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Social And Cultural Factors Influencing Maternal Mortality In Khyber Pakhtunkhwa- Pakistan

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Abstract

Maternal mortality is an aggravating issue of developing countries and Pakistan is not an exception. Much of this issue is associated with social and cultural factors, which limits women to utilize timely and appropriate maternal healthcare. However, these factors have not been caught enough attention by researchers. Therefore, to fill in the gap, the current research study investigated the social and cultural factors affecting maternal mortality in Khyber Pakhtunkhwa-Pakistan within the context of Three Delayed Model Approach. For this, qualitative method was applied including key informant interviews, focus group discussions, and case studies. Data were analyzed through thematic approach. It was found that delay in health care resulted in maternal mortality which is further associated with social and cultural factors like low social status of women, low nutritional status, unawareness of maternal health care, restricted mobility, low level of decision making in health care and family planning, traditional birth attendants, and early marriages. Hence, women focused initiatives from government and non-government bodies addressing women's socioeconomic status and their decision-making power are essential to tackle the issue of maternal mortality in the study area.

Key words: Maternal mortality, Social factors, Cultural factors, Khyber Pakhtunkwa-Pakistan.

1. Introduction

Health of every individual is important, however in the case of a mother it is vital mainly due to the child health association with it (Ashraf et al., 2021). In this case, maternal mortality is used as an indicator at national and international levels for the assessment of maternal health (WHO, 2010). Maternal mortality refers to the death of a woman during pregnancy, and delivery or within the 42 days of the childbirth (WHO, 2015). Further, maternal death has two categories i.e. direct obstetric death and indirect obstetric death. The first one is related to obstetric issue and the later one is associated with the previous issues standing provoked by the physiological effects of gestation and both are used for the assessment of maternal mortality rates (Ashraf et al., 2021). The high prevalence of the issue around the world is making it a global concern.

Around the world, 295,000 women per annum die during and following childbirth (Riley et al., 2019). Similarly, every two minutes a woman die

either due to pregnancy related issue or in child birth or after worldwide (WHO, 2015). The issue is more prevalent in the underdeveloped countries as 94% of maternal deaths occur over there (WHO, 2019). Among the underdeveloped regions, Asia is ranked high in maternal mortality. Further, in Asia, the South Asian region has higher rates of maternal deaths (Omar et al., 2021). Being a south Asian country, Pakistan is facing higher rates of maternal mortality with 186 deaths per 1000 live births (Pakistan Maternal Mortality Survey, 2019). A recent study showed for a much higher rate of 340 deaths per 1000 live births (Ashraf et al., 2021). Moreover, the country is the sixth populous country around the world hence putting pressure on the existing resource system and thus the issue is not tackling well enough (Omar et al., 2021).

The issue of maternal mortality is more prevalent and high in the rural areas. Statistics showed for about 26% higher rates of maternal mortality in the rural area as compared to the urban areas of the country (Pakistan Maternal Mortality Survey, 2019). The issue with its high prevalence in the country (Rashid et al., 2019) assert pressure on the government and non-government agencies working in the health sector for its address. However, the issue cannot be addressed without considering its causes or factors contributing towards it. In this regard, the previous research studies had made an effort to cover the topic in question and highlight the issue (Mumtaz et al., 2014; Chodhury et al., 2017). Some of the studies has also identified religious factors like belief faith system, unskilled birth attendants, and some social and cultural factors aggravating the problem specifically in the rural areas (Omar et al., 2021; Hanif et al., 2021; Ashraf et al., 2021). However, the previous studies have not fully identified the social and cultural factors which can address the issue and thus can provide better results towards the issue. Moreover, the issue of maternal mortality has caught global attention as it is included in the development discourses like Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) (Omar et al., 2021; Hanif et al., 2021; Adnan et al., 2017). However, in Pakistan the issue is still prevalent with higher rates and specifically in the rural areas. Moreover, in the country there is limited research on the Three Delays Model approach of Taddeus and Maine (1994) which is of very much importance as this kind of delay is accounted for 73% of maternal deaths (Win et al., 2015). Hence, the first delay is strongly associated with the social and cultural factors (Omer et al., 2021), so it is important to be investigated. Therefore, there is a need for further research to identify the social and cultural causes or factors contributing towards the issue in the context of Tree Delays Model approach so that better localized strategies may be designed and implemented to achieve better results towards the solution of the issue in question. In this regard, the current research study has been designed to identify the social and cultural factors contributing towards maternal mortality in Khyber Pakhtunkhwa-Pakistan.

