REVIEW ARTICLE

Adherence to prenatal care in the sociocultural context of developing countries: a narrative review

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ABSTRACT

Prenatal care is intended to preserve and improve maternal and child health; however, the quality of this service and the attendance rates vary, with developing countries having the lowest rates. There are cultural gaps that prevent adequate access to prenatal care, putting the maternal and child health at risk. Our objective was to carry out an updated review on cultural gaps and their impact on prenatal care. This narrative review was conducted by searching all articles published until December 17, 2022, in English databases such as PubMed and Scopus, and Spanish databases such as SciELO. There are various situations that force pregnant women not to attend prenatal appointment, including machismo, reported as a common cause of non-attendance to prenatal checkups in developing countries and especially in rural communities; poor education in families, so women do not attend prenatal checkups due to ignorance about pregnancy care and risks, as well as their beliefs and customs about pregnancy; difficulty accessing health care services due to geographic issues; mistreatment from health professionals while receiving prenatal care or lack of inclusion in the health center; immigration status and the resulting problems with access to health care. Recognizing these situations is as important as knowing their consequences since, once identified, different solution alternatives can be sought from the primary health care. Health personnel must be trained to help the population understand the importance of prenatal care by knowing and respecting the customs and traditions of each patient, and not undermining their ideologies.

Keywords: Health Status Disparities; Culture; Prenatal Care (Source: MeSH NLM).

INTRODUCTION

Prenatal care, which is the maternal care throughout the pregnancy, is intended to preserve and improve health and allow pregnancy to result in a healthy child. This care is one of the core components of maternal health; however, the quality of this service and prenatal care rates may widely vary between countries: developed countries showed the highest rates and the developing countries the lowest. This reflects the increase of maternal and neonatal mortality in developing countries [1,2].

Since prenatal care is provided by the health system, it should be available to all women during pregnancy. Nevertheless, it is not true since there are conditions that force pregnant women to not to attend prenatal checkups [3]. This can be related to limitations of socioeconomic, sociodemographic or even cultural type, which may negatively influence prenatal care [4].

The World Health Organization (WHO) recommends that pregnant women attend eight prenatal checkups as minimum in order to reduce risk of maternal or neonatal death and also to prevent complications that can occur before, during or after delivery. It is recommended that the first prenatal checkup be at 12 weeks of pregnancy and the other seven in the subsequent weeks [5].

Cultural gaps may contribute to non-adherence to prenatal care [6]. One of these is machismo [7] since various societies still have deep-rooted ideas that place women only in the role of a mother and housewife. They depend on men's will; therefore, it affects their self-esteem and decision-making capacity [8].

Another important gap is poor education, which is closely connected to machismo: if women do not have the right to study since childhood, they will have reduced decision-making capacity, lower valuation in their community and lack of

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empowerment [9].

Finally, it should be noted that despite health is a universal right, there are still places where women cannot access health services [10] for different factors that are closely connected not only with cultural gaps that pose a challenge to health care [11] but also with lack of empathy and respect from health personnel for pregnant women, reason for which they drop out of or do not attend prenatal checkups [1].

During the COVID-19 pandemic women could not attend checkups for obvious reasons; therefore, different countries chose online prenatal care to provide relatively economic medical services and diminish inequality in health care due to its convenience and cost-effectiveness, particularly in developing countries or regions [12]; the sociocultural impact of this new modality of service is still under research.

This revision is aimed to show an updated view of sociocultural gaps that limit prenatal care focused on the previous and subsequent stages to the COVID-19 pandemic.

SEARCH STRATEGY

A search in PubMed and Scopus English databases was performed for this narrative review, and SciELO database was used for the Spanish review. All the articles published until December 17, 2022 were taken into account. The term search included the key words suggested by Medical Subjects Headings (MeSH) controlled vocabulary and Boolean connectors: ("Cultures" OR "Beliefs" OR "Belief" OR "Customs" OR "Cultural Relativism" OR "Cultural Relativisms" OR "Relativism, Cultural" OR "Relativisms, Cultural" OR "Cultural Background" OR "Background, Cultural" OR "Backgrounds, Cultural" OR "Cultural Backgrounds") AND ("Care, Prenatal" OR "Antenatal Care" OR "Care, Antenatal") Filters: from 2018-2022. Based on such criteria, 494 were obtained, which included 202 articles in PubMed, 286 in Scopus and 6 in SciELO. Rayyab web tool was used for systemic reviews [13]. Scientific articles containing information about our topic of interest were selected; and filters by title, abstract and full text were used. Consequently, 63 articles were included for this narrative review. Additionally, a manual search of eligible articles in the bibliographic references was performed to enhance the literature for our review.

RESULTS

Current vision of prenatal care

Over the centuries, pregnancy and birth have been turning points in the history of women, not only due to the risk during the process but also the obstacles that may arise in the mother and child since conception. Although there are currently family planning services and free and open access to contraception in different countries, there are still young mothers that take on this responsibility without having planned for it and without the adequate control [14].

