact of COVID-19 inevitably discussions emerged in the interviews on this issue given that the research took place during the height of the pandemic in Nepal.

Public health as a recognized profession remains under-developed in many LMIC's including Nepal. Besides, despite the growth in university courses, especially at the Bachelors's level, employment opportunities for public health graduates remain problematic. The impact on Federalisation has so far had more of a negative rather than positive effect on public health practice. The loss of

sanctioned positions for public health practitioners at the local level raised here was also a key finding in Thapa et al. (2019).<sup>8</sup> All participants recognized the importance of sanctioned positions at the local level as this would go a long way to meet the employability needs of newly qualified practitioners whilst ensuring community health needs are understood and that local programs are implemented and monitored. There is a recognition that public health practice is broad and there is a requirement to work with others across disciplines and professional boundaries as noted in this study. Achieving healthier communities requires collaboration with other health sector staff, educators, nutritionists, and local politicians where conceptualizations of health can differ, thus the need for public health advocacy at all levels of government.<sup>10,11</sup>

How to prepare graduates for practice is an important consideration of the curricula at both the bachelor and master levels. Similar to Sharma & Zodpey it was noted here that the public health curriculum must balance theory with practical problem-solving skills and real-world scenarios.<sup>3</sup> There were concerns from senior practitioners as well as the newly qualified that Bachelor level graduates are not always ready for the 'real world' of community-based public health practice. Besides, there is an expressed need reported here for postgraduate and ongoing training opportunities for practitioners. Karkee (2014) provides an excellent framework for considering the knowledge, skills, and competencies for post-graduate public health education in Nepal which provides a good starting point for any future discussions.<sup>12</sup>

Maintaining and further enhancing skills and competencies is critical for the public health workforce and unlike most high-income countries Nepal does not have an agreed set of public health work-related competencies to work towards. Despite the agreement at the Calcutta Declaration (1999) amongst the South East Asian countries to emphasize a population health approach, strengthen training programs, and build public health workforce capacity<sup>13,14</sup> there seems to be very little evidence of this being developed in Nepal. A recent study from Bhandari and colleagues (2020) using a multi-step interactive Delphi methodology, aimed to develop an agreed set of 'public health competencies' amongst public health practitioners in Uttar Pradesh, India. The study provides an important message, in that competency

frameworks cannot be simply taken from other countries. Contextual factors, as well as national, regional and local priorities all, have to be taken into account.<sup>15</sup> Nevertheless, the method could be usefully implemented in the Nepalese context and would be a good starting point in consideration of professionalization.

## CONCLUSION

Findings from this research add to a small but growing body of literature that highlights that a well-trained and competent public health workforce is critical in protecting, promoting, and maintaining the health of people. Political federalization and more recently COVID-19 have impacted the development, capacity, and employment of this often-neglected workforce. Public health graduates with their broad-ranging knowledge and skills are often overlooked in the health sector. This is related to a general lack of understanding of what public health is and what public health practitioners do amongst politicians and the general public.

The public health workforce needs to be recognized as the strategic lead in the community and population-level health management and program implementation. Public health workers are a well-trained cadre of health professionals who are currently under-utilized at district, provincial, and central levels. There is no shortage of these trained professionals as approximately 1200 graduate every year in Nepal. It will be critical to deploy this workforce into key priority areas and programs in the post-COVID-19 era and that public health and associated posts are created and sanctioned as a matter of priority. There was a consensus that core public health skills and knowledge (competencies) need to be revised, systemized, and operationalized within a public health career structure in Nepal. The Nepalese Public Health Association will need to play an important role in facilitating this process.

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