

Impact Of Low Level Of Education On Health Inequalities In Pakistan: A Descriptive Analysis Of Maternal Health

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Abstract

Conventionally, the socio-economic condition of maternal has been measured using information about poverty, low level of Education, and geographic Location, or household income. Since the teen aging is a developmental stage characterised by a search for and a move into individual life tracks a shift of focus from socio-economic position of origin to socio-economic position of destination is justified. Education orientation may be used as a major indicator of future social position. The purpose of the study was to elucidate the theoretical link between education and health inequalities in Pakistan. Education is a useful concept in order to detect health inequalities and a powerful way of identifying maternal at higher health risk. The unequal distribution of health and health-damaging behaviour according to educational orientation among teenager turns out to be an important challenge for public health work.

Keywords: Socio-economic; Academic Orientation; Health Inequalities; Maternal

INTRODUCTION:

The existence of every country's population depends on improvements in maternal and child health (Dzomeku et al., 2021). However, Pakistan suffers from widespread disparities in the provision of and access to maternity and paediatric healthcare services (Dickson, Darteh, et al., 2018). To achieve the Sustainable Development Goals' (SDGs) of universal health care, it is crucial to comprehend the factors that contribute to disparities in mother and child health (MCH) (Nachinab et al., 2019). Public health is paying more and more attention to how healthcare services are distributed unequally. Pakistan faces unequal distribution of mother and child health care services, just like other Sub-Saharan nations. Equal access to MCH is crucial

for enhancing maternal and child health outcomes and well-being. However, an uneven distribution of MCH services raises mortality in areas with limited resources (Dzomeku et al., 2021).

In Northern Pakistan, where poverty is pervasive and access to MCH services is painfully scarce, infant, child, and maternal death rates are at their greatest (Budu, 2020). The MCH services are worse in Northern Pakistan than in the more prosperous Southern districts. According to estimates, 1 in 19 children in Pakistan die before the age of five, and 1 in 27 babies pass away before their first birthday (Dotse-Gborgbortsi et al., 2022). A startling 517 pregnant women may away from maternal causes per year in Pakistan due to inadequate access to MCH treatment and unequal service distribution. Surprisingly, the

majority of maternal and new born deaths may be avoided (Anarwat et al., 2021a).

Over the last decade, Pakistan's main MCH health status indicators including infant mortality rate (IMR), maternal mortality rate (MMR), neonatal mortality rate (NMR), and family planning improved gradually (Ogundele et al., 2018). Due to discrepancies in the use of maternal and child health care, more than 800 women die every day from problems during pregnancy and delivery worldwide. Twenty other people suffer significant injuries, illnesses, or impairments for every woman who passes away, and the majority of maternal fatalities (99%) take place in areas of impoverished nations (Akasreku et al., 2018). The health and well-being of women who have little or no education are also hampered. Given that fatalities for mothers with at least a secondary education were linked to deaths for mothers with no education, inadequate maternal education is still a concern in Pakistan (Sumankuuro et al., 2022). The Sustainable Development Goals (SDGs), in particular the goals of ending poverty, providing universal health coverage, and reducing inequities by the year 2030, are seriously hampered by inequality (Ahinkorah et al., 2021). Policymakers concur that the increasing and enduring imbalance in the allocation of social services, particularly mother and child health care, is detrimental to both nations and people (Angko et al., 2023).

According to previous research, educated women are more likely than less educated women to begin their antenatal care (ANC) visits sooner, and the use of delivery care is strongly correlated with education (Nyarko et al., 2022). Research on maternal health in Pakistan have often concentrated on the entire population, with some studies also focusing on specific areas. The number of children, wealth, education, transportation and health insurance access among women between the ages of 15 and 49 have been found to impact the usage of prenatal care

services in Pakistan (Fenny et al., 2018). The usage of ANC inside communities is impacted by other factors such significant travel distances and wait periods. The prior research on poverty, illiteracy, and location as socioeconomic determinants of maternal health and child health in Pakistan along with theoretical health model is presented in this essay.