2. Material and Methods

2.1. Research design

The study used qualitative method of research design including Three Delays Model approach (Taddeus and Maine, 1994). This model comprised of three elements of data collection i.e. key informant interviews, focus group discussions (FGDs) and case studies (discussed in the data collection section). For key informants interviews were conducted with gynecologists as they are the maternal health care specialists so their insight on the issue is of great importance. For the FGD sessions, LHWs (Lady Health Workers) were selected as participants due to their prime interaction with women throughout their pregnancies and after child birth (Horton, 2013; Omer et al., 2021). Secondly, LHWs are important part of country's health care system so,

women seek first advice regarding maternal issues from them (Hafeez et al., 2011; Farooq and Arif., 2014). Hence, their insight can provide vital information on the said issue. Case studies were conducted with the closed family members of the deceased (women died during pregnancy or after child birth within 42 days). Case studies were identified with the help of LHWs.

2.2. Study Site

The currents study was conducted in the four districts of Khyber Pakhtunkhwa Province of Pakistan i.e. Peshawar, Mardan, Charsadda, and Nowshehra. The reason behind the selection of these districts was the authors' easy access to the health care system providers in the area.

2.3. Sampling Technique and Sample Size

The current study used purposive sampling technique while selecting the study site and further respondents of the study. The sample size comprised of 50 key informants (gynecologists of principal hospitals in the four districts), 4 FGDs with LHWs (Lady Health Workers), and 8 case studies (family members of the deceased).

2.4. Data Collection

Data were collected from 50 key informants through interview method. The interview schedule was designed on the basis of the objectives of the study. The schedule was reviewed by two subject experts and their expert opinion was incorporated to make a final version. Formal permissions were sought from key informants before interviews and the unwilling ones were replaced with the willing key informants. Interviews duration was about 60 to 90 minutes. Before the interviews, the purpose of the interview and use of data for research purpose specifically were explained. Data were collected from LHWs through focus group discussions. A total of four FGDs were conducted one in each district. From the concerned districts' health department, a list of LHWs was obtained and then they were contacted to attend the session in the principal hospital of each district. Each FGD was comprised of at least 10 LHWs and the duration was about 60 to 90 minutes. Same research ethics were applied in each FGD session as well. 2 case studies in each district was conducted with the closed family members where a maternal death has been recently reported. Case studies were conducted to identify those social and cultural causes which delayed or hindered the health care provision and thus led to maternal death.

2.5. Data Analysis

The collected data were analyzed using thematic analysis. First, the interviews, FDGs recordings, and case studies interviews were transcribed and translated into themes. Main themes were identified related to the study objectives and also by reviewing the relevant literature. Themes were identified by the use of both the deductive and inductive approach. After the data transcription and translation, interpretation was done as presented in the upcoming sections of this paper.

3. Results

3.1. Profile of gynecologists

Data in Table 1 show the profile of key informants participated in this study. Most of the gynecologists (50%) were in the age range of 30-39 years, followed by 30%, and 20% in the age range of 40-49 years, and above 49 years, respectively. all the gynecologists were female and married (70%), having specialized education (70%). They have good working experience and mostly stationed in DHQ hospitals of their respective districts.

Table-1: Profile of gynecologists

Variable	Frequency	Percentage
Age (in years)		
30-39	25	50
40-49	15	30
Above 49	10	20
Total	50	100
Gender		
Male	--	--
Female	50	100
Marital status		
Single	08	16
Married	35	70
Widow	07	14
Total	50	100
Education		
MBBS	15	30
MBBS and Specialization in Gynecology	35	70
Experience (in Years)		
1-5	02	04
6-10	25	50
11-15	20	40
Above 15	03	6
Total	50	
Work station		
District Head Quarter Hospital	35	70
Tehsil Head Quarter Hospital	15	30

3.2 Profile of LHWs

Data in Table 2 show the profile of LHWs. Data show that most of the LHWs were of young age (30-39 years) as depicted by 58% in the category. Most of them (87.5%) were married and having intermediate level of education with a good work experience.

