



FAKTOR PENYEBAB KETERLAMBATAN RUJUKAN MATERNAL - SYSTEMATIC REVIEW

CAUSATIVE FACTOR OF DELAY IN MATERNAL REFERRAL - SYSTEMATIC REVIEW

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Abstrak

Latar Belakang: Setiap harinya di dunia, sekitar 810 ibu meninggal karena penyebab yang dapat dicegah. Penyebab keterlambatan rujukan dianalisis menggunakan Three Delay Models dan Kerangka pikir determinan kematian ibu. Tujuan penelitian yaitu untuk menggambarkan faktor penyebab keterlambatan pencarian pertolongan kasus rujukan maternal. **Metode:** Penelitian ini menggunakan Systematic Review pada artikel yang diterbitkan antara tahun 2010 – 2020 dalam database Science Direct, Scopus, Sage Journals, dan Google Scholar. Sembilan artikel yang memenuhi kriteria inklusi dan eksklusi, diikut sertakan sebagai sampel untuk ditinjau lebih lanjut. **Hasil:** dijabarkan dan dijelaskan dalam bentuk narasi. Hasil menunjukkan terlambat dalam mengambil keputusan untuk mencari perawatan kesehatan (8 artikel), terlambat dalam mencapai fasilitas perawatan kesehatan kebidanan yang berkualitas (5 artikel), terlambat dalam menerima layanan perawatan ibu darurat yang cepat dan memadai (4 artikel), Pendidikan Ibu (6 artikel), Penghasilan dan Pekerjaan Ibu (2 artikel), Keberdayaan wanita (6 artikel), Status keluarga dalam masyarakat (4 artikel), Status masyarakat (3 artikel), dan Kultural (7 artikel) **Kesimpulan:** Keterlambatan rujukan sebelumnya akan mempengaruhi keterlambatan berikutnya. Masalah Keterlambatan dalam mencari perawatan kesehatan paling banyak ditemukan adalah pengambilan keputusan dimana di negara menengah ke atas paling banyak, penyebab faktor kultural mendominasi penyebab keterlambatan rujukan, dilanjutkan dengan pengaruh Sosioekonomi yang paling banyak dibahas adalah pendidikan ibu serta keberdayaan wanita, masalah keberdayaan wanita paling banyak ditemukan di negara pendapatan menengah ke atas.

Kata Kunci: Terlambat Mencari Perawatan, Model Tiga Terlambat, Sosioekonomi Kultural, Pendapatan Menengah, Systematic Review

Abstract

Background: Every day in the world, around 810 mothers have died from preventable causes. The causes of delay in maternal referral care were analyzed using the Three Delay Model (Thaddeus & Maine, 1994) and the determinants of maternal mortality (McCarthy & Maine, 1992). **Purpose:** To describe the factors that cause delays in seeking care for maternal referrals. **Methods:** This is a systematic review study of articles published between 2010 and 2020 based on database from Science Direct, Scopus, Sage Journals, and Google Scholar. Nine articles that met the inclusion and exclusion criteria were included as samples for further review. The results regarding the factors causing late referral are described and explained in narrative form. **Results:** First delay (8 articles), Second delay (5 articles), Third delay (4 articles), mother's education (6 articles), mother's income and occupations (2 articles), women's empowerment (6 articles),

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family status in society (4 articles), community status (3 articles), and cultural influences (7 articles) studies are acquired. **Conclusions:** The previous delay will affect the next delay and the problem of delay in seeking health care is in decision-making which mostly found in upper-middle countries, the causes of cultural factors which also causing the delay in referrals, followed by the socioeconomic influence that most widely discussed are maternal education and women's empowerment, the problem which is also most commonly found in upper-middle-income countries.