Prenatal care is characterized by being early, periodical, continuous and comprehensive; it is achieved by teamwork and the community participation; and allows the comprehensive maternal assessment at every moment [15].

The WHO determines that a minimum of eight prenatal checkups help to reduce perinatal deaths up to 8 per 1,000 births. The new model implemented by this agency recommends a first control at 12 weeks of pregnancy and the other seven at weeks 20, 26, 30, 34, 36, 38 and 40 [5].

Nevertheless, there are gaps that difficult access to these services, which is reflected on maternal and neonatal mortality rates. Mortality rate has decreased 38 % in developing countries; however, 810 women die from preventable circumstances related to pregnancy and childbirth [16].

Adherence to prenatal checkups

Attendance to prenatal checkups contributes to significantly reduce neonatal mortality; nevertheless, another important factor is adherence, which is often affected by socioeconomic, demographic and cultural factors, among others [17,18].

While there are factors that negatively affect adherence to prenatal checkups, there are other factors that benefit and encourage pregnant women to attend checkups, the main factor being humanization. Health care humanization and prenatal education are considered to contribute to pregnant women's adherence to checkups and benefit their safety to face pregnancy and delivery since pregnant women that come with doubts and fears, at first, are able to build stable trust in their physicians when they receive humane treatment [19].

Likewise, this humane treatment allows pregnant women to overcome fears, recover self-confidence, strengthen their making-decision power and rights. In other words, it empowers and helps them to overcome cultural gaps that discourage adherence to prenatal care [20,21].

Beliefs and customs in prenatal care

Because of their own beliefs or social environment, many women think that pregnancy does not require control checkups, or they are afraid of going to a doctor's office and see a male physician [22,23].

Origin may influence care: since women from the coast are influenced by technology, they follow more adequate control checkups than women from the highlands [22].

Women use traditional medicine during pregnancy for

different reasons such as protection against evil spirits, fetus growth or even shortening labor. The explanation is worldwide multiculturalism [23].

There is still a small number of midwives in some countries, to whom many women turn since, due to their beliefs, they think that are more experienced than health care personnel [24]. Therefore, many births still occur at home nowadays because they distrust health care personnel and technology, and for this reason many pregnant women are less likely to seek prenatal care [25,26].

Poor education and machismo as gaps in prenatal care

Women usually do not attend prenatal checkups due to various reasons. Some of them are poor education level or illiteracy, lack of knowledge about the importance of prenatal checkups and lack of knowledge about sexuality, which can be associated with low level of parental education or lack of communication because of taboos imposed. Different studies reveal that 50 % of women only have completed secondary school [17].

In other places such as Africa, which has a high illiteracy rate, there is low adherence to prenatal checkups since many studies state that utilization of medical services increases along with the education level [8].

Dropout or non-adherence to prenatal checkups occurs because machismo still prevails at present, a fact that limits women to household chores, which is time-demanding, particularly if men do not help their partners; also, women take care of their children. This passive, silent, dependent and restricted attitude is imposed by male domination in their daily life [8].

Migratory status and accessibility to health care services as gaps for prenatal care

Migration is an important gap associated with non-adherence to prenatal care since it involves limiting economic, cultural, language, social and emotional components [27,28]. Migrant families must overcome many challenges, including those related to integration to the new societies that receive them, among other factors [29]. All of this influences their health condition and mental health [27]. Concerning prenatal care, cultural, language and satisfaction barriers were the most frequent, according to migrant families [30]. Therefore, it is important to provide prenatal care considering cultural aspects, which requires a multidisciplinary health care staff that is trained not only in clinical practice but also in multiculturalism to respond and meet migrant users' needs [27].

Health service accessibility gap

It was stated that many women do not attend prenatal checkups due to lack of access to the health center where they belong [31]. Distance from home to health facilities, long waiting times for consultation at health centers, belonging to places that do not have community health care facilities and having to go to other communities, in addition of transportation cost [32] and mistreatment by health personnel contribute to the fact that women do not attend prenatal checkups [33]. Regarding the last aspect, rude language of health care personnel not only discourages pregnant women to attend checkups but also to go with their partners [1].

Consequences of non-adherence to prenatal care in newborns

Prenatal care is one of the most important tools that heath systems provide to pregnant women worldwide since it ensures a carefully supervised pregnancy. It allows labor and birth in the best possible conditions, without the risk of physical or psychological sequelae for both mother and child [34,35].

Nonetheless, while prenatal care is a priority in different health care facilities, a high number of pregnant mothers, particularly adolescents or those in developing countries, have an increased risk of not accessing or not adhering to prenatal care provided [34,35]. There is a diversity of factors associated with such non-adherence, particularly those of sociocultural type, which limit attendance to health care facilities and complicate the early detection of obstetric disorders and, consequently, of the proper treatment. Therefore, the risk of both maternal and neonatal complications is increased [36].

