

Systematic Review

A contemporary overview of factors hindering the improvement of maternal health literacy among mothers in South Asia: a systematic review and a thematic analysis

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ABSTRACT

In South Asia, maternal health remains an important public health challenge and poor maternal health literacy (MHL) of mothers has been identified as a root cause of maternal deaths. However, systematic literature reviews conducted to identify 'contemporary' factors hindering the improvement of MHL among mothers in South Asian countries are rare. Hence, this systematic review aims to identify the contemporary factors that impede the MHL among mothers in South Asia. Research articles for the review were selected using preferred reporting items for systematic reviews and meta-analysis (PRISMA). Initially, 264 articles were retrieved from 11 prominent publishing databases, including Taylor and Francis, Elsevier, and Sage. Of these, 21 articles published on six South Asian countries between January 2020 and May 2025 were selected, considering inclusion and exclusion criteria. Nutbeam's health-literacy classification was used to direct the thematic analysis. As findings, 'lack of formal education of mothers', 'cultural barriers', 'misconceptions regarding formal healthcare sector', 'low maternal age', 'less exposure to media', 'less access to digital technology and low digital literacy', 'low family income', 'family structures', 'work obligations', 'partner's involvement', 'area of residence', 'shyness and discomfort of sharing gynecological issues', 'influence of the religion', and 'gender inequality in decision-making' were recognized. These findings provide an overview of reasons behind low MHL among mothers in socio-culturally diverse South Asia, and highlight the importance of overcoming such factors through practical implications to contribute to achieving low maternal mortality rates as per UN Sustainable Development Goal 3.1, 'reducing the global maternal mortality ratio' by 2030.

Keywords: Maternal health literacy, South Asia, Influencing factors, Mothers

INTRODUCTION

Maternal health remains an important public health challenge worldwide; while maternal mortality and morbidity have become a crucial public health issue.¹ It remains a neglected health issue especially in low-income countries such as sub-Saharan Africa and Southern Asia which report about 86% of maternal mortality.¹⁻³ Low health literacy of expectant mothers and their families has been identified as a root cause of maternal deaths.⁴ Comparatively, low-income countries exhibit low maternal health literacy, consequently, they experience poor health outcomes. Therefore, urgent attention is

needed to finding a proper solution for increasing the maternal health literacy (MHL) among mothers, particularly in low-income countries.⁵

MHL is a social and cognitive skill that enables women to access, understand, comprehend, evaluate, and apply health information to enhance and maintain mothers' and children's health and well-being.^{6,7} MHL focuses more on enhancing health quality and outcomes throughout prenatal and postnatal phases with related to nutrition and immunization, timely antenatal care (ANC), neonatal and postpartum care, and identifying risk factors.⁷⁻⁹ Inadequate MHL is a reason for an increasing number of preterm birth,

low birth weight, low maternal age, cesarean deliveries and, admitting neonates in intensive care.¹⁰ Moreover, women with poor health literacy fail to understand new information and guidance.¹¹ The consequences of poor health literacy are not limited to mothers but also extend to the health and well-being of their children, families, and other dependents.¹² However, there are 10–45.5% of postpartum women currently have low health literacy, consequently they experience negative health outcomes and the healthcare system faces immense financial and social burdens; hence, addressing this issue is a high priority for South Asian countries.^{13,14}

Therefore, how to improve MHL to achieve high-quality maternal and child health has been recognized as a prominent research area.⁵ Also, healthcare providers focus on improving MHL among expectant mothers to achieve upgraded maternal outcomes, especially in low and middle-income countries (LMICs). Thus, it is pivotal to investigate the contemporary factors that hinder improvement of MHL among mothers in South Asian countries. Such research supports maternal and child health workers, policymakers, and researchers to understand the maternal health information needs in socio-culturally diverse South Asia. Further, they can enhance MHL through practical implications among women in South Asia, contributing to achieve the UN Sustainable Development Goal of 3.1, ‘reducing the global maternal mortality ratio to less than 70 per 100,000 live births’ by 2030.

