Factors affecting Maternal-care during labour at maternity centres of Karachi, Pakistan: Exploratory study

Nirmal Shahzaib

Tazeen Saeed Ali

Nousheen Pradhan

Farina Abrejo

shahnaz Shahid Ali

See next page for additional authors

Authors

Nirmal Shahzaib, Tazeen Saeed Ali, Nousheen Pradhan, Farina Abrejo, shahnaz Shahid Ali, and Amir Ali Samnani

Factors affecting Maternal-care during labour at maternity centres of Karachi, Pakistan: Exploratory study

Nirmal Shahzaib[1], Tazeen Saeed Ali[2], Nousheen Akber Pradhan[3], Farina Abrejo[4], Shahnaz Shahid[5], Amir Ali Samnani[6]

Abstract

Globally 529,000 women die every year due to harmful consequences of childbirth. This study aimed to explore the barriers and facilitators that influence the provision of quality care during labour at maternity centres in Karachi, Pakistan. The qualitative exploratory study design was used to study such factors from public and private maternity health facilities of Karachi, Pakistan. A total of 12 in-depth interviews were conducted through purposive sampling by using validated semi-structured interview guide. Data was analysed using content analysis manually. Among major barriers, unhygienic environment, lack of basic equipment, supplies and medicine, unprofessional attitude of staff, physical infrastructre and shotrage of staff were explored. Among facilitators, caring and supportive attitude of healthcare personnel during labour were identified. These identified determinants would guide policy-makers, Maternal, Newborn and Child Health (MNCH) planners and health managers to take appropriate actions to enhance the quality of maternal care which will subsequently result in considerable reduction in maternal mortalities.

Keywords: Quality, Maternal care, Maternity centres, Barriers, Facilitators.

Introduction

Maternal mortality ratio (MMR) is an alarming indicator of human development. Each year around 529,000 women die globally due to harmful consequences of pregnancy and childbirth, out of which 99% of mortalities occur in developing countries.[1] Globally, 70% of maternal deaths occur due to complications of childbirth such as sepsis, haemorrhage, abortion and hypertensive disorders.[2] Majority of these deaths occur in low-income and low-resource settings.

According to the Millennium Development Goal (MDG)

[1]Al-Zahra Hospital, Sharjah, United Arab Emirates; [2]Department of Midwifery and Community Health Sciences, School of Nursing, Aga Khan University, Karachi, Pakistan; [3,4]Department of Community Health Sciences, Aga Khan University, Karachi, Pakistan; [5] of Nursing, Aga Khan University, Karachi, Pakistan; [6]Aga Khan University, Karachi, Pakistan.
Correspondence: Amir Ali Samnani. e-mail: am_samnani@hotmail.com

report, Pakistan intended to reduce MMR by three-quarters till 2015, however, it has remained off track on all maternal care indicators monitored for MDG 5.[3] Hence, it is clearly stated that the unfinished agenda of preventable maternal mortalities is not only an ethical obligation but is achievable in terms of Sustainable Development Goals (SDGs). Under the umbrella of SDG 3.1, reducing maternal mortality ratio to less than 70 per 100,000 live births by 2030 is set as a specific target.[4] Furthermore, its significance is also emphasised by World Health Organisation's (WHO) vision which is targeted to be achieved by an important global strategy towards ending preventable maternal mortality (EPMM).[5] Therefore, this study aimed to identify barriers and facilitators that affect the quality of maternal care during normal childbirth in secondary level maternity health facilities of Karachi, Pakistan.

Quality of Care (QoC) is a challenging concept to define; however, for the purpose of this study the operational definition of quality care is limited to the provision of care, which is safe, effective, efficient, skilled, patient-centred and timely.[6]

The Donabedian's model of quality of care[7] and WHO's health systems framework[8] were used as modified conceptual framework specific to the context of the study that guide study objectives. This framework helped us to analyse the facilitating and constraining factors that impact quality of care during labour and childbirth.

As most pregnancy-related deaths and illnesses are clustered around the time of childbirth, hence, quality of care in maternity centres providing services related to normal delivery must be optimised to promote good maternal health outcomes. This study will guide towards raising the quality standards in maternity facilities by exploring factors that accelerate as well as impede the provision of quality care to mothers during facility-based normal delivery.

