The Barriers to Maternal Health Care: A View of Disparities in Southwest Asia through the Three Delays

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Regions in Southwest Asia are experiencing simple obstacles in their ability to receive healthcare services. Vulnerable populations, such as individuals in need of maternal health care, are experiencing specific delays in obtaining medical care that can contribute to Southwest Asia's maternal mortality rate. This paper will utilize the Three Delay Model (3DM) to address the relationship between indirect factors in receiving care and socioeconomic factors, such as community, income, and education, present for women in South Asian countries. Each delay will be further explained in its relationship to socioeconomic factors and resulting outcomes on maternal health. Further exploration will be conducted on how the three delays in receiving medical care and social factors present for this population can explain negative maternal health outcomes in this region.

Keywords

Maternal Health • Barriers • Access • Model

Introduction

Countries in Southern Asia like Indonesia, India, and Cambodia can be classified as lower-middle-income countries. Additionally, Sub-Saharan Africa and Southern Asia account for almost 87% of global maternal deaths (WHO, 2024). The severity of this number can be understood by exploring the external factors that might contribute to negative maternal health outcomes. The Three Delays Model (3DM) was proposed by Sereen Thaddeus and Deborah Maine (1994); their work investigated indirect factors that can contribute to maternal mortality and obstetric complications. This model is categorized as: (1) the delay in deciding to seek care; (2) the delay in arrival; and (3) the

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delay in receiving adequate and fulfilling medical attention (Thaddeus & Maine, 1994). This model can oftentimes be used to visualize the relationships between providers and patients; therefore, it can combine the roles of each party to explain the outcome of their healthcare experience. For example, patients who can reach a healthcare facility without any barriers like transportation might still receive subpar medical services because of medical equipment shortage. The 3DM is present to visualize and explain external factors that contribute to possible complications in maternal healthcare. It is used to observe in a broader scope the responsibility of women, their community, and healthcare systems (Actis Danna et al., 2020).

These delays can be further pushed into effect through socioeconomic factors that are present in the everyday lives of women in South Asian countries. This region experiences the second-highest rate of global maternal deaths, and understanding barriers to receiving adequate maternal healthcare can eliminate health disparities in underserved populations (WHO, 2024). This field of study not only impacts the health of South Asian women but ultimately dictates the health outcomes for infants. The primary focus of the paper is to discuss the socioeconomic factors that contribute to the three delays in receiving maternal healthcare for women in Southwest Asia. This discussion can prompt further recognition of the global advocacy needed to minimize negative healthcare outcomes for women in this region.

Delay 1: The Decision to Seek Care

The first delay in this model addresses the ability to recognize a health problem and the decision to seek care to address this health problem. This delay is proposed to be the leading contributing factor to maternal mortality in Southern Asian countries (Baig et al., 2023). A study was done in India using the 3DM to understand sociocultural factors associated with maternal deaths. This study found that the first delay was the most significant contributor to maternal deaths (Sk et al., 2019). The recognition of maternal health problems requires knowledge of what warning signs are present, and of the maternal deaths studied, the main reason for the delay in seeking care was late decision-making, unawareness of warning signs, and lack of preparedness surrounding birth plans (Sk et al., 2019).

Socioeconomic factors can further explain how delays in care can occur from personal factors. The decision to seek care requires prior knowledge and understanding of what issues need to be resolved. Factors such as education and age were seen to impact the ability to conclude whether taking the initiative to seek care was worth it (Sk et al., 2019). The relationship between these socioeconomic factors in decision-making is apparent regarding the first delay. Thaddeus and Maine (1994) conclude that education and economic status can contribute highly to the utilization of healthcare services. Within this study, education on maternal health signs and financial restraints contributed to the first delay in the decision to seek care (Sk et al., 2019). There is a connection to be made on whether prior maternal health exposure can contribute to the lack of initiative in seeking care because of experience in the birthing process. However, it is recognizable that factors of age and education have influenced the initiatives for women to seek care during maternal health problems. The external factors present for women in Southwest Asia can impact their choices to make the initiative to seek care (Actis Danna et al., 2020).

Delay 2: Arrival to a Healthcare Facility

The second delay in care is the time it takes to leave a location and arrive at an intended healthcare facility. This delay can be explained simply through women's transportation access, which can be impacted by the geographic distance between the women and the healthcare facility, the cost of transportation, and the reliability of this transportation. Mechanisms that create a delay in reaching a healthcare facility, such as transportation and distance, can create unintended barriers to the utilization of medical services. Healthcare services are underutilized in Southwest Asian countries like Indonesia, which are burdened with geographical barriers. For instance, the residents of the Maluku region of Indonesia, an isolated area containing many islands, present underutilization of healthcare services because of the distance and time it takes to travel to a healthcare facility (Ipa et al., 2023). The inability to reach a healthcare facility presents a large healthcare barrier for immobile populations such as pregnant women (Thaddeus & Maine, 1994). With isolated island regions in Indonesia already presenting high maternal mortality rates, delays in the arrival to healthcare facilities are likely to impact health outcomes for vulnerable populations (Syairaji et al., 2024).

