

# Key social determinants of maternal health among African countries: a documentary review

## Abstract

**Background:** The phenomenon of social determinants to maternal death reduction in the continent of Africa is a global health problem of increasing concern. Every region had shown progress, although levels of maternal mortality remain unacceptably high in Africa.<sup>1</sup>

**Objectives:** This narrative literature review study was conducted for exploring the key social determinants and ways of coping mechanisms, for the reduction of maternal mortality, among African women living inside the African continent.

**Methods:** A narrative literature review design was applied using a variety of search engines employing a Boolean search strategy to retrieve research publications, “grey literature”, and expert working group reports.

**Key findings:** The review recognized different social determinants among African countries, which affect women’s health negatively. The commonly reported include, health care provider attitude, economic/financial inequity, geographical (transportation problems), insecurity, marital status and age, education, gender equity, material and human resources, socio-cultural factors and health care system delivery. Whereas common strategies to cope with maternal health care services were found to be good dress, good reliance on social network, maternal health education, gender equality and male involvement in reproductive health activities.

**Conclusion:** The continental maternal death trend did not reduced as it was intended by Millennium Development Goals (Goal - 5) and still continues with Sustainable Development Goals (Goal-5), “Achieve gender equality and empower all women and girls”; therefore the importance of social determinants and coping strategies still remains crucial in accelerating maternal mortality reduction among many African countries.

**Keywords:** africa, social determinants, maternal health, maternal mortality

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## Introduction

According to Cairo definition of reproductive health, “Reproductive health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes”.<sup>2</sup> Therefore, reproductive health implies peoples’ choice for satisfaction having safe sex life that enables them to reproduce and decide, when and how to do so.<sup>2,3</sup> According to the World Health Organization’s (WHO’s) 10<sup>th</sup> revision of the International Statistical Classification of Diseases (ICD-10) and Related Health Problems Maternal mortality is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes”.<sup>4,5</sup> In many African countries the number of population is growing; poverty, increased levels of unemployment, political unrest, and natural or man-made disasters are some of the common problems that lead to high maternal deaths. Women who live in the African region need to be empowered with education and employment.

Social and economic status, cultural values and norms are closely connected to maternal deaths or disabilities related to pregnancy and child birth. Generally speaking, geographic distance, poverty

and marginalization of poor woman are some of the risk factors for maternal death. High maternal mortality rate is one of the indications of disparities between wealthy and poor countries. Maternal deaths are higher in countries with less skilled and Trained Traditional Birth Attendants (TTBA). Less educated and poor women are vulnerable to maternal death and disability. High maternal mortality rate is an indication of poorly structured and functioning health care systems and deeply rooted gender inequalities that leave women with less power, limited control over resources, poor decision-making, restriction on access to social support and health care services. Gender inequalities are commonly manifested in early life. Girls who are born from poor families are more vulnerable to child marriage and exploitation.<sup>6</sup> The significance of the review for social determinants of maternal health among African women in Africa is crucial in addressing the determinants, developing coping mechanisms and identifying the gap for developing further strategies that help in the reduction of Maternal Mortality Rate (MMR). Because social determinants of maternal health are broad and are more likely to be influenced by policy, community context and geographic access, family characteristics, cultural and social values, maternal health care services and maternal characteristics. During the era of MDGs (2000-2015) and SDGs (2015 - 2030), social determinants to maternal health among African countries were remained to be a major concern

of the globalised world. The phenomenon of Social determinants to maternal health among African countries is one of the main global health problems of increasing concern. Although Maternal Mortality Rate reduction had shown progress, still it remains to be unacceptably high in majority African countries.<sup>1</sup> This review is aimed to explore social determinants to maternal health among African countries as well as issues that come along with them; ways in which they manage those social determinants in order to compare the different findings and identify potential knowledge gaps that may exist.

## Objectives

- i. To explore key social determinants to maternal health that help the reduction of maternal mortality among African women;
- ii. To explore ways in which African countries manage the common social determinants related to maternal health;
- iii. To identify knowledge gaps on social determinants to maternal health and reduce maternal mortality among African women living inside the African continent.