LITERATURE REVIEW

Over the years, the literature has been nourished with an increasing number of studies related to MHL. In many studies, it was found that mothers’ formal education is a determinant factor of their MHL.^{7,11,12,15-17} These studies elaborate that women with a lower education level demonstrate poorer maternal knowledge compared to women with better education. The number of ANC visits by the mothers was found as another influencing factor and it was further connected with the mother’s education and ANC.^{12,16,18,19} Educated mothers tend to attend more ANC visits compared to uneducated mothers.^{15,17} However, Pipio et al opined that the inadequate number of midwives and the language they use impact the improvement of antenatal health literacy of mothers.¹⁹

Some studies highlight the monthly income of the family as a determinant factor of pregnant mothers’ knowledge.^{11,12,16,17} Sathi et al connect both the income and education-related factors arguing that poorer and less-educated women show low MHL.^{17,20}

In developing countries, routine healthcare messages are disseminated through mass media to the general public.²¹ A study explains that families with a lack of media exposure demonstrate low engagement in maternal healthcare services.¹⁷ Further, Wake et al mention that expectant mothers with higher family income access mass

media and social media for health-related information than mothers with lower family income.¹⁶ Additionally, research found that rural mothers have low MHL, thus, the place of residence is also an influencing factor to MHL.^{7,18,20} Several studies elaborate that mother who has an educated partner visit more antenatal clinics compared to mothers with no/less educated partner.^{11,17,18,20} Also, working mothers have rich maternal knowledge compared to unemployed mothers due to their passive exposure to parenting information in their working environment.¹⁵ However, the ‘age of the mother’ is significantly associated with maternal health knowledge.^{7,18,20} Besides the aforementioned factors, research found that, mothers, friends, neighbors, community health volunteers, and health campaigns influence MHL.²² Further, mothers who own mobile phones access more maternal care as they have more autonomy to contact health staff efficiently.²³

However, no systematic literature review has been conducted based on preferred reporting items for systematic reviews and meta-analysis (PRISMA) along with a thematic analysis considering 2020-2025 period, to find out the ‘contemporary’ factors hindering the improvement of MHL among mothers particularly in South Asia. Therefore, this study aims to fill that information gap by identifying the ‘contemporary’ factors affecting MHL.

Research objective

The objective was to find out the factors hindering the improvement of maternal health literacy among mothers in South Asian countries.

METHODOLOGY

Study selection

Inclusion/exclusion criteria

The study was conducted as a ‘systematic’ literature review based on preferred reporting items for systematic reviews and meta-analyses (PRISMA) to select the relevant research articles for the study. Primarily, appropriate articles were searched from 11 prominent publishing databases namely Elsevier, Springer, Taylor & Francis, Wiley, Sage, BMC Public Health, Nature Portfolio, JSTOR, Frontiers, PLOS One, and BMJ Public Health, as they are well-established for their authenticity worldwide. ‘Factors affecting maternal health literacy among mothers in Asia’ was the key phrase used to search research articles from those publishing platforms. Accordingly, 5,030 articles (Elsevier- 201, Springer- 139, Taylor & Francis- 296, Wiley- 760, Sage-245, BMC Public Health- 87, Nature Portfolio-31, JSTOR- 35, Frontiers-208, PLOS One- 3,019, BMJ Public Health- 09) were identified as relevant. Of those articles, 264 research papers were retrieved and of them, 21 (n=21) research articles that met the inclusion criteria were chosen for the study.

Table 1: Inclusion and exclusion criteria.

Criteria	Inclusion items	Exclusion items
Articles	Original research papers	Book chapters, review articles, newspaper articles, magazine articles, and conference papers; informal literature; and duplicate reports/articles
Time duration	January 2020 to 15 May 2025	Before January 2020 and after 15 May 2025
Countries	South Asian countries	Non-South Asian countries
Language	English	Non-English

Research articles were filtered using the PRISMA method and Figure 1 depicts PRISMA flowchart that shows the process of article selection.²⁴

Screening process

The authors identified 264 articles from Taylor & Francis (08 articles), Sage (14 articles), Elsevier (48 articles), BMC (50 articles), Springer (12 articles), Wiley (34 articles), PLOS One (78 articles), Frontier (17 articles), Nature (01 article), JSTOR (01 article), and BMJ (01 article). In the selection procedure, the authors eliminated 07 articles due to their duplication. Ultimately 21 articles were included in this study based on the inclusion criteria.