Keywords: Delay in Seek Care, Three Delay Models, Socioeconomic Cultural, Systematic Review

INTRODUCTION

In 2017, every day around the world, there are approximately 810 women died from pregnancy and childbirth-related causes. In 2015, around 85,000 women in the Asia-Pacific region died by the same cause. Essentially, 90 percent of these deaths could be prevented through adequate antenatal, obstetric and perinatal care – which provided by highly trained midwives and traditional birth attendants. Increasing access to emergency care, by decreasing the three main types of delay in service delivery, has the potential to reduce deaths in every setting, system, and population. (Calvello *et al.*, 2015)

In Afghanistan, Bangladesh, Cambodia, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines and Timor-Leste, conflicts, poverty, weak infrastructure and health systems causes tackling the problem to be more challenging. Monitoring and reporting is a bigger challenge, meaning the actual death toll could be higher. Nonetheless, Bangladesh, Indonesia, Laos and Timor-Leste are on track to meet the target. In a study in India, delay due to first delay, 65% of the cases took 2-7 days to detect complications leading to subsequent death. From the 65% of the first delay cases, only 64% decided to seek treatment and only 28% of those who decided to seek treatment, had decided to seek treatment to a health facility. (Khan & Pradhan, 2013)

MATERIALS AND METHODS

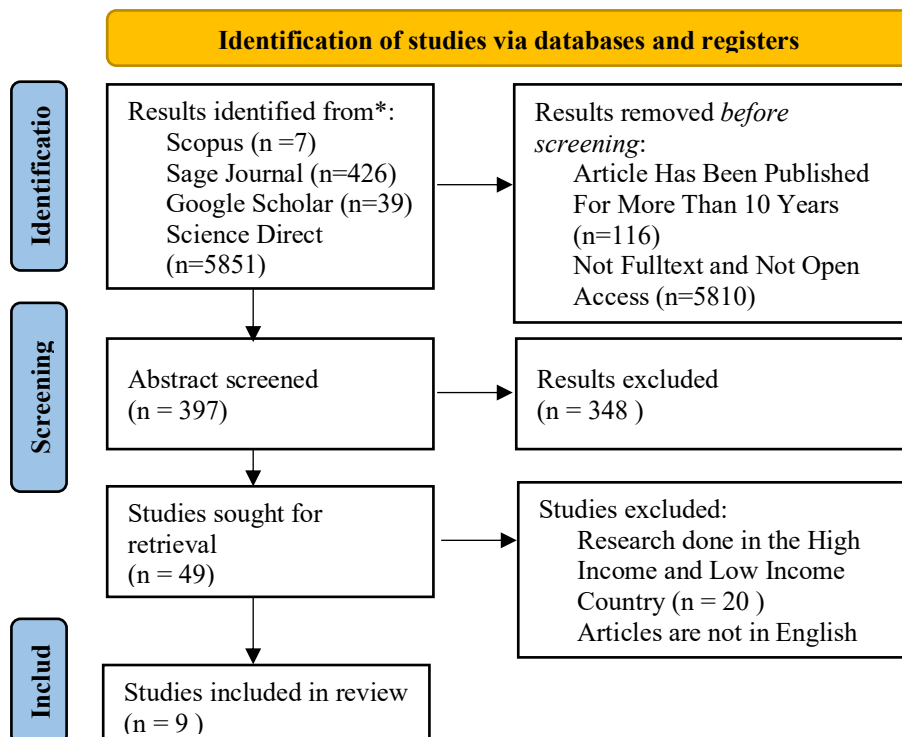
This research is a systematic review method with the following inclusion criteria: Literature in English and Indonesian, using articles from the last 10 years, journals with full text, and journals with open access. In research with non-research studies, review articles are not included in this study. The study was conducted in a middle-income country. Literature were searched using Boolean Operator using specific keywords on searching the literature which are, "Three delay" OR "Three Phases of delay" AND "Delay in deciding to seek care" AND "EmOC" OR "Emergency Obstetric Care" OR

"Obstetric Emergencies" OR "Emergency Mother". As for Indonesian literatures, the keywords used were "Tiga Terlambat" AND "Pengambilan Keputusan" AND "Gawat Darurat Obstetri" OR "Gawat Darurat Kebidanan" OR "Gawat Darurat Obstetrik". The literatures obtained as the search results using ScienceDirect, Scopus, SageJournals, and Google Scholar databases. The literature search process was reported in the PRISMA flowchart. Furthermore, data preparation was carried out by filtering and grouping articles using Mendeley Desktop. Additionally, important information was transferred from the literatures into a format according to the specified theme using Evernote.v.6.25.1. The final result is 9 full-text articles which then assessed using Mixed Method Appraisal Tools (MMAT)

RESULTS

There are 6323 studies based on keyword search results. Researchers conducted screening and obtained 9 articles that matched the inclusion and exclusion criteria to be included in this systematic review. The following are the results of the PRISMA diagram in the literature search.