Theoretical Health Model for Delivering Medical Facilities

Research in this area adapted and modified Andersen's healthcare usage model to examine obstetric services (place of delivery) (Straatmann et al., 2019). Predisposing factors, enabling factors, and need factors are the focus of Andersen's approach for determining what motivates people to seek out health care. It can be started with the concept of predisposing variables, which are those aspects of a person's life that encourage or discourage the use of health facility delivery before the occurrence of the provided health behaviour (Bilsteen et al., 2018). The term "predisposing qualities" refers to any and all factors that might influence an individual's assessment of their own health care needs and their frequency of seeking medical care from medical facilities (Song et al., 2021). These risk variables include, but are not limited to, age, reproductive history, cultural views, education, legal status, marital status, and social factors. Second, enabling factors include resources, such as financial standing, community resources, and other characteristics, that either promote or inhibit the use of health services. Andersen's model suggests, third, that "Need" for care is significant in driving behaviour (Karpur et al., 2019). For this reason, we employed Andersen's model alongside an exhaustive search of the empirical literature to help us zero in on a few key contributors to health centre provision. As can be seen in Figure. 1, the study's explanatory variables were classified as either predisposing (marital status, age, religion, maternal education,

parity), enabling (site of residence and financial status), or mediators (perceived need) (Neupane et al., 2020).

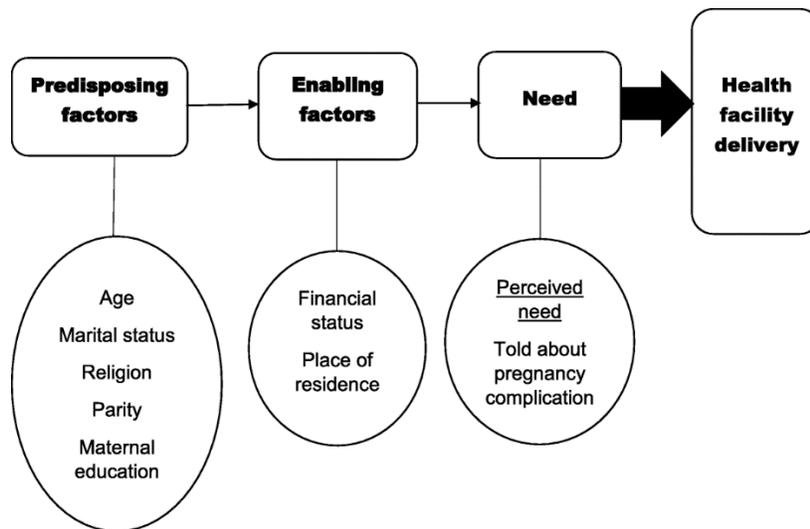


Figure 1. Andersen's Theoretical Healthcare utilization model

BODY

Poverty

In general, a woman's likelihood of giving birth in a healthcare center decreases with her level of poverty. Given that maternal health care in Pakistan is free, a recent study revealed that in addition to the price of healthcare services, additional economic considerations affect women's decisions over where to give birth (Seidu et al., 2022). This complex interpretation makes an important contrast between the Pakistanian setting and other legal systems that needs to be investigated. This perspective is supported by some studies, which shows that choosing to give birth outside of a hospital was not always motivated by a woman's inability to pay for maternal health services (Anarwat et al., 2021b; Kuupiel et al., 2019; Seidu et al., 2022). Transportation costs, travel time, and other expenses related to getting medical care in facilities may also be significant issues. Gaining a fuller understanding of how a woman's financial situation affects her decision to birth at home requires taking the expenses connected with

health facility deliveries in a wide sense (Novignon et al., 2019).

Kuupiel et al., (2019) found that inequality in wealth was also influenced by living in rural areas, as well as in the northern and centre regions. The fact that poor women in rural areas frequently have to travel long distances to access medical care and may not be able to afford transportation costs, as well as the fact that harvesting activities may limit their mobility during certain seasons, could be one explanation for the role of rurality (Kuupiel et al., 2019). These results are consistent with another study from Pakistan, where having access to experienced birth attendants was unequal and rural living had a large favourable impact (Amporfu & Grépin, 2019). In Pakistan, there are large disparities in income levels and geographic regions, indicating that household wealth significantly affects child survival and that the impoverished are more likely to experience child death. Inequalities in wealth were evident in MCH through teen pregnancy, low birth weight,

new-born malnutrition, and childhood illness (Yaya et al., 2021).

Bediako et al., (2021) reported that due to socioeconomic barriers, which are well-established to be significantly connected to accessibility to proper antenatal services, the high frequency of low birth weight may also be the result of insufficient access to health facilities like prenatal treatments (Bediako et al., 2021). Due to the deprivation of their communities, the region's rural residents—who make up around half of the population—have little access to medical facilities. Additionally, they lack access to amenities like power, excellent roads, and drinking water, which deters qualified midwives from applying for jobs in these communities. It must be acknowledged, nevertheless, that while the Pakistanian government has taken steps to expand access to prenatal care by making these services available to all expectant women in the whole nation, the success of these plans is constrained by socioeconomic challenges (Dakura & Yidana, 2022).