Charting the data

In the charting phase, the 21 articles (n=21) were extracted and analyzed for the identification of several points: author(s), year of publication, name of the data base, country/countries involved, and summary of the article including objective of the study, design, and essential findings. The data chart is presented below in Table 2.

Data analysis

Thematic analysis based on an inductive approach was used to identify the contemporary factors hindering the improvement of MHL among mothers in South Asian countries. Nutbeam's health-literacy classification; functional, interactive, and critical health literacy were used to direct the thematic analysis.²⁵ Accordingly, the themes were identified and created iteratively by comparing and contrasting the findings of the selected studies based on the health literacy skills elaborated in Nutbeam's health literacy classification.

FINDINGS AND DISCUSSION

Of the 21 research papers published between January 2020 to May 2025 in South Asian countries including India, Bangladesh, Pakistan, Afghanistan, Nepal, and Maldives, 14 themes were recognized as the contemporary factors hindering the improvement of MHL among mothers in South Asian countries.

Table 2: Overview of the research articles chosen for the systematic review (n=21).

No.	Author's name	Year	Data base	Country/ countries involved	Summary of the study
1	Rana et al	2020	Plus One	Bangladesh	To determine the level of knowledge and practices on exclusive breastfeeding (EBF) and its relationship between different socioeconomic and demographic factors among mothers. Method: A community clinic based study. Findings: Mothers' age of ≥ 21 years were more likely to have knowledge on EBF and mothers with monthly family income $\geq 10,000$ (Bangladeshi taka) were less likely to have practices of EBF.
2	Fatema et al	2020	Elsevier	India, Pakistan, Bangladesh, Nepal	To examine the impact of mass media exposure and sociodemographic factors on maternal healthcare utilization in India, Bangladesh, Nepal, and Pakistan. Data: Demographic and Health Surveys (DHS) 2014–2017. Results: Maternal healthcare utilization is significantly higher among women exposed to mass media. Mother's educational level influence mass media exposure and some maternal healthcare services.
3	Sohn et al	2020	Sage	Bangladesh Nepal Pakistan	To investigate the effects of women's empowerment and media use on maternal ANC in Southeast Asian countries. Data: DHS conducted in Southeast Asia (2011–2014). Findings: Women with decision-making authority for their own health, household purchases, and visiting family/relatives experience more health care than women without decision-

Continued.

No.	Author's name	Year	Data base	Country/ countries involved	Summary of the study
					making authority. The women who use mass media receive more health care.
4	Islam et al	2021	Elsevier	Bangladesh	To investigate the prevalence of neonatal mortality and its associated risk factors in 21 developing countries, using latest DHS data. Findings: In Bangladesh, parents' higher-level education, better wealth status, above 19 years for delivery, ANC visit, media access significantly lower neonatal death. Parents' lower education level, poor wealth status, early maternal age, no ANC visit, no media access were significant risk factors.
5	Harsch et al	2021	Frontiers	Afghanistan	To explore health literacy of women in Afghanistan and the associated factors. Data: A survey. Findings: Health literacy among educated women in Afghanistan is low even compared to other Asian countries. Health literacy is linked to age and education.
6	Yadav et al	2021	Wiley	India	To examine the socioeconomic factors of antenatal services, skilled birth attendance and postnatal services in 4 Empowered Action Group states of India. Data: National Family Health Survey. Findings: female education, mass media exposure, women's autonomy, economic status were linked with the use of maternal healthcare services.
7	Pike et al	2021	Wiley	Bangladesh	To examine the experiences and decision-making of expecting adolescents in Bangladesh related to ANC and nutrition practices. Method: Interviews. Findings: Adolescents experience less autonomy upon becoming pregnant. They seek support and guidance from families for care, health and nutrition. Mothers/mothers-in-law plays the decision-making roles, with husbands actively participating.
8	Acharya et al	2022	BMC Public Health	Nepal	To understand the facilitators and barriers to health mother's groups (HMG) meeting participation. Method: A convergent mixed-method (data from the 2016 Nepal DHS, IDIs, and FDGs). Findings: Women's education level was associated with HMG participation. 'Work obligations of mothers' was identified as a hindering factor.
9	Ng et al	2022	BMJ	India	To examine the factors influencing the uptake of reproductive, maternal, newborn, child health and nutrition (RMNCH&N) services in high disease burden low-resource settings. Method: Cross-sectional surveys. Findings: Higher knowledge was associated with older age; higher levels of education and literacy; living in a nuclear family, primary health decision-making autonomy; attending ANC and satisfaction with ASHA's service.
10	Kumar et al	2022	Elsevier	Nepal	To evaluate the association between the ritual of menstrual restrictions and maternal healthcare access in Nepal. Data: Nepal Multiple Indicator Cluster Survey, 2014. Findings: Women who face menstrual restriction tend to delivery at home receiving assistance from untrained women, which increases the risk of maternal deaths. Hence, some rituals impact negatively on women's physical health over the lifespan.
11	Khalid et al	2023	PLOS One	Pakistan	To understand the perceptions of mothers who delivered at home without receiving ANC and the perceptions of their decision-makers regarding this behavior. Data: IDIs. Findings: Traditional beliefs and practices, poverty and gender inequality, poor health care systems were found as influencing factors for childbirth in marginalized settings.