## Methods

The study applied a narrative review design to a qualitative documentary research on social determinants associated with maternal health focusing in the reduction of maternal mortality rate among African women who are living in the continent of Africa; mechanisms related to its reduction and identifying the knowledge gaps. Data sources included: related research publications, service evaluation reports from government, international agencies, (WHO, UNFPA, AFRICAN UNION COMMISSION) and non-government reports and documents and unpublished works on: social determinants to maternal health in Africa. Following sampling strategy was applied: document searches were assisted by the use of search engines such as PubMed, The Lancet, Google Scholar, and internet based public access domains. Boolean search strategy to retrieve relevant research publications, and “grey-literature” (unpublished reports), was applied. Search terms used included, “Africa” AND “social determinants” OR “maternal health” AND/OR “maternal mortality”. Additional literatures were obtained by revising the reference lists of retrieved publications that were relevant to the study.

## Inclusion criteria

- I. Documents, journals, reports, unpublished articles on African maternal mortality and social determinants, maternal health and health promotion written in English language.
- II. Published or produced between 2000 and 2018

**Table 1** Variants of social determinants of maternal health in African countries

Social Determinant	Description
Health Care Provider Attitude	Reports from different studies documented that health care providers with bad approach, use of harsh and critical language were observed to discourage women from accessing health care services. A study in Kenya noted that majority of the health professionals had a poor attitude towards pregnant women mainly female health care providers. <sup>23,24</sup> Another study from Uganda also reported mistrust of health care providers that was resulted because of unpleasant past experience, fear of punishment and fear of being diagnosed with HIV infection as determinants for not attending at the health facilities. <sup>25,26</sup>

## Exclusion criterion

- i. Abstracts.

Since the subject of “Social determinants to maternal health”, is broad, clear parameters were set to scope the review. Abstracts and studies for direct or indirect disease conditions related to maternal death were excluded.

## Content analysis

A content analysis of qualitative data was applied to selected documents. Data were preliminarily analysed for social determinants affecting maternal health that cause maternal death and strategies used to manage and overcome social determinants of maternal health in Africa. Conditional factors possibly associated with social determinants to maternal health and strategies used to manage are:

- i. Individual attributes; of women such as knowledge of services and education,
- ii. Family characteristics; that include economic status, access to resources, family support, marital relationship,
- iii. Community context; rural, urban, social position such as ethnicity and distance to health facilities,
- iv. Culture and social values; women’s status, gender, norms, religion and health beliefs,
- v. Availability of health services; including emergency obstetric care, skilled or well trained staff and affordable fee for services.

## Results

The literature review included publications of original research studies published in peer-reviewed journals; and “grey literatures” that consist of reports and online publications related to social determinants to maternal health in Africa. According to WHO,<sup>7</sup> social determinants of health is defined as, “the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities.” In this definition, social environment includes social structures and economic systems. Health of an individual is determined by physical environment, health services, structural and societal factors. Social determinants of health are shaped by the distribution of money, power, and resources among individuals, families, local communities and countries. This review identified that women in Africa face different forms of problems that are inquired by different social determinants that affect their health and lead to maternal death (Table 1).

Social Determinant	Description
Economic / Financial Inequity	Economic or financial wealth determines the time, place and person that means, when, where and by whom you get the service. Socio-economic status determines the decision making because it is challenging without having money, supportive husband, family, or social network. Therefore, unemployment, poverty, lack of money to pay for transport are barriers in decision-making on health care service utilization if the service is unaffordable. <sup>27-29</sup>
Geographical (Transportation Problems)	Many studies documented challenging road network, poor physical access and infrastructure within the communities as the major problems faced by most residents of rural communities in maternal health care utilization. Therefore, maternal health care utilization was observed to be higher in urban areas rather than the rural parts of the continent. <sup>23,25,27,28,30</sup>
Insecurity	Safety and freedom of movement even during night is determinant in accessing maternal health care services because as most of the obstetric cases or delivering mothers came to the health facility any time security and safety is important. Insecurity specially during night leads to loss of property, death, and disabilities. <sup>23,26,27</sup>
Marital Status and Age	Age, marital status and family size had strong influences on maternal health. Some of the mothers are very busy with household activities and they are discouraged in going out for health facility follow-ups. <sup>12,27,28</sup>
Education	Different studies in most African countries reported that formal education and health education as a common social determinant to maternal health because health seeking behavior of mothers depend on formal education and specifically health education at an individual and community level through regular health promotion activities. <sup>27,28,31-33</sup> A study by Ditekemena, et al., <sup>24</sup> reported males who were educated and with high income were seeking a good health care services for their wives/ women and children.
Gender Equity	One of the major facilitators for the utilization and access to maternal health services was found to be gender equality <sup>30,32</sup> .
Material and Human Resources	There is a study that reported poor quality of maternal health care resulted from barriers that include lack of ultrasound machines, short clinic opening hours, and shortage of healthcare workers. <sup>32</sup>
Socio-cultural Factors	Bad cultural belief, practices and attitudes are among the deep rooted determinants that affect maternal health negatively. These social determinants factors affect also the communication of men in the community, especially for those who accompany their wives to health facility as being looked by the community as if they are dominated by their wives. <sup>24,25,28</sup>
Health Care System	Improper health care delivery without proper referral and hospital delay affects health of an individual physically, socially and mentally. <sup>32</sup>