Methods and Results

An exploratory qualitative study design was used to explore factors as barriers and facilitators for quality of maternal care using in-depth interviews (IDIs). Purposive sampling technique was used for recruiting the study participants for in-depth interviews from the selected

secondary level health facilities.

The study settings included one public and one private secondary care maternity hospitals in Karachi, Pakistan. Aga Khan Maternity Centre, Garden (AKMCC-G) was chosen as private hospital whereas; Sobhraj Maternity Centre as a public facility. These sites were selected because of convenience and provision of obstetrics and gynaecology services to women on a secondary level of care. The duration of the study was three months (July till September 2016).

Total 12 IDIs were conducted (six each in private and public facility) to understand the research problem using structured interview guide. The interviews were audio-taped and notes were simultaneously taken to mark important details including verbal and non-verbal gestures regarding the study phenomenon. The duration of each interview was 40-45 minutes and written informed consent was signed by the study participants. The data collection tools were pre-tested in Aga Khan Maternity Centre, Karimabad (AKMCC-K) Karachi.

Participants' eligibility criteria comprised a) mothers between 18 to 45 years who have normally delivered their baby in a health facility, b) Health Care Providers (HCPs) including doctors, nurses or midwives, c) Health/Nurse managers and hospital administrators. Availability at the time of data collection and experience of at least six months of working in selected health facility were the main consideration for providers, whereas willing to participate was the only consideration for mothers who underwent normal labour.

The data obtained from the interviews were transcribed and analysed using content analysis manually. The whole process from coding till the emergence of themes was conducted by three separate reviewers from the study team to validate the findings. The Aga Khan University-Ethical Review Committee (4167-CHS-ERC-2016) provided ethical clearance. Permission letters were also obtained from the selected hospital administration. Consent form was signed by each participant after they were briefed about the purpose of the study.

The identified factors under barriers and facilitators are collectively depicted in the framework diagram (Figure I) considering Donabedian's model of quality of care[7] and WHO's health systems framework[8] to summarise the study results. Furthermore, the identified barriers and facilitators were also compared [private vs public] with its relation to the six building blocks of health systems (Table 1).

Study findings revealed that the quality of care in both public and private maternity healthcare facilities has been constrained by numerous factors. However, a few
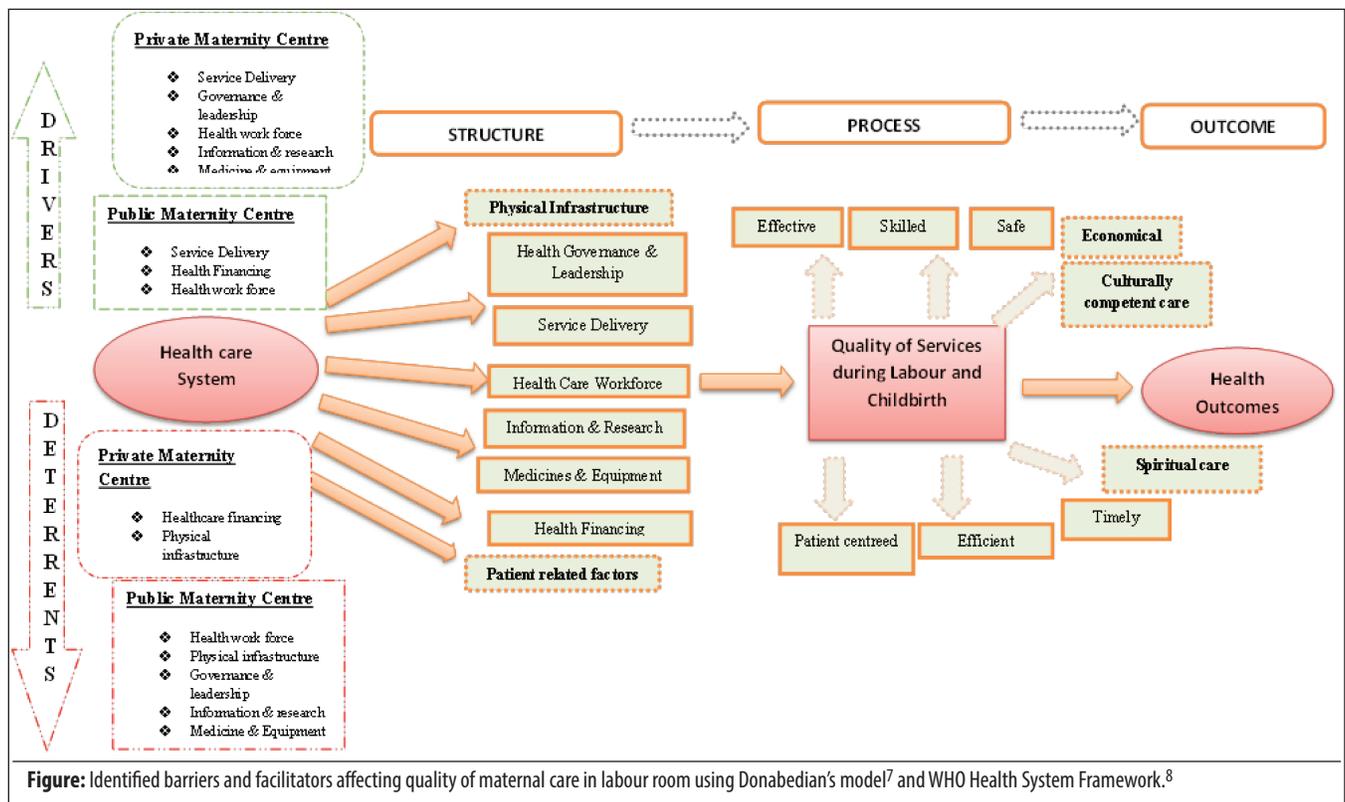