Continued.

No.	Author's name	Year	Data base	Country/ countries involved	Summary of the study
12	Bhattarai et al	2023	BMC Public Health	Nepal	To test a family-focused virtual counseling mHealth intervention designed to increase iron folic acid compliance in rural Nepal. Data: Semi structured interviews. Findings: Expectant mothers were not equally familiar with using mobile devices. Their lack of autonomy limited their ability to speak freely, and their mobility to get better coverage.
13	Sarmah et al	2023	Sage	India	To explore the sociocultural factors influencing food choices, reasons behind adopting a particular food habit or food restrictions and factors affecting prenatal and postnatal care in five tribes of Assam, in India. Method: Mixed method. Findings: Religion and customs influence on pregnancy and PNC, food preference and avoidance.
14	Tayal et al	2024	Taylor and Francis	Afghanistan, India, Nepal Maldives, Bangladesh, Pakistan	To identify the socioeconomic and demographic factors influencing maternal healthcare service utilization in South Asia using data from the DHS. Mature women receive adequate ANC and PNC. Educated, working, wealthier women were aware of family planning. Women with mass media exposure receive MHCSU. Women with a lack of decision-making autonomy receive less MHCSU.
15	Puja et al	2024	Elsevier	Bangladesh	To examine the healthcare challenges faced by underprivileged women in Bangladesh, issues related to menstruation and gynecological disorders through a field study in a slum area. Method: Mixed method. Findings: lack of knowledge, misconceptions, patriarchy, domestic violence and, lack of power of women and trust issues are connected with negative experiences.
16	Haque et al	2024	Elsevier	Bangladesh	To examine the factors affecting the dietary diversity of both children and women of the residents live in a manufacturing industry-dominated growing peri-urban area of Bangladesh. Method: A survey. Results: The age of the children, maternal age, and maternal education significantly affect children's dietary diversity, and mothers' education level, their access to and control over resources affect their dietary diversity.
17	Singh et al	2024	BMC Public Health	India	To investigate the spatial heterogeneity of early marriage and motherhood across Indian districts. Data: the fifth round of National Family Health Survey. Findings: Education is a critical determinant. Uneducated women are more likely to marry early. Socioeconomic factors, including poverty and limited mass media exposure, caste, religion were associated factors and increased the risk of early marriage and motherhood.
18	Khaled et al	2024	Wiley	Bangladesh	To examine sociocultural factors influencing dietary behaviours in pregnancy. Method: IDIs and FGDs with mothers. Expectant Mothers obtained diet and nutrition related information from community health workers and other women in the community. They prefer reaching their-own networks before healthcare providers for health information.
19	Ahmed et al	2024	Elsevier	Bangladesh	To investigate the factors contributing to delivery-related complications and their consequences among the mothers residing in the hard-to-reach areas of Bangladesh. Method: A cross-sectional study. Highly educated, employed mothers with higher number of ANC visits, and first-time mothers reported delivery-related complications.
20	Hossain et al	2024	nature	Bangladesh	To examine the importance of early and regular ANC visits in reducing maternal and child mortality rates in Bangladesh. Data: The Bangladesh DHS (2017–18). Findings: Women

Continued.