In Adu et al., (2018), since mothers who give birth in private health centres come from affluent social classes and have higher socioeconomic status than mothers who give birth in public health facilities, it was expected that the incidence of low birth weight would be low in the reserved hospital (Adu et al., 2018). High socioeconomic status has been demonstrated to positively affect delivery outcomes. Additionally, the government of Pakistan has more than tripled its healthcare spending in the last ten years, but the country's healthcare infrastructure is still inconsistent and inadequate, mainly outside of major cities like Accra (Kpodotsi et al., 2021). Although not entirely up to Western standards, hospitals and emergency services are accessible inside cities. For large segments of the rural population who cannot afford to travel vast distances for healthcare, traditional herbal medicine is the preferred alternative due to the

scarcity of healthcare facilities and even medical practitioners in rural areas (Dickson, Adde, et al., 2018).

Low level of education

Gender inequality in Pakistan's educational system has an especially negative impact on women (Sakyi et al., 2020). This disparity results from behaviours including child marriage, child labour, poor teacher preparation, the inability to account for females' menstrual cycles at school, and unadvertised expenditures associated with sending kids to school. Social norms that tend to view female education as less important and so more disposable than male education confuse all of these variables (Dickson, Darteh, et al., 2018). Girls' lack of access to education has detrimental effects on the economy and health, including rising poverty rates, a decline in the use of birth control, greater risk during pregnancy, and dangers to the health of the offspring when their mothers are illiterate. According to Afaya et al., (2020), use of delivery care is significantly influenced by a woman's education level, and educated women are more likely than less educated women to begin antenatal care visits sooner (Afaya et al., 2020).

Anarwat et al., (2021) reported that there are significant differences in the utilisation of trained birth attendants during deliveries across various socioeconomic classes. There are significant disparities in competent birth delivery, according to studies done in low- and middle-income nations. The results of this research indicated that competent birth delivery was substantially correlated with affluence, women's education, and husband's educational level. The concentration index and curve, for instance, demonstrated that wealth-related disparities were statistically significant in skilled delivery, favouring women from homes with higher incomes. After decomposition, it was discovered that mother's education and home wealth were the

primary causes of disparities (Anarwat et al., 2021a).

In Ogundele et al., (2018), women who had completed at least secondary school were 30–46% more likely than those who hadn't to get family planning, maternity care, or delivery in a medical institution from a trained health worker. With a significant difference ($P < 0.01$), children who were born to mothers with a post-secondary education had a higher likelihood of receiving all vaccinations before the age of one year than those who were not in this category (Ogundele et al., 2018). By improving girls' access to sanitary products, developing social support systems to encourage women and girls to complete their education, and lowering the cost of education at special schools to make them more accessible, organisations have sought to combat this issue. The impact of these practises on females' access to school in Pakistan has varied (Dotse-Gborgbortsi et al., 2022).

The level of education a woman has also affects how risky she is throughout pregnancy and delivery (Nyarko, 2019). Girls and women with higher levels of education are more likely than those with lower levels of education to seek prenatal care. In Pakistan, haemorrhaging and eclampsia are two of the top 3 causes of maternal death, according to a recent study (Akasreku et al., 2018). Both of these delivery problems may be avoided with the right medical care. Complications from abortions, both medical and private, are the second-leading cause of maternal death in Pakistan, with mortality rates among women who did not seek medical help being significantly higher (Akasreku et al., 2018). More than any other subgroup of women, women without education are far more likely to attempt to conduct abortions on themselves at home, which is the most dangerous sort of abortion. According to Sumankuuro et al., (2022), the maternal mortality rate might be dramatically lowered if more women had access to schooling.

Young moms now find it simpler to continue their education and schooling thanks to a recent reform in Pakistan's reenrolment policy and free secondary schooling. However, there are still laws and customs in many African nations that make it more challenging for teenage mothers to finish their education (Sumankuuro et al., 2022).

Geographic location

Studies in Pakistan have revealed spatial disparities in resource distribution, with the affluent South receiving much more financial support, including greater access to social services like schools and health care (Ahinkorah et al., 2021). The observed wealth disparity in health metrics might be diminished with improved social and economic redistribution of these resources across the nation. Compared to many other countries, Pakistan's government health spending reduces inequality less steadily, making up just one-third of the difference (Angko et al., 2023). Once more, the government's yearly allocation to the health sector has varied and continues to be below the 15% objective set by the Abuja Declaration (Nyarko et al., 2022). Making evidence-based choices and allocating limited public resources to needy depend on understanding the causes of these discrepancies. Achieving the pertinent health-related SDG objectives is challenging due to the persistence of health-care imbalances that harm the poor, rural residents, and women with low educational levels (Fenny et al., 2018).