In summary, this literature review identified different social determinants for maternal health that consist of; cultural beliefs, negative perceptions towards health care providers' characteristics, health care cost, lack of transportation services and infrastructure. Maternal health care service provision was also found to have disparity with beliefs and practices. As it was reported in many studies health professionals often had bad attitude and poor treatment to mothers. The study also documented lack of respect to privacy and confidentiality of the mothers by health care providers, a situation which caused barrier to maternal health care especially for pregnant women.

## Discussion

This review revealed that main social determinants to maternal health faced by African women in African countries that include; health care provider attitude, economic/financial inequity, geographical (transportation problems), insecurity, marital status and age, education, gender equity, material and human resources, socio-cultural factors and health care system delivery. There are studies that reported similar findings as determinants for maternal health care service utilization in many countries such as; marital status,

maternal and/or husband/spouse education, financial stand of the household, health education and socio-cultural beliefs.<sup>8,9</sup> Whereas common strategies to cope with maternal health care service needs were found to be good dress, good reliance on social network, maternal health education, gender equality and male involvement in reproductive health activities for creating supportive spouse. As it is stated by different authors and WHO; the results of this documentary literature review identified the most common social determinants for maternal health in Africa health care provider attitude economic/ financial inequity, geographical (transportation problems), insecurity, marital status and age, education, gender equity, material and human resources, socio-cultural factors and health care system delivery. The results of the findings have similarity with that of WHO Commission on the Social Determinants of Health, that included mainly poor and low living conditions; inequitable distribution of power and resources within families, communities and overall the continent.<sup>10,11</sup> There are studies that reported training of traditional birth attendants and provision of delivery kits from the local health systems can decrease maternal mortality rate mainly in developing countries with low skilled professionals, bad physical infrastructure for transportation, poor attitude of health workers towards pregnant mother and insecure areas.<sup>12</sup>

Women in African countries are liable to socio-cultural inequities that do not allow them to be politically represented, absence of legal protection unequal educational opportunities and less access to reproductive health service.<sup>13</sup> In most African countries Socio-economic rankings are associated with cast, ethnicity, educational level, decision making, unequal power in managing the resources and stigmatization. Social inferiority and discrimination usually lead to poor attitude and treatment by health-care providers.<sup>14,15</sup> As a consequence of it mothers can be ignored and abused by government health workers, and preference to “die at home” will be the only choice instead of looking for modern health care services.<sup>16</sup> Mostly socio-cultural factors influence decision-making, whether to reach health facility or not. In many societies health seeking behavior is interlinked to ethnicity, religion socio-economic position, residence and access of transportation.<sup>16,17</sup> women who get pregnant during adolescence mainly for economic reasons (sex for money, sex for food and clothes) and those who get pregnant frequently (within a short period of time) even though they are married may develop maternal, infant, and child morbidity or die. Bad experiences of early or multiple pregnancy causes, negative social, educational and economic outcomes in later life; Because of the unsafe sex or inadequate spacing pregnancies. The use of contraceptives is one of the strategies in improving maternal and child health and reduction of maternal and child deaths. There are studies that reported a reduction of maternal mortality with the use of contraceptive.<sup>8,18,19</sup>