No.	Author's name	Year	Data base	Country/ countries involved	Summary of the study
					between 25-29 visit ANC well-ahead than younger women. Women and their partners' education significantly influence ANC visit. Women with economic constraints and rural women showed lower probabilities of seeking timely ANC.
21	Bhowmik et al	2025	Wiley	Afghanistan	To evaluate the association between the frequency of ANC visits and institutional birth services in Afghanistan. Data: 'Multiple Indicator Cluster Survey' (2022 to 2023). Findings: Women's higher education, the area of residence, wealth index, education levels, ownership of mobile phones, number of children, and number of ANC visits were associated with institutional births.

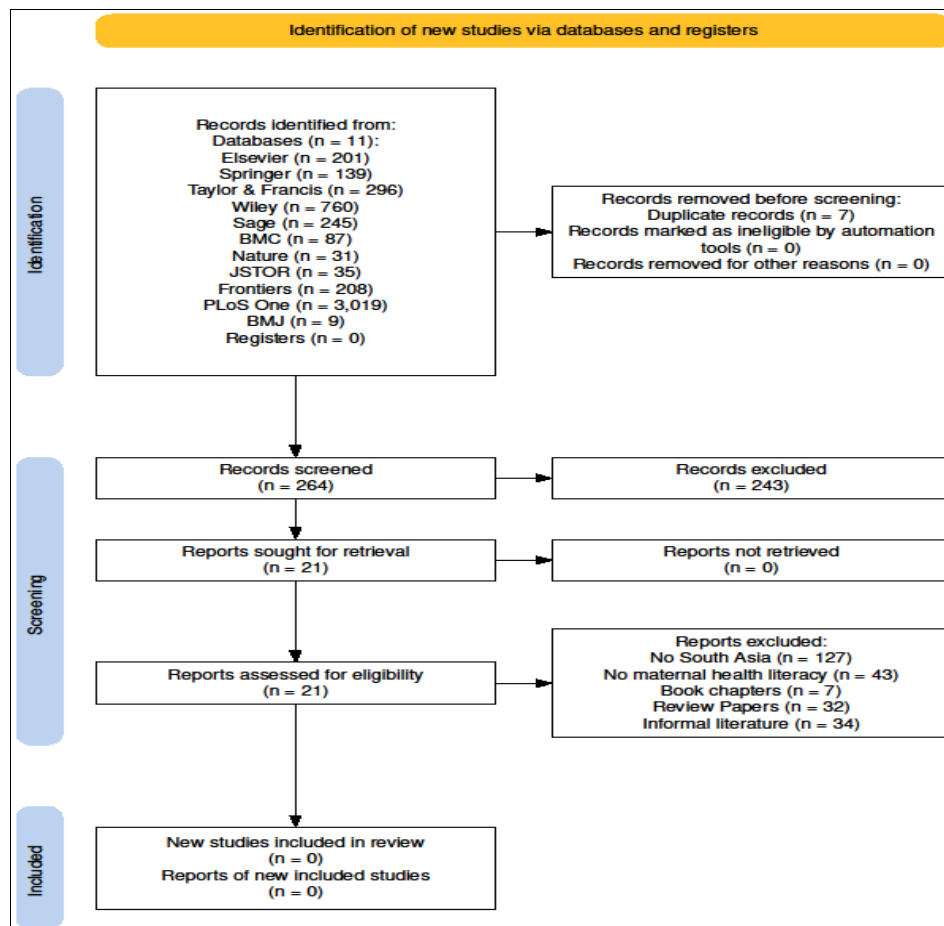


Figure 1: The PRISMA flowchart shows the articles selection process of this study.