Table-2: Profile of LHWs

Variable	Frequency	Percentage

Age (in years)		
30-39	23	58
40-49	12	30
Above 49	05	12
Total	40	100
Marital status		
Single	03	7.5
Married	35	87.5
Widow	02	05
Total	40	100
Education		
Matric	10	25
Intermediate	15	37.5
Bachelor	10	25
Above Bachelor	05	12.5
Experience (in Years)		
1-5	10	25
6-10	15	37.5
11-15	15	37.5
Above 15	--	--
Total	40	100

3.3 Social and Cultural Factors

The themes derived from thematic analysis on social and cultural factors affecting maternal mortality in the context of Three Delayed Model approach are provided as follow.

3.3.1 Low socioeconomic status of women

In the patriarchal society of Pakistan and especially in the Pashtun culture of the province, women are subjected to various gender inequalities and thus have low financial, social, political, and educational status which further account towards delay in seeking health care especially maternal health care (Omer et al., 2021). Due to the low educational level, these women have no financial independence and thus low levels of say in family and health matters. Most of the LHWs and Gynecologists were of the view that due to low levels of educational status of women, they were in low socioeconomic status and thus cannot avail maternal health care. In this regard, one of the LHW stated that

"Most of the mother in laws of women are clearly against their daughter in laws education as it will burdened them in household chores. Because, in the traditional society of Khyber Pakhtunkhwa, daughter in laws are burdened with the household responsibilities".

One of the gynecologist stated that

"Education is of much more importance for women as they are the future bearers".

Furthermore, another gynecologist stated that;

"During pregnancy, it is the ultimate responsibility of mother in law and husband that they must be considerate and in the case of any

problem or complication, they must provide health care to women."

3.3.2 Low nutritional status

Women's low socioeconomic status further aggravated the issue of their low nutritional status. In the traditional patriarchal society of Pashtun culture, women are the last to eat and their nutritional needs were frequently ignored even during their pregnancies (Hanif et al., 2021). However, A nutritional needs during pregnancy and after childbirth must not be ignored for maternal health. In this regard, healthy and balanced diet is important so to avoid any risk factors associated with nutritional deficiencies during pregnancy and after child birth.

In this regard, a gynecologist has expressed her views as:

"It is a horrible fact that during pregnancies most of the women we deal are having pale ghostly faces which indicates sever nutritional deficiencies which further arise so many maternal complications. In their households, they have to first offer food to men and then to children and thus they eat at last which is deeply embedded in the culture. This is not a priority to take care of women's dietary needs".

LHWs being the first hand interactors with the rural households have vital information regarding the first delay in health care due to poor nutritional status of women. Most of the LHWs were of the view that women in the family structure have no say in most decisions and the culture and social structure of the family did not allow them to prefer their nutritional needs even during their pregnancies. One of the LHW stated that:

"In the rural households and especially from poor background, women are treated harshly and they were not offered good food rather the left overs during their pregnancies as well. Moreover, it is a common cultural and social practice which was accepted by these women as well. Therefore, these women were mostly malnourished before marriage and even during their pregnancies".

The families' opinion about special and healthy diet for pregnant women were not good. A mother in law in this regard stated that:

"Childbearing is a very common thing among women and it requires no special diet or attention from the families. Women are made from Allah's side for this thing so bodies are made for this. The first priority must be male as they have to do work outside and earn so more food is required by them".

3.3.3 Restricted mobility

In the pashtun culture of the province, women and especially pregnant women's mobility is tightly restricted. These women have to stay at home most of the time and in case of health care, first they have to seek permission from the elders and then husband. In this regard, one LHW provided her opinion:

"Pregnant women mostly stay at home even after child birth. They cannot visit their parents' house as well. In the case of health care, she will seek permission from father in law, mother in law and husband mainly, who will grant permission after assessing the situation, related cost and other things like availability of transport and health care providers".