Coping mechanisms should focus or be done based on the specific social determinant that leads to maternal death. Some of the major mechanisms that were used in coping to the social determinant to maternal health in Africa include social participation, empowering women through education for enhancing their autonomy in order to create freedom of making health-related decisions.<sup>20,21</sup> Male involvement is also one of the strategies that should be enforced in programs related maternal health. Government policies on stratification for the reduction of inequalities, social protection of disadvantaged people can help and unequal consequences of illness in socio-cultural beliefs and practices are some of the strategies that can help in reducing maternal mortality and morbidity of African women in the nations of Africa. As it was observed in Ugandan women, social determinants to health like poverty, lack of education, powerlessness in resource distribution lead to maternal malnutrition and deaths. According to World Conference on Social Determinants of Health (19-21 October, 2011), in Rio de Janeiro, Brazil, maternal anemia was reported as the major cause of fatigue and poor mental concentration that affects maternal health and ultimate productivity of women. As a consequence it also affects cognitive development of infants, brings learning difficulties that lead to less productivity by extending to poor health and poverty to the country. The National Food Fortification Program developed a strategy for enrichment of the commonly consumed foods (vegetable oil, maize and wheat flour). This was done by introducing vitamin A in to vegetable oil, and a variety of vitamin B-1, B-2, B-6, B-12; additives along with zinc, iron, niacin, folic acid by infusing in wheat and maize flour milling.<sup>22</sup>

## Conclusion

National trend toward the reduction of maternal deaths in most African countries was slow, and social determinants of maternal health are still some of the contributing factors to the inadequate reduction of maternal deaths. There are few studies that were conducted in exploring the social determinants of maternal health in accessing maternal health

care services and strategies in coping these determinants among African women inside Africa. Therefore, the purpose of this review study is to benchmark findings on determinants to maternal health care services and the common coping strategies employed in dealing with these determinants among African countries. Finally, the author/reviewer acknowledges that this documentary review was limited to English language publications and reports only. Most publications were based on qualitative approaches or professional connoisseurship which made it not possible to actually make distinctions in the significance of various findings. Other limitations are the review did not include studies on the effects of social determinants to maternal health.

The author/reviewer took guidance from WHO (2010)<sup>1</sup>, ‘*conceptual framework on social determinants for Health*’ in the development of the research questions.

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## Conflict of interest

Author declares that there is no conflict of interest.

## References

1. UNICEF. Monitoring the Situation of Children and Women. 2016.
2. Glasier A, Gülmezoglu AM, Schmid GP, et al. Sexual and reproductive health: a matter of life and death. *Lancet*. 2006; 368(9547):1595–1607.
3. AFRICAN UNION COMMISSION. Sexual and Reproductive Health and Rights: Continental Policy Framework. 2006.
4. WHO. International Statistical Classification of Diseases and Related Health Problems (ICD-10). World Health Organization: Geneva. 2004.
5. Ronsmans C, Graham WJ. Maternal mortality: who, when, where, and why. *Lancet*. 2006;368(9542):1189–1200.
6. UNFPA. The Social Determinants of Maternal Death and Disability. 2012.
7. WHO. Commission on Social Determinants of Health (CSDH), closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. World Health Organization: Geneva. 2008.
8. Simkhada B, Teijlingen ER, Porter M, et al. Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature. *J Adv Nurs*. 2008;61(3):244–260.
9. Adjiwanou V, Bougma M, LeGrand T. The effect of partners’ education on women’s reproductive and maternal health in developing countries. *Soc Sci Med*. 2018;197:104–115.
10. Marmot M, Friel S, Bell R, et al. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*. 2008;372(9650):1661–1669.
11. Munodawafa D, Sookram C, Nganda B. A strategy for addressing the key determinants of health in the African Region: WHO, Regional Office for Africa. 2013.
12. Chi PC, Bulage P, Urdal H. A qualitative study exploring the determinants of maternal health service uptake in post-conflict Burundi and Northern Uganda. *BMC Pregnancy and Childbirth*. 2015;15:18.

<sup>1</sup>WHO (2010). A Conceptual Framework for Action on the Social Determinants of Health: World Health Organization, Geneva.