Graphic 1. PRISMA Diagram





Literature Quality Assessment

The literature quality assessment was carried out using the Mixed Method Appraisal Tools (MMAT) for the assessment phase of the systematic mixed study review, which include qualitative, quantitative, and mixed methods studies. The assessment used 5 indicators by the research design and the outcome is carried out by discussing with the team. (*Hong et al., 2018*)

Table 1. Summary of Literature Characteristics

No.	Article Title	Author, Year	Country, Region Type, Economic Status	Research Methods (Design, samples, variables, instruments, analysis)	Research result	Results MMAT
1	<i>Only when the boat has started sinking: A maternal death in rural north India</i>	Jeffery, Patricia Jeffery, Roger / 2010	Indian, Rural, Lower Middle Class	D: Ethnographic S: Residents in Jhakri Village (location where the maternal death occurred) V: Health-related issues (such as childbearing, family planning, government health services, public and private medical practitioners). I: List of Interview Topics A: Qualitative Data Analysis	Late in making decisions to seek health care due to the influence of women's status and family status in society (poverty, education, employment, knowledge) and also cultural influences.	Strong
2	<i>Ten years Trend in Maternal Mortality at Kilimanjaro Christian Medical Center Tanzania, 2003-2012: A descriptive retrospective tertiary hospital based study</i>	Maro, Eusebious W. Mosha, Neema R. Mahande, Michael Johnson Obure, Joseph Masenga, Gileard / 2016	Tanzania, Urban and Rural area, Middle to Lower Class	D: Descriptive retrospective S: Data of 34953 maternal deaths in KCMC from January 1st 2003 to December 31st 2012. V: Primary: Maternal death, caused by pregnancy and by medical procedures. Secondary: Sepsis, bleeding, eclampsia, obstructed labour, abortion, ectopic pregnancy, anesthetic complications and pulmonary embolism, maternal medical condition, number of antenatal care visits, referral from other facility, gestational age booking, hemoglobin level, last antenatal care and mode of delivery. I: Tanzania MoH maternal mortality surveillance form A: STATA version 12	Indirect Causes of Maternal Death 38.9% Delay type II 34.3% Delay type I 20.0% Delay type III	Strong
3	<i>Access and utilization of antenatal care services in a rural community of eThekweni district in KwaZulu-Natal</i>	Sibiya, Maureen Nokuthula Ngxongo, Thembelihle Sylvia Patience Bhengu, Thandeka Jacqueline / 2018	South Africa, Rural, Upper Middle Class	D: Qualitative design; exploratory, descriptive and contextual. S: (Stage 1) 15 pregnant women between the ages of 20 and 39 years old, black African women. (Stage 2) 6 professional nurses/midwives. V: Social and cultural beliefs, Previous pregnancy experience, Access to health care and emergency services, Communication and transparency about service delivery, Availability of human and material resources, and quality of ANC services. I: Nurse interview guide and pregnant woman interview guide A: Thematic analysis using the Tesch method	The delay in making a decision to seek health care is caused by the influence of the mother's environment, customs, and experiences when receiving care services in her previous pregnancy. Delays in getting adequate midwifery health care facilities caused by inaccessible health care due to clinic operating hours and days; the number of clients attended daily; providing more than one service in one day; and transportation and financial problems as well as	Strong