The same fact was reported by most of the gynecologists. That pregnant women's mobility is restricted and depended on the permission seeking from in-laws and husbands, finances availability, and transport availability. The gynecologists further pointed out that we are mostly dealing very critical pregnancies and deliveries where women were delayed for medical health care due to the male absence as these women must be accompanied by a male member to visit hospital.

The families were of the opinion that they cannot challenge the culture of their society and death comes at proper time hence nothing can change it. The belief system and restricted mobility for women is embedded in the social structure of the society and thus it results in maternal mortality high rates.

3.3.4 Unawareness of maternal health care

Women being illiterate and having the low levels of education especially in rural areas are subjected to unawareness regarding maternal health care which further aggravate the issue of maternal mortality. However, various social and cultural factors accounted towards the unawareness of maternal health care. In the rural areas, traditional healers and technicians mostly work whose services were mostly availed in maternal health care. However, these personnel were not having expertise in the said area and thus the high risk pregnancies and risk factors at child birth arises. The pregnancies' risk factors can be reduced by the timely diagnosis and appropriate treatment (Hanif et al., 2021). However, the local culture and social structure has their own level of understanding and dealing pregnancies and child births. Most of the gynecologists and LHWs were of the opinion that pregnant women do not often seek health care or antenatal care which is related to the social and cultural beliefs. There are cultural beliefs that health care providers must not be trusted. Local people and the women itself see them as outsiders who were not in the good interest of the patients. So, the lack of trust between the doctor or health care providers and women further aggravate the issue in question. In this regard one LHW expressed her point of view:

"Women in rural areas especially don't trust gynecologists and especially they consider their medications and other treatment procedures for making them infertile".

Similarly, a mother-in-law expressed her opinion in this regard:

"Lady Doctors are not for the treatment as pregnancies don't need generally treatments. Rather, these lady doctors made women infertile and their treatments aggravate issues in pregnancies".

LHW pointed out an important social and culture practice which led to high risk factors during pregnancies.

"Mostly, the pregnancies are kept secrets in the first three months which are very important phase and where chances of miscarriages are high and thus regular medical check-ups are important along with nutritious food. However, people in this area do not care".

3.3.5 Low levels of decision making power in seeking health care and family planning

In the traditional patriarchal society of the province, women are not empowered to take decisions related to their health care needs and family planning. The concept of family planning has been rejected by the religious beliefs and thus every year women go through child birth without considering their body needs. The number of children after marriage is not decided by women itself rather by their husbands and their in-laws. So, family planning in the most cases is not an option for these women. In this regard, most of the LHWs were of the opinion that in rural areas people do not avail family planning options because they consider it against their religious beliefs. Most importantly, they think that these children will make their old age good. Because more children means more number of earners especially boys. One of the LHW stated that:

"In rural areas due to poverty, people tend to make more children in the hope that their children will earn more and thus they will attain a better living in future. This is the main driving force

behind more children and no family planning which further affect women's health condition and thus arise in the form of complicated pregnancies and deliveries and thus led to maternal mortality in many cases"

A gynecologist expressed her views as:

"Women were pressurized by the social and cultural factors to bear more children. These women has no say in making children. These women are forced to bear pregnancies by their husbands and in-laws to increase their assets (baby boys)".

At the family side, one of the mother-in-law expressed her views as:

"Women are bound to produce children, many children especially boys so that their future may be secured. This is the ultimate responsibility of a woman to make her husband and in-laws happy in this regard. A good daughter-in-law has to bear many children".

An LHW stated that:

"These women can't take contraceptive pills rather they will choose to live in their husband homes and to bear children or to leave their houses and take contraceptive pills".

3.3.6 Traditional birth attendants

Most of the deliveries, especially in rural areas are attended by the traditional birth attendants. People do not like to deliver in hospitals which related to their cultural and social structures that deliveries must be done within their homes. Most of the LHWs were of the views that within the culture, it is strongly embedded that pregnant women catch evil eyes, therefore they have to stay at home most of the times and must deliver within their homes by traditional birth attendants. These birth attendants are not trained enough to deal complicated deliveries and thus end up in more complication which led to maternal mortality. These traditional birth attendants are residing in localities, which are easily available and also charge less. So, people prefer these birth attendants rather to visit hospitals.