Lack of formal education of mothers

As per the thematic analysis of n=21 studies, 'lack of formal education of mothers' was recognized as a prominent factor for low MHL among mothers in South Asia.²⁷⁻³⁰ Research reveal that, marginalized, less educated women are unaware of the importance of seeking medical assistance and healthcare information about menstrual, reproductive, and gynecological health.^{29,30} Consequently, women are less capable of making educated decisions on maternal health-related issues.³⁰ Research in rural India mentions, uneducated, rural women who experience early

marriage (57.2%) and early motherhood (70.5%) receive less maternal healthcare services compared to women with secondary or higher education.^{28,31,32} Accordingly, the 'lack of formal education of mothers' was recognized as an influencing factor for MHL and this finding is aligned with the findings of a few previous literature on MHL.^{7,11,12,15-17}

Cultural barriers

Socio-cultural norms and rituals related to pregnant mothers are in practice to follow during prenatal and postnatal periods.³³ A study from n=21 explains, cultural

norms like menstrual restrictions highly influence on healthcare access and utilization with the negative consequences.³⁴ Women who faced such restrictions tend to give birth at home with the assistance of untrained women, which potentially increases the risk of maternal mortality.³⁴ It was noticed in our analysis that, some mothers refrain from visiting healthcare facilities for health checkups. Instead, they trust traditional home remedies and treatments which are inadequate in curing the health

issue.³⁰ Tribal mothers in Assam follow certain practices including praying, and performing religious sacrifices expecting smooth delivery and protection to the baby from different diseases and spirits. Research further reveal that, even accredited social health activists do not interfere with health-related cultural taboos as they are quite hard to change.²⁹ Thus, ‘cultural barriers’ were identified as a hindrance to improving MHL literacy among mothers in South Asia.

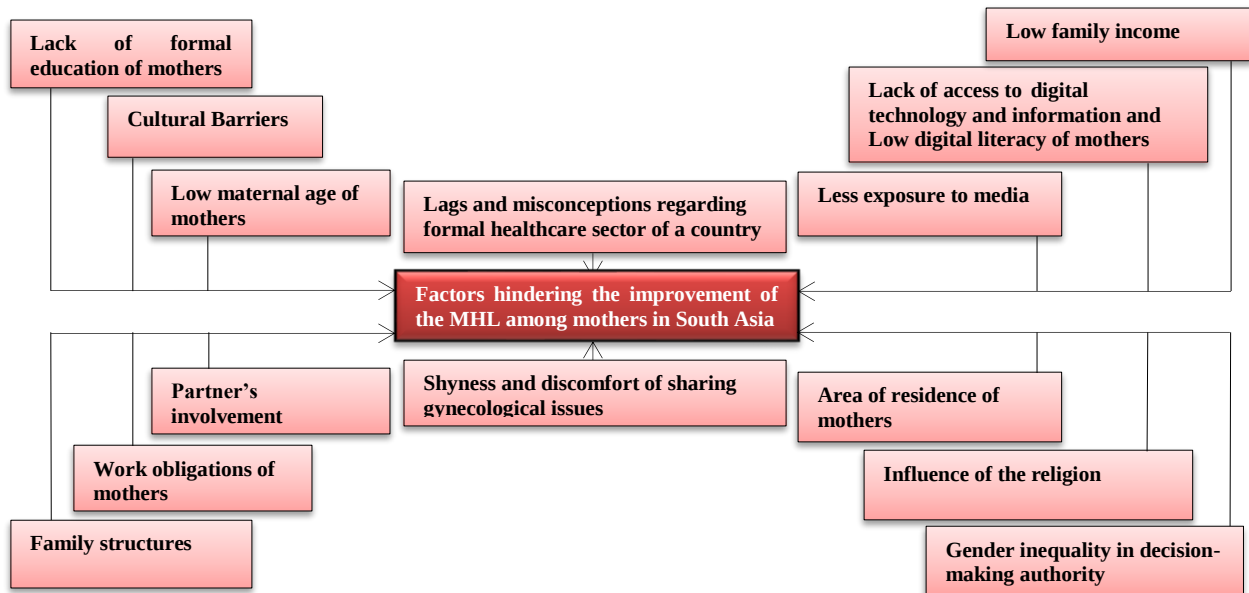


Figure 2: Factors hindering the improvement of the MHL among mothers in South Asian countries.

Lags and misconceptions regarding formal healthcare sector of a country

Low-income mothers are significantly influenced by limited health infrastructure, lack of regional health centers, and more patients in the hospitals to access healthcare services, to obtain health knowledge, and to consult healthcare providers.^{27,30,35} Moreover, women considered the hospital as an unfriendly and unsafe place due to a lack of exposure and unfamiliarity with hospital environments. Communication gap was identified between grassroots level healthcare providers and tribal women.³⁶ Research indicate that midwives and doctors lack empathy and compassion, thus, women meet the doctors only when there is a critical health issue.^{33,36} Hence, ‘lags and misconceptions’ on formal healthcare sector was recognized as a factor affecting MHL.