					<p>problems regarding poor communication and transparency of information about services.</p> <p>Delays in receiving prompt and adequate emergency maternal care services are caused by a shortage of nursing staff working in health facilities, unavailability of care and maternity case record cards and poor clinic infrastructure.</p>	
4	<p><i>How a woman's interpersonal relationships can delay care-seeking and access during the maternity period in rural Zambia: An intersection of the Social Ecological Model with the Three Delays Framework</i></p>	<p>Kaiser, Jeanette L. Fong, Rachel M. Hamer, Davidson H. Biemba, Godfrey Ngoma, Thandiwe Tusing, Brittany Scott, Nancy A. / 2019</p>	<p>Zambia, Rural, Lower Middle Class</p>	<p>D: cross-sectional S: 167 free list respondents and 135 respondents from FGDs (women who are pregnant or have children under the age of two, men with children under the age of two, and community elders, defined as community members over the age of 54 years) who have a residence within a distance of <5 km, 5–10 km, > 10 km from nearest health facility. V: -The Three Delay Model (1) socio-cultural factors, (2) perceived benefits/needs, (3) economic accessibility, (4) physical accessibility, (5) quality of preventive care, and (6) quality of emergency care. -The Social Ecological Model (1) individual characteristics, knowledge, attitudes, and skills; (2) relationships with family, friends, and people in their closest social network; (3) the structural, cultural, and service environment within their “local” communities and (4) the larger social, cultural, economic, and policy structures I: Free-list qualitative approach with open-ended questions A: qualitative analysis using SAS v9.4 and NVivo v.11</p>	<p>Late in making decisions to seek health care due to the influence of women's empowerment factors and environmental influences.</p>	<p>Strong</p>
5	<p>Analysis of the Causes of Maternal Death in Garut Regency (Epidemiological Studies in Efforts to Decrease Maternal Mortality in West Java Province)</p>	<p>Octaviani, Dhita Aulia Husin, Farid Wirakusumah, Firman F. Susiarno, Hadi Sukandar, Hadyana Susandi, Dadan / 2019</p>	<p>Indonesia, Urban and Rural, Middle to Upper Class</p>	<p>D: sequential explanatory mixed method S: 45 death cases in Garut during October-November 2016 V: Maternal death, Patient factors: age, parity, birth spacing, and presence of comorbidities. Health worker factors: ineffective counseling (regarding family planning, danger signs, and clean and safe childbirth) Infrastructure factors:</p>	<p>The delay in making a decision to seek health care is caused by factors of women's status in the family and society, family status in society, community status, and financial capability.</p> <p>Delays in reaching adequate midwifery health care facilities are caused by limited transportation facilities in the village, the ineffectiveness of the Active Alert Village</p>	<p>Moderate</p>

				<p>unavailability of drugs, space, equipment, blood transfusion stocks, and human resources. Reference factor: Three Delay Factors (geographical location, area of residence, access) to health facilities, and financial problems) I: Perinatal Verbal Autopsy (OVP) document and list of interview topics A: Fisher Exact Statistical Test and Qualitative Analysis</p>	<p>government program, and also the geographical location which makes traveling difficult to reach by car. Delays in receiving prompt and adequate emergency maternal care services are caused by limited blood supplies and space, the attitude of health workers and health facilities, and previous history delays.</p>	
6	<p><i>Perception of pregnant women on barriers to male involvement in antenatal care in Sekondi, Ghana</i></p>	<p>Annoon, Yvonne Hormenu, Thomas Ahinkorah, Bright Opoku Seidu, Abdul Aziz Ameyaw, Edward Kwabena Sambah, Francis / 2020</p>	<p>Ghana, Urban area, Lower Middle Class</p>	<p>D: cross sectional S: 328 pregnant women of reproductive age excluding adolescents. V: (1) Socio-demographic characteristics of participants, (2) Rate of male involvement in ANC (3) Socio-demographic barriers to male involvement in ANC (4) Socio-cultural barriers to male involvement in ANC. (5) Health care environment factors that can become obstacles to male involvement in ANC I: Questionnaire on people's views, opinions, impressions, feelings and behaviors by the Department Of Health, Physical Education And Recreation, College Of Education Studies, University Of Cape Coast A: Frequency, percentage and inferential statistics (binary logistic regression) with data analysis matrix with Statistical Products and Service Solutions (SPSS) version 21.</p>	<p>Socio-cultural factors that cause men do not to want to accompany their partners for ANC are caused by the influence of partner's age, marital status, religion, living environment, gender-related norms prevailing in Ghana, waiting time at health facilities, perception that husbands are not involved in everything. that occurred in the health facility during ANC and the distance to the health facility. The factor that causes high involvement in ANC is the availability of an enabling environment that motivates men to participate in ANC. This can stem from factors driven by women, cultural settings or health facilities.</p>	Strong
7	<p><i>"You see, we women, we can't talk, we can't have an opinion...". The coloniality of gender and childbirth practices in Indigenous Wixárika families</i></p>	<p>Gamlin, Jennie B. / 2020</p>	<p>Mexican, Rural, Upper Middle Class</p>	<p>D: feminist ethnography (combining ethnography with ethnohistory and using an interpretive framework for analysis that draws on coloniality theory) S: health workers (8), teachers (3) and key community and family members (approximately 15) V: how gender relations have been institutionalized in the Wixárika community, and the historical situation from the perspective of gender coloniality to visualize the impact of colonial and post-colonial governance and institutions on previously more egalitarian gender relations. I: interview transcripts and field observations.</p>	<p>Late in making decisions to seek health care due to the influence of women's empowerment, mother's education, mother's income, welfare, and unsupportive environmental factors. Delays in reaching adequate midwifery health care facilities due to earlier delays and causing unpreparedness of the vehicle that must be used to reach the health facility immediately.</p>	Strong