In this regard, most of the gynecologists were of the view that we deal mostly complicated deliveries which were first attended by traditional birth attendants and when the case became complicated they came to us. This is the main cause of maternal mortality. The high risk pregnancies like high blood pressure or gestational diabetes cases attended by these birth attendants mostly end up in women deaths.

Families in this regard expressed their views that it is against the religion and culture when pregnant women walk outside homes. In the case of emergencies they should visit the hospitals accompanied by man.

3.3.7 Early marriages

The traditional society of the province, early marriages are very common cultural practice. After marriage it is obligatory to have children thus women tend to make babies despite of the high risk involved. Most of the LHWs expressed their views that "early marriages are very common which arises high risk pregnancies because at a very young age, these girls cannot produce healthy babies. They are themselves babies".

People of the area believe that at young age women can produce healthy babies as they are themselves healthy. Therefore, these pregnancies were not mostly handled by experts rather by traditional healers and thus end up in complicated deliveries and thus delay in the appropriate health care happened.

Most of the gynecologists reported that early marriages are among one of the important factor influencing maternal mortality which is so deep rooted in the area culture that it cannot be challenged rather it will take more time and also appropriate measures are not in ground as well.

4. Discussion

Maternal mortality is an important issue of the country with alarming rates. Therefore, it is important that the issue may be addressed on priority basis. Although, the health department is working to address the issue, however there are various other factors which influence the issue. Hence, the understanding of these factors are important so that multifold strategies may be developed to counter the issue effectively. In this regard, an attempt has been made to highlight the social and cultural factors of maternal mortality in the four main districts of Khyber Pakhtunkhwa-Pakistan. Three Delayed Model approach has identified various social and factors which has been discussed in detail. Among the social and cultural factors influencing maternal mortality, the first one was low social status of women. Low social status of women was due to their low literacy status, financial and thus decision making status. Due to their low social status in the traditional patriarchal society of the province, women tend to bear more children without even considering their body and maternal health care needs and thus aggravate the issue of maternal mortality in the country. The same fact has been endorsed by various researchers from the developing world like Adjiwanou et al., (2018) noted that the deep rooted gender inequality in the African countries accounted towards low social status of women in terms of low literacy status and financial status and thus further accounted towards the broader issue of maternal mortality. These dependent and uneducated women cannot exercise the power of decision making related to health care even during their high risk pregnancies and thus resulting in high rates of maternal mortality (Adgoy (2018). Several studies in the literature from various other countries have also indicated that women's literacy and educational level improved their health outcomes and decreased the maternal mortality as educated women seek professional health care services immediately and also family planning services (Egmond et al., 2004; Mayhew et al., 2008; Rahmani et al., 2015). Moreover, adolescent pregnancies ratio is less among the educated women as well thus reducing the risk of maternal mortality (Egmond et al., 2004; Najafizada et al., 2017).

It is the common fact that women from low income households with low income job of husbands especially in rural areas prefer to deliver at home and did not seek health care services due to the associated costs (Hadi et al., 2007). While, women in high income households with regular and high paid husband's job seek health care services immediately and deliver in the health centers with professional health services providers (Mayhew et al., 2008).

It has been identified that due to the low social status of women, they were burdened with household chores and they have to perform their duties even in their pregnancies. More responsibilities put pressure on their health and arise various complications in their pregnancies and child birth. The same fact has been reported by Lowe et al., (2016) that women in the rural Gmbia were burdened with the household chores during their pregnancies which adversely affect their health and thus causing maternal deaths during deliveries as well.

More importantly, the issue of poverty is deeply rooted in the society which limits women's access to health care services as well. According to Cardenas et al. (2015), the poverty affects women more and aggravate the issue of maternal mortality. Because, in rural areas women put their needs at last whether it is related to their health or food even in their pregnancies. Poverty is a rural phenomenon, thus, the issue of maternal mortality is more profound in the rural areas of developing countries as compared to urban areas (Gholampoor etal., 2018; Herteliu et al., 2015; Fiori et al., 2014). Likewise, poverty is also associated with the low levels of literacy which further increased the ratio of maternal mortality

especially in the rural areas of developing countries. Furthermore, poor people preferred son and thus undergone through repeated pregnancies which further increased the risks of maternal deaths (Gholampoor et al., 2018).