Figure: Identified barriers and facilitators affecting quality of maternal care in labour room using Donabedian's model[7] and WHO Health System Framework.[8]

Table: Comparing barriers and facilitators in Public and Private Maternity Health Facility using WHO Conceptual framework.

S. #	Health Systems Building Block	Maternity Health Facility	Drivers	Deterrents	Key Findings Explored
1.	Health governance and leadership	Public	×	√	**Deterrents:** Politics and corruption, Poor planning, no check and balance system, favoritism between employees, fake registration of employees, demoralization of staffs.
		Private	√	×	**Drivers:** Supportive supervision of staff Co-operative management, supervisory audits.
2.	Service Delivery	Public	√	×	**Drivers:** Psychological care, supportive and spiritual care, timely & patient centric care, culturally competent care
		Private	√	×	**Drivers:** Physical care, Psychological care, Supportive care, Timely & patient centric care Non-discriminatory care
3.	Healthcare	Public	√	√	**Drivers:** Attitude of doctors, Knowledge and skills of doctors, Knowledge and skills of doctors, Experienced consultants, trained nurses, duty timings of HCPs, team work of care providers, Provision of guidance to patients **Deterrents:** Knowledge & critical thinking of nurses, attitude of nurses and other paramedic staffs, shortage of health workforce, no provision of counseling and guidance to patients, lack of appreciation by management- demotivating factor
	Workforce	Private	√	√	**Drivers:** Attitude of doctors and nurses Knowledge and skills of doctors and nurses, Team work of care providers **Deterrents:** Knowledge of new nurses, shortage of health workforce, timings of duties/double duties, only verbal appreciation from management.
4.	Health care Information	Public	×	√	**Deterrents:** Non-availability of protocols of labor and delivery, no structured guidelines and policies of safe delivery, absence of teaching schedule, no audit action plan, no proper patient handing over documentation.
		Private	√	×	**Drivers:** Structured and complete guidelines, protocol and policies of labour and delivery available, infection control policy available, proper teaching schedule and materials present, audit findings and action plan found, proper patient handing over sheet present, other essential documents found.
5.	Medicine, equipment & supplies available	Public	×	√	**Deterrents:** Unhygienic environment and equipment, stinking bed mattress, non-availability of medicines, absence of food supply absence of drinking water, non-sterilized equipment, presence of veterans (cats) in hospitals.
		Private	√	×	**Drivers:** Hygienic environment and equipment, sterilized delivery equipment, clean mattress and bed sheets, presence of medicines, food and water supply.
6.	Health Financing	Public	√	×	**Drivers:** Economical feasible care, low bed charges, laboratory charges are less than half of normal price, poor can afford delivery.
		Private	×	√	**Deterrents:** High charges of delivery and other procedures.

supporting factors were also identified, mainly caring and supportive attitude of healthcare personnel during labour and delivery. This was perceived as a main driver in our study that enhanced quality care in both public and private health facilities. It was found that due to resource constraints as well as minimal facilitation from the government, public sector strives hard to provide quality care to mothers during childbirth.

