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Premises for maternal death analysis

Premisas para el análisis de la muerte materna

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SUMMARY

Maternal mortality (MM) is a serious public health problem that requires immediate occupation by all those involved in its study, analysis, and planning, plus the execution of public policies to fight the individual and collective tragedy that it represents, the historical analysis of the medical, social and public policy causes related to MM in the "Concepción Palacios" Maternity through hermeneutical understanding, allows the elaboration of important theoretical premises, leaving open the possibility of maintaining research and planning strategies in the current reality of the maternal death, to serve as support, incentive, reflection, and knowledge, for which six (06) theoretical premises on maternal death are proposed.

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RESUMEN

La mortalidad materna (MM) es un problema grave de salud pública y que requiere ocupación inmediata de parte de todos los involucrados en su estudio, análisis y planeación más ejecución de políticas públicas para combatir la tragedia individual y colectiva que representa, el análisis histórico de las causas médicas, sociales y políticas públicas relacionadas con la MM en la Maternidad "Concepción Palacios", a través de la comprensión hermenéutica permiten elaborar importantes premisas teóricas, dejando abierta la posibilidad de mantener la investigación y planeación de estrategias ante la realidad actual de la muerte materna, para servir de apoyo, incentivo, reflexión y conocimiento para lo cual se proponen seis (06) premisas teóricas sobre la muerte materna.

Palabras clave: *Muerte materna, mortalidad materna, premisas.*

INTRODUCTION

The gestation explains with evidence the origin of individuals and, such as death; it is inherent to living beings. For the human being it uses to be an event of joy, rejoice and perpetuation of the species, however, in very eventual circumstances the death of the pregnant woman occurs as a

catastrophic event (1).

At the beginning of humanity, death in pregnancy and birth occurred with undeniable frequency. Then, with technological advances, specifically in the medicine area, those became less frequent. The number of deaths was registered and compiled as another isolated figure; afterward, the Maternal Mortality (MM) became a health indicator which was named Maternal Mortality Rate (RMM by its acronym in Spanish), but all in numbers, and then, the specific causes were known and classified in obstetrical: direct, indirect y non -obstetrical. The use of the term maternal death has been proposed as something beyond numbers, as it is a tragic event that impacts the family and society (1). The MM is a grave public health problem affecting most of the worldwide poor countries and has a great impact on the familiar, social, and economic levels. It is associated with the social and economic development level, representing an excellent indicator of the female gender quality of life. Therefore, there are several factors involved in each maternal death such as the absence of good prenatal control, low economic level, scarce schooling, poor diet, low access to public health services, as well as the limited birth control, and little information regarding sex education, amongst other (1-3). The MM can be seen as the extreme reflection of a much more complex and poorly adverted reality, represented by a wide spectrum of women in which must also have to be included those who achieve a healthy pregnancy and those suffering extreme maternal morbidity (MME by its acronym in Spanish) and almost die, where the social justice is violated along with the right to the human being health and development.

Every minute 380 women get pregnant, 190 face unplanned or unwanted pregnancies, 110 suffer from pregnancy-related complications, 1 die due to pregnancy-related complications (4-12). By 2015 the MM Rate (RMM) was 239 by 100 000 live birth (RNV) in developing countries, compared to 12 by 100 000 in developed countries. The mayor estimated the risk of MM over life is 1 in 4 900 in developed countries compared to 1 in 54 in low-income countries (13,14). In relation to the conditions for maternal risk, there can exist some mother endogenous factors including biological factors, which vulnerability arises from the deficiency or limitations of a group of protective conditions that are the object of social rights that weakens the capacities of the mother and those of her relatives to anticipate the risks of pregnancy, delivery, birth or postpartum period, growth and development that include geographic, socioeconomic, cultural, educative, and sanitary aspects (15,16).

Regarding the MM risk factors, 50 % involves the participation of lifestyle, social conditions, and an environment in 20 %, the social structures and conditions; the environment has repercussions in sickness or health, hereditary factors intervene in 20 % and the health systems have an impact of 10 %. There is a dark side represented by cultural, economic, educative, nutrition, and access to birth control service factors. A larger number of pregnancies involve a higher risk of complications or death. Due to this, it is important to study the MM as a base for politics and guidelines in an integral or holistic context for generating public politics and social incidence that are not only sustainable but efficient and with a long term sustained character (10-26).