The low nutritional status of women is common especially among the poor and rural segment of society. The culture and social norms of the society put the women food needs at last and men and children at first. Hence, in a household, first the men and children have to feed and then women even if they were pregnant the same pattern follows. The low nutritional intake results in complicated and high risk pregnancies and deliveries and thus led to maternal mortality. The same fact has been endorsed by various researchers around the developing and underdeveloped countries (Lowe et al., 2016; Adjiwanou et al., 2018; Gholampoor et al., 2018; Hanif et al., 2021; Omer et al., 2021). The social and cultural fabric of the society restricted women's mobility even if it's an emergency the permission must be sought from elders and men should be accompanied and thus it delays the process of health care service which led to maternal mortality in most cases. The same fact has been endorsed by the researchers that restricted mobility of women especially in rural areas delayed the health care service delivery and thus accounted towards the high rates of maternal mortality around the country (Hanif et al., 2021; Omer et al., 2021). Furthermore, the costly transport services also delayed the health care service in the rural settings of the country (Sarfaraz et al., 2015)

Women and especially in rural areas were mostly illiterate and thus have no basic knowledge of health care. During their pregnancies, they have to rely on the traditional healers and family knowledge which is not an authenticated sources of treatment and thus end result may be seen in high rates of maternal mortality in the area. According to Najafizada et al., (2017), women have low levels of awareness related to maternal health care due to their low levels of literacy mainly. The low levels of unawareness about maternal health care delayed access to the health care service and thus led to maternal deaths.

Women do not exercise the power of decision making whether it was related to their bodies to discontinue a pregnancy or not to opt to have more children or to choose family planning option. The patriarchal society and culture did not allow them. These decisions were mainly taken by the in-laws and husbands hence large number of deaths reported in the country, especially in rural settings. The same fact has been endorsed in the literature around the developing world. According to Azuh et al., (2015) highlighted that male dominancy is prevailing in the traditional societies where women's body are even controlled by men. Women have no say in the reproductive decisions like family planning, abortions etc. The male dominancy over reproductive health of women affect women's health badly and end result arise in the form of maternal mortalities.

Most of the childbirths were handled by the traditional birth attendants in the area which is amongst one of the main causes of maternal mortality because these attendants were not skilled and they have no preparation for any emergency situation. The services of these unskilled birth attendants were mainly availed due to social and cultural norm that pregnant women have to deliver within the house so that evil eye may not be caught as well. Moreover, the medical professionals were not trusted by people hence, the issue of maternal mortality aggravated within the rural settings. In this regard, the previous researchers endorsed these facts (Omer et al., 2021).

Another important social and cultural factor which influence maternal mortality was the early marriages. It is a very common practice especially in rural areas. Previous research

studies have also reported the factor as amongst the important and major factors affecting maternal mortality (Ali et al., 2014; Najafizada et al., 2017; Hanif et al., 2021). The prevailing cultural and social barriers impede in the timely access of maternal health services and the use of outdated and traditional practices in the case of pregnancy complications increased the vulnerability of women deaths.

5. Conclusions

Maternal mortality is an important issue which is affected by various factors like social, cultural, and economic. The current study has focused on the identification of prevailing social and cultural factors which influence maternal mortality in the four main districts of Khyber Pakhtunkhwa province. These factors has been studied in the light of Three Delayed Model approach to identify those factors which delays the maternal health care service in the area. The study found some important social and cultural factors like low social status of women, low nutritional status, restricted mobility, unawareness of maternal health care, low levels of decision making power in health care and family planning, traditional birth attendants, and early marriages. The study found that the mentioned social and cultural factors delayed the access to proper maternal health care which mainly resulted in maternal mortality. Therefore, women focused initiatives from government and non-government bodies addressing women's socioeconomic status and their decision-making power are essential to tackle the issue of maternal mortality in the study area.

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