It has been demonstrated that a low number of prenatal checkups (less than four) as well as inadequate checkups are risk factors for preterm delivery, besides children low weight at birth, particularly followed by increased risk of respiratory distress syndrome [1].

The risk of neonatal mortality and its dependance on the number of checkups are low; however, it is important to consider the possibility of its occurrence to demonstrate the benefits of adequate adherence to prenatal checkups [36].

Consequences of non-adherence to prenatal care in pregnant mothers

There is little research on the consequences of non-adherence to prenatal checkups or inadequate prenatal care worldwide in the context of infection with SARS-CoV-2. In the past three years, due to the high risk of infection, hospitals have been devoted to take care of COVID-19 patients and have set aside the multiple consolidated health care systems such as prenatal care, thereby leading to non-adherence to prenatal checkups [12,37-39].

Demographic and health surveys (DHS) administered in Democratic Republic of Congo, Egypt, Ghana, Nigeria and Zimbabwe included three socioeconomic groups stratified

as follows: poor, middle and rich. The rich group had more access to and utilization of maternal health care services, but poor pregnant women showed non-adherence to prenatal care; consequently, they developed truly fatal cardiovascular diseases [9,40,41].

Literature mentions that in countries like Nigeria, pregnant women that do show non-adherence to prenatal care develop hypertensive diseases such as preeclampsia and eclampsia [41]. On the other hand, inadequate prenatal care by health personnel may lead to overlook diseases such as aerobic vaginitis and lead to severe complications—especially during pregnancy—such as puerperal sepsis and maternal death; the inadequate hygiene of pregnant women is also related to the development of these pathologies [42].

Supporting pregnant women to achieve the adequate gestational weight is a global health challenge. On the other hand, it has been observed that excessive weight gain is associated with adverse results in mother and child health in the short and long term [43].

DISCUSSION

A total of 303,000 women dies every year in low-income countries from preventable causes related to pregnancy and delivery (44). In addition, when assessing the situation of maternal morbidity and mortality in Latin America and the Caribbean, it was observed that 7,600 maternal deaths mainly occurred due to postpartum hypertension and hemorrhages in 2015 [44,45].

This review demonstrates current sociocultural gaps that date back centuries and could not be eradicated, particularly in developing countries. We could mention, e.g. machismo, a problem that causes depression, empowerment deficit and decreased decision-making in women. On the other hand, it directly affects the child since there is an emotional rejection of such child [46] within households, which makes women seek help for survival but without receiving an answer from society [47-50]. Moreover, educational gaps in women such as poor education level, lack of knowledge about prenatal care and lack of knowledge about sexual and reproductive health, places them at a low level of empowerment in society both from the economic and decision-making standpoint within the household and the community [1,51,52].

At the same time, there are new gaps that difficult health care for pregnant women, especially migration, which can be explained in these countries by economic problems or political conflicts, as in Syria, Turkey and Lebanon. There are many countries, like Germany, in which migration has caused a greater impact on health resulting in, e.g. lack of care or health neglect by migrant pregnant women [22,53]. Consequences of non-adherence in newborns are evident since in countries such as India, Ethiopia, Myanmar and South African countries, mortality rates remain high compared to countries like Nepal [8,16,54].

Furthermore, mothers' non-attendance to prenatal checkups have caused diverse complications during pregnancy, delivery and postpartum overall, which has potentially put their lives at risk. Therefore, maternal morbidity and even mortality are closely related to non-adherence to such checkups [55-60].

The impact of the pandemic on the programs aimed to perinatal health remains unknown. Some reports state that such programs have been disrupted due to quarantine and confinement, a fact that has limited the access to prenatal care [51]. Likewise, it was also observed that lack of knowledge and misconceptions about COVID-19 have negatively affected access to maternal and prenatal health [51,60-64].

CONCLUSIONS

The meaning of culture is the set of beliefs and customs that characterize a place and its population. Each of these characteristics enhances each population; however, they can hinder access to health care services. From the prenatal care standpoint, it is very important to count on this service for the adequate development of the fetus and newborn, which, in turn, benefits women's health during pregnancy and postpartum.

Women do not attend prenatal checkups due to customs and traditions of their communities and factors associated to health care services such as lack of access, not only because of factors such as distance or language and tradition barriers, but also lack of empathy among health personnel. It is urgent to have a global view of all the barriers that hinder adequate prenatal care: that will allow working on topics required to improve care provided to pregnant women and their babies.

It is recommended to educate population regarding the importance of prenatal care. In addition, it is necessary to provide health care personnel with more training; and they should know customs and traditions of each patient. In this way, patients will be respected and helped without undermining their ideology.

This article demonstrates that, until present, cultural gaps in prenatal care are due to beliefs and traditions, poor education, machismo, lack of accessibility to health services and migratory status. These gaps hinder the comprehensive care that each patient deserves to prevent future maternal and neonatal complications.

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