Unlike private health facility, un-hygienic environment and lack of basic supplies, equipment and medicines emerged as major barriers in the public health facility. These factors have adversely influenced mothers' level of satisfaction and well-being. However; in the private health facility, hygienic environment and availability of basic supplies, equipment and medicines were found to be a facilitator that reflects good quality of care

The study findings also drew attention towards the rising levels of corruption and politics as a huge obstacle in impeding quality of maternal service delivery in public health facilities. A qualitative exploratory study conducted to identify factors influencing quality care in Iranian healthcare system revealed that bureaucracy and dependence on government along with resilient hierarchical structure served as a huge barrier for declining quality care.[9] The study identified that managers in public sector organisations do not have autonomy to devise or implement strategic decisions. Due to poor resource allocation and centralised decision-making at higher government level, all structures and processes targeting quality of service delivery are highly affected.

One of the strengths of our study is that it has explored the factors by comparison of both public and private health facilities which will provide better insight to readers about the identified issues. As far as limitations are concerned, this study was only conducted in Karachi city due to time and budget constraints, adding multiple cities might have slight variations in identified factors.

Considering the aforementioned identified factors, the study recommends setting and implementing quality of care standards in public health facilities and to establish the quality improvement mechanism by devising quality tools that include patient satisfaction survey, supportive supervisory visit reports, incident reporting, stock out report, complaint and suggestions form, etc. Health sector reforms should focus on decentralisation of power and resource allocation to reduce corruption, unnecessary delays in resource allocation and bringing competent healthcare providers on board with equal access for training and capacity building to all the employees. There should be a conducive environment along with appropriate working schedules to keep the staff motivated and relieved from excessive stress. More importantly, standards should be set that are equivalent for public and private nursing and midwifery schools to provide quality

Factors affecting Maternal-care during labour at maternity centres of . . . .

2064

curriculum to train nurses and midwives to ensure quality human resources.

Conclusion

Providing skilled and quality care to mothers is quite essential in minimizing maternal morbidity and mortality and also critical for the survival of child. These determinants can also be an input for policy makers, MNCH planners and health managers to take appropriate actions to enhance the quality of maternal care during the intrapartum period which will, in turn, result in considerable reduction in maternal mortalities. Scalability of study across province and use of mixed method study to have multiple world views is essential for future replication of this study.

Recommendations

• Established the quality improvement mechanism by devising quality tools that include client satisfaction survey, supportive supervisory visit reports, incident reporting, stock out report, complaint and suggestions form etc.

• Health sector reforms focusing on decentralization of power and resources allocation to reduce corruption, unnecessary delays in resource allocation and bring competent healthcare providers on board with equal access for training and capacity building to all the employees

• Conducive environment along with appropriate working schedules of doctors, nurses and midwives caring for pregnant women in health facilities to keep them motivated and relief from excessive stress.

• Setting standards equivalent for each Public and Private nursing and midwifery schools to provide quality curriculum to train nurses and midwives to ensure quality human resource

Disclaimer: The manuscript was part of the author's Master thesis (in health policy and management)

Conflict of Interest: None.

Funding Disclosure: None.

References

1. Htoo H, Soe K. A participatory action research for improving maternal health through health education program with pictorial handbook in Pao minority group, Myanmar. [Online] [Cited 2020 Dec 20]. Available from: URL: https://www.car.chula.ac.th/display7.php?bib=b1916325

2. Ronsmans C, Graham WJ, Lancet Maternal Survival Series steering group. Maternal mortality: who, when, where, and why. Lancet 2006; 368: 1189-200.

3. United Nations Development Program (UNDP). Pakistan Millennium Development Goal Report. Planning Commission of Pakistan, 2013.

4. Murray CJ. Shifting to Sustainable Development Goals—implications for global health. New Engl J Med 2015; 373: 1390-3

5. Campbell SM, Roland MO, Buetow SA. Defining quality of care. Soc Sci Med 2000; 51: 1611-25.

6. World Health Organization. Strategies towards ending preventable maternal mortality (EPMM); 2015.

7. Donabedian A. Evaluating the quality of medical care. Milbank Q 2005; 83: 691-729.

8. World Health Organization. Everybody's business--strengthening health systems to improve health outcomes: WHO's framework for action.2007.

9. Mosadeghrad AM. Factors influencing healthcare service quality.Int J Health Policy Manag 2014; 3: 77-89.