				A: inductive thematic analysis using N-Vivo version 8		
8	Analysis of the Causes of Maternal Death in Cirebon Regency	Nataria, Desti Husin, Farid Hidayat, Yudi M Sismayadi, Dodi Sukandar, Hadyana Wirakusumah, Firman F / 2020	Indonesia, Urban and Rural, Middle to Upper Class	<p>D: sequential explanatory mixed method</p> <p>S: (Quantitative) 53 OVM, RMM, and RMMP, and recapitulation of maternal death reports (Qualitative) 5 Families (husband/mother/parents/in-laws/sisters) of the mother who died, (11) health workers related to maternal deaths, and the person in charge of recording and reporting maternal deaths at the health office, health service facilities, population service and civil records/burial services/kelurahan in Cirebon Regency in 2015.</p> <p>V: factors that cause preventable maternal deaths, factors that cause barriers to referrals, and systems for recording and reporting maternal deaths.</p> <p>I: recording recapitulation and list of interview topics.</p> <p>A: analytical descriptive.</p>	<p>Late in making a decision to seek health care accounted for 66.7% due to the influence of maternal education and women's empowerment.</p> <p>Late in reaching quality midwifery health care facilities accounted for 9.1% caused by previous delays and in some places there is still a lack of transportation facilities, but most have good road conditions and means of transportation, most households have a distance of > 5 km but can be reached in 2 hours.</p> <p>Delay in receiving prompt and adequate emergency maternal care services accounted for 24.2% due to limited blood bank supply and services which only available until nine 9 o'clock PM, and operating rooms that are not always available within 24 hours and limited anesthesiologists.</p>	Moderate
9	<i>Women's decision-making autonomy in the household and the use of maternal health services: An Indonesian case study</i>	Rizkianti, Anissa Afifah, Tin Saptarini, Ika Rakhmadi, Mukhammad Fajar / 2020	Indonesia, Urban and Rural, Middle to Upper Class	<p>D: Cross sectional</p> <p>S: 47,963 out of 49,621 households were successfully interviewed</p> <p>V: (Result Variable)</p> <p>The influence of women's decision-making autonomy in the household on the use of several MNH services, in particular as follows:</p> <p>Adequate ANC is defined as have attending to ANC at least four times, Use of SBA services is defined as the use of health workers (midwives, nurses, or doctors) at the time of delivery, both at home and in health facilities, and FBD is defined as delivery in a health facility.</p> <p>(Explanatory variable)</p> <p>The autonomy of women's decision-making in the household using the Women's Participation Index (WPI).</p> <p>(Covariate variable)</p>	<p>Decision making to seek women's health care is influenced by women's status, family status in society (poverty, education, work, knowledge), and community status.</p>	Strong