13. AFRICAN UNION. Multi-Sector Determinants of Reproductive, Maternal, Newborn and Child Health. *Draft Policy Brief for the International Conference on Maternal, Newborn and Child Health (MNCH) in Africa. Johannesburg, South.* 2013.
14. Coovadia H, Jewkes R, Barron P, et al. The health and health system of South Africa: historical roots of current public health challenges. *The Lancet.* 2009;374(9692):817–834.
15. Mumtaz Z, Salway S, Bhatti A, et al. Addressing invisibility, inferiority, and powerlessness to achieve gains in maternal health for ultra-poor women. *Lancet.* 383(9922):1095–1097.
16. Gabrysch S, Campbell OM. Still too far to walk: Literature review of the determinants of delivery service use. *BMC Pregnancy and Childbirth.* 2009;9:34.
17. Say L, Raine R. A systematic review of inequalities in the use of maternal health care in developing countries: examining the scale of the problem and the importance of context. *Bull World Health Organ.* 2007;85(10):812–819.
18. Maxwell L, Nandi A, Benedetti A, et al. Intimate partner violence and pregnancy spacing: results from a meta-analysis of individual participant time-to-event data from 29 low-and-middle-income countries. *BMJ Global Health.* 2008;3(1):e000304.
19. Mochache V, Lakhani A, El-Busaïdy H, et al. Pattern and determinants of contraceptive usage among women of reproductive age from the Digo community residing in Kwale, Kenya: results from a cross-sectional household survey. *BMC women's health.* 2008;18(1):10.
20. Cleland JG, Van Ginneken JK. Maternal education and child survival in developing countries: the search for pathways of influence. *Soc Sci Med.* 1988;27(12):1357–1368.
21. Filippi V, Ronsmans C, Campbell O, et al. Maternal health in poor countries: the broader context and a call for action. *The Lancet.* 2006;368(9546):1535–1541.
22. Balikowa DO. *Social determinants of health: Food fortification to reduce micronutrient deficiency in Uganda.* World Conference on Social Determinants of Health, Rio de Janeiro, Brazil. 2011.
23. Essendi H, Mills S, Fotso JC. Barriers to Formal Emergency Obstetric Care Services' Utilization. *J Urban Health.* 2011;88Suppl 2:S356–69.
24. Ditekemena J, Koole O, Engmann C, et al. Determinants of male involvement in maternal and child health services in sub-Saharan Africa: a review. *Reproductive Health.* 2012;9:32.
25. Cham M, Sundby J, Vangen S. Maternal mortality in the rural Gambia, a qualitative study on access to emergency obstetric care. *Reproductive Health.* 2005;2:3.
26. Chi PC, Urdal H. The evolving role of traditional birth attendants in maternal health in post-conflict Africa: A qualitative study of Burundi and northern Uganda. *SAGE Open Medicine.* 2018;6:2050312117753631.
27. Ochako R, Fotso J, Ikamari L, et al. Utilization of maternal health services among young women in Kenya: Insights from the Kenya Demographic and Health Survey, 2003. *BMC Pregnancy and Childbirth.* 2011;11:1.
28. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria – looking beyond individual and household factors. *BMC Pregnancy Childbirth.* 2009;9:43.
29. Samb OM, Ridde V. The impact of free healthcare on women's capability: A qualitative study in rural Burkina Faso. *Soc Sci Med.* 2018;197:9–16.
30. Mpembeni RN, Killewo JZ, Leshabari MT, et al. Use pattern of maternal health services and determinants of skilled care during delivery in Southern Tanzania: implications for achievement of MDG-5 targets. *BMC Pregnancy Childbirth.* 2007;7:29.
31. Gebremariam W. Do Women with Higher Autonomy Seek More Maternal and Child Health-Care? Evidence from Ethiopia and Eritrea. *Stockholm Research Reports in Demography.* 2007.
32. Alvarez JL, Gil R, Hernández V, et al. Factors associated with maternal mortality in Sub-Saharan Africa: an ecological study. *BMC Public Health.* 2009;9:462.
33. Chol C, Hunter C, Debru B, et al. Stakeholders' perspectives on facilitators of and barriers to the utilisation of and access to maternal health services in Eritrea: a qualitative study. *BMC pregnancy and childbirth.* 2018;18(1):35.