The connection between socioeconomic factors and geographical setting is apparent in island countries in Southwest Asia like Indonesia. The healthcare facilities in the most population-dense islands differ from those of smaller island inhabitants and can result in an inequitable dispersion of medical facilities (Public or Private?, 2025). Private healthcare systems, including international hospitals, are in major cities within Indonesia, and they are known to offer significantly higher standards of care with modern facilities and quality staffing (Allianz Care, n.d.). The delay in arrival to medical services and care can be reflected to a greater degree in isolated rural areas, like islands. Most inhabited islands in the world are located in Southern Asia, and the delay in arrival to facilities can be of concern regarding geographical struggles within this region (Number of Islands by Country 2025, n.d.). A delay in the arrival to healthcare facilities can create negative health outcomes for women with obstetric barriers. Factors that contribute to a delay in arrival to medical facilities are most prominent for lower-income communities (Syed et al., 2013). Many Southwest Asian countries are considered lower-middle-income economies (World Bank, n.d.). Health barriers for obstetric populations in this region can highlight inequalities in geographical accessibility for low-income countries and rural populations (Banke-Thomas et al., 2024).

Delay 3: Adequate Healthcare Service

The third delay addresses the performance of medical service during treatment. Performance can be judged by the equipment at medical facilities and the staff that is located at these facilities (Actis Danna et al., 2020). This delay uses an observation method that looks at biological aspects of health that influence maternal care and responsibilities of women before, during, and after their birth. The incorporation of this delay can be used to address external and indirect factors negatively impacting maternal health outcomes for women in Southwest Asia. This third delay can encapsulate staffing concerns within medical facilities, qualification of physicians and medical professionals, and can establish the impacts of wait time and malpractice.

The negative impacts of the third delay can be best seen through the exploration of the healthcare system in Myanmar. The health inequities in Myanmar's healthcare system have left rural communities seeking care from private healthcare professionals and community organizations rather than obtaining reliable access to hospital systems (Han et al., 2018). This situation has led

to a distribution of healthcare that leaves certain communities at a disadvantage. Within hospitals, there are a limited number of physicians, who are classified as underpaid and overworked. Private practices located in rural communities have a general lack of healthcare providers and healthcare training (Mosca et al., 2020). The third delay is prominent between both the rural and urban communities in Myanmar, and each region is experiencing concerns about the quality of care received. The staffing and performance of qualified healthcare professionals have decreased throughout states and regions in Myanmar, and the inaccessibility of medical institutions has given little room for clinical skill-based training (Saw et al., 2019). This has resulted in the ratio of medical doctors being below the WHO-recommended minimum of 1 per 1,000 population of medical doctors, with wide disparities between urban and rural communities (Saw et al., 2019). The number of medical professionals, as well as their qualifications, can impact the overall care received by women in Myanmar and can result in longer wait times and less patient-centered care. A study on the satisfaction of pregnant women with antenatal care services at women's hospitals in Myanmar was conducted, and it produced evidence that wait time led to a lower overall satisfaction rate (Hsai et al., 2020). The impact of deficiencies in healthcare systems and insufficient staffing and protocols can limit access to lifesaving healthcare (Thaddeus & Maine, 1994). For women's health, concerns about timely and adequate care are important and can dictate satisfaction for medical facilities (Win & Panza, 2010). Indirect factors regarding the administration of adequate care facilitated through institutions can create delays in receiving care for vulnerable populations. Socioeconomic factors can contribute to satisfaction, and monthly income was a large contributor to dissatisfaction rates in healthcare services for pregnant women in South Okkalapa, Myanmar (Hsai et al., 2020). Socioeconomic factors and their relation to healthcare delays are vital for recognizing disparities in healthcare services and systems. The 3DM model helps explore external factors like wait time, staffing, and services that contribute to a delay in receiving maternal healthcare. The third delay explores factors that are not within the control of patients but are perpetrated through healthcare institutions. Southwest Asian countries, like Myanmar, can experience negative maternal health outcomes that are explained through barriers that are specifically present in this region.

Conclusion

Examining health disparities in Southwest Asia can dramatically impact the crucial field of maternal health. The Three Delay Model can express the indirect factors that affect the administration of maternal health care. This model represents the negative impact of socioeconomic barriers on access to maternal health care. Recognizing the delays in care and the barriers created to perpetrate these delays, builds a collective understanding of the role of the patient and the role of healthcare systems. External factors present in everyday life can further drive delays in healthcare systems. For vulnerable populations and countries, addressing the indirect factors that further drive barriers to maternal care can generate recognition and advocacy. Through exploration of the barriers in maternal care using the Three Delay Model, proactive assessments can be made within healthcare systems and patient lifestyle changes.

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