				Some demographic, reproductive, socioeconomic, household, and geographical characteristics. I: Household Questionnaire, Women's Questionnaire, and Men's Questionnaire A: Descriptive statistics, frequency with percentage, Chi-square test, and logistic regression with STATA SE version 15.1 and the appropriate IDHS weights and were taken into account for the IDHS survey design.		
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DISCUSSION

A. Overview of the Distribution of Research Areas

The distribution of the area where it is obtained from 3 continents. Four literatures discuss research on the Asian continent, namely Indonesia and India (*Jeffery & Jeffery, 2010; Nataria et al., 2020; Octaviani et al., 2019; Rizkianti et al., 2020*). Four studies from African continent, namely South Africa, Ghana, Tanzania, and Zambia (*Annoon et al., 2020; Kaiser et al., 2019; Maro et al., 2016; Sibiya et al., 2018*). And one study in North America, namely Mexico (*Gamlin, 2020*).

Countries were grouped based on economic conditions and the type of region which are countries with middle to lower incomes. Two of the literatures discuss researches on rural areas, namely India and Zambia (*Jeffery & Jeffery, 2010; Kaiser et al., 2019*), one of the literature discusses research in an urban area, namely Ghana (*Annoon et al., 2020*), and one literature discusses research in both rural and urban areas, which is Tanzania (*Maro et al., 2016*). In countries with upper middle income, there are two literatures researched in rural areas, namely Mexico and South Africa (*Gamlin, 2020; Sibiya et al., 2018*) and three literatures studied in rural and urban areas, namely Indonesia (*Nataria et al., 2020; Octaviani et al., 2019; Rizkianti et al., 2020*).

B. Delay in Relation to Using Three Delay Models

The causes of delays in making decisions to seek care in countries with lower-to-middle income are family-level decisions (*Maro et al., 2016*), lack of family resources, husbands not knowing the right role, not having prepared delivery equipment for fear of being given a bad stigma by health workers (*Kaiser et al., 2019*), and widespread and long-term distrust of health facility services (*Jeffery & Jeffery, 2010*). In countries with middle-to-higher income, the cause is a lack of understanding of alarming signs (*Nataria et al., 2020*), mothers fully submit all decisions to their husbands (*Gamlin, 2020*), delaying the



administration of government health insurance but also not preparing maternity funds (Octaviani et al., 2019), bad experiences with the attitude of health workers (Sibiya et al., 2018). Meanwhile mothers who can make decisions at various levels, tend to choose to give birth in health facilities and be assisted by experts. (Rizkianti et al., 2020)

The causes of delays to get the healthcare are mostly the result of previous referral problems (Maro et al., 2016), transportation (Gamlin, 2020), geography, active-standby villages have not started (Octaviani et al., 2019), transparency of health service information (operating hours, patient capacity, patient rights), and finances (Sibiya et al., 2018). In this case, things that affecting the travel time such as transportation and communication can be made easier using application innovation. (Nataria et al., 2020)

The causes of delays in receiving the healthcare are lack of drug preparations, lack of equipment, lack of skills of health workers, lack of human resources for health workers (Maro et al., 2016), blood services are not ready 24 hours and preparations are not always available, operating rooms and ICU are not always ready (Maro et al., 2016; Nataria et al., 2020), the lack of responses from the hospital in receiving patient complaints, the attitude of health workers, the condition of the referred patient is in an unstable state (Octaviani et al., 2019), inadequate infrastructure, no record card of maternity cases are provided from the hospital, and previous reference. (Sibiya et al., 2018)

C. Socioeconomic Factors

1. The Status of Women in Families and Society

Socioeconomic factors based on the status of women towards family and society includes mothers with low education (Annoon et al., 2020; Maro et al., 2016; Octaviani et al., 2019), the practice of early marriages and pregnancies so that they leave school at a young age and husband's perception that learning is not for women (Gamlin, 2020). A mother's education that is high compared to the low has a higher probability of utilizing the ANC adequately and making decisions (Rizkianti et al., 2020).