Yaya et al., (2021) noted that all mothers in Pakistan received free child vaccination irrespective of their financial situation. Surprisingly, metropolitan regions and children whose mothers or carers had completed secondary education had somewhat greater rates of vaccine coverage than rural areas and children whose mothers or carers had not (Yaya et al., 2021). According to these findings, urban regions have more service coverage than rural ones. The government of Pakistan has shown a lack of

consistency in its investment in health facilities and the evolution of health insurance coverage, which has contributed to a relatively maldistribution of MCH service coverage between the rich and the poor, as well as between urban and rural residents, over the past several decades (Kuupiel et al., 2019). Over the past few decades, regional hospitals and sub-district health centres have expanded their service areas, mostly to the benefit of the urban and well-to-do. District health systems, which are made up of hospitals and health centres, are the gold standard when it comes to offering comprehensive curative, preventative, and health-promotion services like MCH (Amporfu & Grépin, 2019).

Seidu et al., (2022) when compared children in urban and rural areas, as well as those from different socioeconomic backgrounds, there were noticeable discrepancies in health outcomes in Pakistan. For instance, the country's CIs for diarrhoea, malnutrition, being underweight, and stunting are similar to the MICS for developing countries (Seidu et al., 2022). One of the most influential socioeconomic variables in health inequalities is educational attainment. When comparing indicators of teen pregnancies and child malnutrition, this study indicated that the education disparity was significantly bigger than the urban-rural divide. There was an inverse relationship between the mother's or caregiver's level of formal education and the prevalence of adolescent pregnancy and new-born malnutrition. High school graduates were shown to be substantially less likely to become pregnant as teenagers (Anarwat et al., 2021b).

In Pakistan, universal health coverage does not provide equal access to MCH services (Bediako et al., 2021). Even though they frequently fall beyond the purview of the health sector, socioeconomic determinants (such as poverty, maternal education, and other systemic societal disparities) have a key role in the problem of unequal health outcomes. Stunting implies

chronic malnutrition, which is typically brought on by persistent poverty in the family, whereas wasting in youngsters signals acute malnutrition (Dakura & Yidana, 2022). Policies should address issues such as low birth weight, teen pregnancies, and new-born malnutrition, for which the World Health Organization suggests multi-sectoral interventions. Policies should also address other issues such as maternal and child health disparities. Long-term effects of birth equity include undernutrition, which is associated with a reduction in human capital (i.e., the knowledge and skills that make people able to work and thus produce economic value) (Adu et al., 2018).

Policy response on health inequalities

The recently implemented free secondary education programme in Pakistan is one example of recent initiatives in this regard worth mentioning. The youngsters who would have dropped out of school due to financial constraints are the target audience for this intervention (Sakyi et al., 2020). Pakistan has adopted free maternal health care, community-based health services, and better prenatal care and education to boost access to health facility delivery. These programmes have increased hospital utilisation. The country's secondary school enrolment has expanded dramatically as a result of the government covering all relevant financial expenditures (Kpodotsi et al., 2021). Additionally, this has been a huge comfort for parents who couldn't pay secondary school tuition. If properly implemented, the intervention will probably lessen educational disparities and, eventually, access to maternity care (Dickson, Adde, et al., 2018).

Conclusion

Inequities in healthcare outcomes among teen pregnancy, child malnourishment, and child death, still presents significant issues. Similar patterns may be seen in the disparities among the

poor and uneducated families. The key factor influencing health disparities is the education of mothers. To bridge these gaps, significant policy leverage and multisectoral efforts are required. In Pakistan, there are many instances of inequality in the majority of mother and child health interventions, to the detriment of the poor, rural residents, and those with lower levels of education. Therefore, addressing the disparities in allocation of resource through basic healthcare services is essential to combating Pakistan's excessive wealth and geographic disparity. For instance, increasing maternity and child health awareness and promoting it, as well as enhancing the standard of primary care in disadvantaged rural areas, can enhance the equality and quality of mother and child health care in Pakistan. To understand the social aspects of disparities and the related causes of MCH inequalities, further study, particularly qualitative research, is required.

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