Low maternal age of mothers

The underage mothers rarely can handle the responsibilities of child-care, also young mothers with different complications causes for neonatal mortality.^{37,39} A study reveals that nearly 40% of women in rural areas were married before the age of 18, and delivered their first child before the age of 21.³¹ Also, pregnant adolescents make delays in accessing the formal health system not

knowing she is pregnant, not knowing she should approach healthcare, or told by others it is too early to seek care.³⁸ However, the older-women with at least one child exhibit higher maternal knowledge.^{35,41} Therefore, the ‘low maternal age of mothers’ was identified as a factor affecting MHL among mothers in South Asia in line with the findings of a few previous studies.^{7,18,20}

Less exposure to media

Media use were positively associated with disseminating maternal health information and facilitating mothers’ access to health information and their informed decision-making.^{35,45} Hence, mothers with more mass media exposure tend to receive maternal healthcare, deliver their babies by skilled birth attendants, and receive postpartum care in South Asia.^{26,35,43} Owing to a study, watching television once a week increases awareness of ANC services, leading to fewer neonatal deaths.^{28,39}

In contrast, a study reveals that women with limited exposure to mass media experience early marriage and early motherhood.³¹ Thus, in our thematic analysis ‘less exposure to media’ was recognized as a factor influencing the MHL. The same fact was proven by the previous literature by Wake et al, Sathi et al, and Biswas et al.^{16,17,21}

Lack of access to digital technology and information and low digital literacy of mothers

As per the thematic analysis, 'lack of access to digital technology and information and low digital literacy of mothers' was identified as an influencing factor to the MHL among women in South Asian countries.^{27,32,36,44} It is critical to note that 201 million women still experience less access to mobile phone technology in South Asia.^{35,36} Women's lack of ownership of mobile phones, less familiarity and competency in using mobile devices and mobile apps, and poor internet coverage affect their participation in the virtual counseling and other mHealth programmes in LMICs.⁴⁴ However, women's with mobile phones access health-related information, stay connected with health workers, update on pregnancy requirements, and access institutional birth services.³² Significantly, technology links the rural and urban gaps through telehealth services, helping marginalized and underprivileged women to enhance their well-being.³⁰

Low family income

Impoverished women comparatively experience early marriage and early motherhood in India; consequently face challenges when seeking essential maternal healthcare services.^{31,32,40} Economic constraints of the family prevent mothers from purchasing nutritious, preferred or appropriate food or taking adequate rest during pregnancy.²⁹ Mothers from the poorest families utilize maternal healthcare services the least when compared to women belonging to wealthy families.²⁸ Through our study, 'low family income' was identified as a factor hindering the improvement of MHL among South Asian women. Several previous literature also found the same factor as a barrier to improve MHL among mothers.^{11,12,16,17,20}

Family structures

During pregnancy, many women rely upon their families for advice, guidance, and support.³⁸ Significantly, their mothers, husbands, mothers-in-law, sisters-in-law, and neighbor women become the health information sources.³⁸ In an extended family, advice comes from grandparents, siblings-in-law, aunts, and uncles.³⁸ In most Asian countries the mothers-in-law make the decisions for their daughters-in-law in the patriarchal systems significantly about their access to medical services, when to seek medical service, what services needed and the location of delivery.^{38,42} Accordingly, 'family structure' was recognized as another influencing factor for the MHL among South Asian mothers.

Work obligations of mothers

As per the findings of (n=21), the work obligations of mothers impede the improvement of MHL and this finding is similar to the outcome of the previous study by Senarath et al.¹⁵ In particular, women are too busy in agricultural

seasons (July-September and December/January) with additional household work, including preparing food for field workers. Thus, female community health volunteers participation declines during the planting seasons.⁴⁵ Also it was observed that housewives had lower health literacy levels than women working elsewhere.²⁷ Accordingly, women's responsibilities as caretakers limit them from spending adequate time for searching maternal care and related information.³⁶