Socioeconomic factors based on Income and Employment, working mothers are less likely to use a trained traditional birth attendant during delivery (Rizkianti et al., 2020), and for those who are not working, families supported by the government funds, but it is too difficult to be qualified for those whom have many children. (Gamlin, 2020)

Socioeconomic factors based on women's empowerment in low-to-middle income countries are the mother's decision to depend on her husband (Jeffery & Jeffery, 2010)

the reason why is that husbands need mothers at home to cook, take care of children, and have sexual intimacy. In addition, they do not want male nurses to take care of their wives, have low knowledges of maternal health, afraid of being tested for HIV, and have not prepared for delivery equipment (Kaiser et al., 2019). Factors for women's empowerment in upper-middle income countries including health decisions centered on the husband, but the husband is not present when giving education on danger signs during ANC for reasons of work (Octaviani et al., 2019), the wife is dependent on her husband because of financial problems (Nataria et al., 2020), forced marriage, domestic violence triggered by pregnancy at a young age, husbands don't care about their wives when they are pregnant or giving birth, and being a single mother for many children (Gamlin, 2020). Couples counseling, special education for couples, and home visits are considered to increase community knowledge and change perceptions about partner involvement (Annoon et al., 2020)

2. Family Status in Society

Socioeconomic factors based on family status in the community are the average low level of family education (Octaviani et al., 2019) resulting in a lack of understanding of health informations (Nataria et al., 2020), Poverty (husband's occupation, land ownership, husband's income) is also described as the main problem in decision-making process (Jeffery & Jeffery, 2010). Wealth status affects the choice of giving birth in health facilities, the services of a trained traditional birth attendant, and the intensity of performing ANC (Rizkianti et al., 2020).

3. Community Status

Socioeconomic factors based on community status are the active-standby villages are not running properly, the resources of midwives who are always changing causing less intimacy with the community, resulting in decreased community motivation for ANC (Octaviani et al., 2019), an inadequate environment also reduces the motivation for partner involvement for ANC (Annoon et al., 2020; Octaviani et al., 2019) but there is no significant difference in the use of ANC between cities & villages (Rizkianti et al., 2020).

D. Cultural Factors

Norms, culture, and community influences can affecting the decisions (Kaiser et al., 2019; Sibiya et al., 2018). Cultural factors that cause delays are the religious leader's prohibition of a health procedure that changes public perceptions widely, the belief that mothers are slowly becoming not afraid of death if they continue to give birth to children



and refuse to be given treatment including medical treatment, a belief that a child is harmful for their mother because the child, seeing the experiences of other pregnant women who have given birth successfully despite ignoring the warnings from health facilities, the belief that recommendations from private doctors are more profitable for certain institutions rather than medical aspects (*Jeffery & Jeffery, 2010*), Women who will have their pregnancy checked just when it is clearly shows so, this fear is based on belief in magic (*Sibiya et al., 2018*), trusting traditional healers because it's more affordable and considered to be more amicable than the health workers (*Octaviani et al., 2019*), the system in society that favors men (*Gamlin, 2020*), spouse's age, marital status, partner's disapproval of having to do housework and the assumption that they feel controlled by their partner, and partner's feeling of being excluded from everything that happens in health facilities (*Annoon et al., 2020*).

CONCLUSIONS AND RECOMMENDATIONS

A systematic review study on the distant determinants of late referral in obstetric cases found nine literatures that met the inclusion and exclusion criteria. Previous delays will affect subsequent delays. Using the Three Delay Models Framework, the problem of delays in seeking adequate health care is in decision-making process which most commonly found the upper-middle-class countries, the cause of cultural factors which dominates the cause of delay in referrals followed by socioeconomic influences that most widely discussed are maternal education and women's empowerment, the problem which is also most commonly found in upper-middle-income countries.

The literature study carried out still has limitations, such as the amount of literature reviewed, the uneven distribution of the area, the unbalanced type of area and the country's economic status, the dissimilarity of research methods from selected articles, and the researchers' ability of critical appraisal that greatly affects the understanding and interpretation of the analysis which can lead to errors in drawing conclusions.

It is important to maintain trust, which is the most commonly found factor, starting from increasing patient's satisfactions, carefully considering the health workers who will be delegated in the community, regularly educating families, training more traditional birth attendants to ease the need for human resources for health workers,

utilizing technology in this era of globalization is the right solution for future communication problems.

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