Partner's involvement

The role of partners' education, age, and profession are important determinants of woman's usability of maternal health services.³⁵ In some households, husband's permission is needed for women to attend virtual counseling programmes.⁴⁴ Further, marginalized women undergo domestic violence leading to various health issues among women, and they hesitate looking for medical attention. Also, males involve in spending decisions.³⁸ Research mention that some expecting mothers were not allowed going to the doctor by their arrogant husbands.³⁰ Hence, it was observed through our analysis that, 'partner's involvement' is a factor affecting the MHL among mothers in South Asia which aligned with the findings of four literature.^{11,17,18,20}

Area of residence of mothers

Reachability to infrastructure ensures more access to health-related information and consequently, it leads to higher HL.²⁷ In contrast, rural women experience limited access to information and receive inadequate ANC and institutional birth services due to less resource availability for obtaining healthcare services.^{32,35} A study explains, rural women from Mandsaur and Rajgarh districts exhibit lower health knowledge than women in the peri-urban district of Hoshangabad.⁴¹ Contrary to that, urban women experienced a 20% lower chance of neonatal deaths compared to rural women. Thus, 'area of residence of mothers' was recognized as a factor influencing the MHL of mothers in South Asia and the similar finding were revealed by the previous studies by Gamage et al, Ferede et al, and Jiregna et al.^{7,18,20}

Shyness and discomfort of sharing gynecological issues

Research explains that many women expressed discomfort when sharing gynecological issues with a male doctor, particularly in South Asia, where women are socialized from a young age to keep their health matters private and refrain from discussing them openly, particularly with male doctors.³⁰ Consequently, the novelty and shyness of first-time expecting mothers prevent them from searching formal maternal health information initially.³³ Further, mothers' negative experiences with healthcare professionals also limit the access to healthcare services.³⁰ Thus, owing to our thematic analysis, 'shyness and discomfort of sharing gynecological issues' was identified

as a factor hindering the improvement of MHL of mothers in South Asia.

Influence of the religion

It was observed in n=21 analysis that religious and spiritual beliefs also shape how women experience and manage their pregnancy. Some mothers believe that health outcomes are largely influenced by fate, thus inevitable, whether they are positive or negative. Further, those beliefs strengthened their preference for age-old traditions such as home deliveries.³⁶ Also, Harsch et al opine in their study that, using contraceptives was considered a sin to a great extent by one in two women.²⁷ Accordingly, 'influence of the religion' was found as an influencing factor for MHL in South Asia.

Gender inequality in decision-making authority

Through our analysis, 'gender inequality' was identified as a barrier to improving MHL.^{36,42} Countries like Pakistan and Nepal with a higher gender gap showed that women's decision-making authority had a significant impact on medical service utilization by women.⁴² Bhattarai et al found that although most husbands permitted their pregnant wives to participate in decision-making and women are supported by their families, still there are gender barriers.⁴⁴ A study highlights that when there is gender equality to access and control over resources; mothers receive nutritious diets securing long-term health.³⁷

Accordingly, the aforementioned 14 factors were recognized as the contemporary factors hindering the improvement of the MHL among mothers in South Asia. Apart from the similar findings of previous literature, 'cultural barriers', 'lags and misconceptions regarding formal healthcare sector of a country', 'lack of access to digital technology and information and low digital literacy of mothers', 'family structures', 'shyness and discomfort of sharing gynecological issues', 'influence of the religion', and 'gender inequality in decision-making authority' emerged as the new findings of our study.

However, the current study was conducted excluding the review papers, conference papers, and book chapters and only covered South Asian countries. Thus, further studies are needed to overcome such limitations.

CONCLUSION

This study sheds light on identifying factors hindering the improvement of MHL among mothers in South Asia while developing a holistic understanding of the maternal health information needs of mothers in socio-culturally diverse South Asia. According to the thematic analysis, 14 influencing factors for MHL were recognized. Women are considered primary care providers within the home, so improved health literacy is critical to improving family well-being and health indicators. Therefore, identifying

those contemporary factors influencing MHL is essential for maternal and child health workers, policymakers, and researchers to assess and enhance MHL, as it ensures the health and well-being of the mother and the child, significantly in South Asian countries while contributing to achieving the UN Sustainable Development Goal goal 3.1, 'reducing the global maternal mortality ratio to less than 70 per 100,000 live births' by 2030.

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