In the case of Venezuela, the MM is maintained in figures that triple the reasons reached by other countries and show important population – territorial differences that reflect unfair inequalities in life conditions, amongst those, the availability and timely access to health services. According to the Objectives of the Millennium (ODM, 2000-2015), Venezuela should have reduced the RMM from 53.10 to 13.3 x 100 000 RNV and reduce the infant mortality from 25.80 to 8.78 death by 1 000 registered RNV (17-19). Regrettably, this reduction was not achieved and rather increased the RMM. In respect to socioeconomic aspects in Latin America, due to different conditions from a country to another, the analysis of medical records and "verbal autopsies" searching for MM social determinants has been the object of study, where 80 % of the MM was due to directed causes, related to the low socioeconomic level of the dead expectant mothers with limited education, income sources, good alimentation and care service access, amongst other aspects, which has a repercussion in the decision-making capacity of the women regarding their health (10-26).

In 2015, Karolinski et al. (27) proposed a

model for addressing the MM, establishing seven fields: Prioritization and knowledge of the problem about its definition, causes, and consequences, to the contextual characterization implying territoriality and the social and political context. The methodological extent meaning the three-cornered of the quantitative information with the qualitative information for the analysis of the results. The management of the knowledge implies gathering information on the problem for making decisions and then, the formulation of politics articulated with the investigation. The innovation generates new tools for addressing the new problems and lastly its implementation. With this model, many aspects are involved in the study of the MM, mainly in the second phase regarding the "contextual characterization" as political, socioeconomic, cultural, territorial, and institutional facets are there defined.

In the Maternidad "Concepción Palacios" (MCP by its acronym in Spanish) in Venezuela, Cabrera et al. (28), determined that the RMM in the MCP, in the 2013 – 2018 period was 191.59 by 100 000 RNV, being this the highest obtained rate in the health center history. They conclude that there is an imperative need for nosocomial politics in the management of institutional health including the social aspects of the MM, after determining that the keys for reducing Maternal Mortality are in the detection and timely management of the complications, applied both to pregnancy hypertensive disorders (THE by its acronym in Spanish), sepsis y hemorrhages as direct causes of Maternal Mortality in the hospital, and to the recommendation to the State, particularly with the executive body in charge of the health in Venezuela, the Health Ministry of Venezuela Ministerio del Poder Popular para la Salud (MPPS). On the grounds of this frankly alarming data, urges the emergence of new premises for the analysis of maternal death that allows the reassessment and re-launch of public politics that cause a profound impact on the MM current reality.

It is important for the comprehension of praxeological, epistemological, ontological, and axiological processes over the events involved in maternal death. Orfila (29), expresses that the university investigation can be explained given a body of theoretical premises that allow the understanding of the management of the university investigation in the context of the development of science and technology, both for the MCP as for the rest of the maternal and infant care institutions in the country. The political and socio-cultural aspects of the MM found by Cabrera, for the MM in the MCP across its history (1), revealed simple situations of connections between events. The connections between these events have, as fundamental characteristics, the supposition arguments that meet the premise concept in such a manner that applies not only to statements but also to arguments. In this sense, for the upcoming investigations and public policies for the MM, the following theoretic premises are proposed, transcending the positivist paradigm for a constructive one, born from the hermeneutic comprehension of the background study of medical, social, and public political causes of the MM in the MCP by Cabrera (1).

DEVELOPMENT

First theoretical premise

The maternal death term is the best definition than maternal mortality for the tragedy of a pregnant woman expecting a happy event that concludes with her death.

In the context of scientific reality and with the existing resources, no maternal death should occur. Through the years, the death of pregnant women have been considered under the indicator of MM, have been known and theorized over the number of deaths, and the same indicator has been modified for its name; have been treated as a percentage, a rate, and a ratio; and the correction factors of the denominators have been adjusted, have been established by 1 000 live birth (RNV), by 10 000 RNV y actually by 100 000 RNV (1,28).

It has also been changed the own denominator for naming the indicator of health making a relation with the number of women with reproductive age as a rate and naming it a ratio if it is taken as a denominator the number of RNV that occurs in the same site and the same period. The most tangible reality when occurs a maternal death, is that of a woman that has an identity, that dies very far from her life expectancy, because she dies with a nationality, with a family, in a society

that counted on her for its future. Therefore the death of a pregnant woman is a woman lost by her family, and with her, it is also lost the sacred universal right to life that all of us have de duty to protect (1).

The authors consider that maternal death is the syndrome of failure; fails a family on its structure, fails the education as many of them die because of the lack of information in sexual and reproductive health, fails the society for being petty in accepting and making the decisions regarding abortions in unsafe conditions, fails the performance of the physician whom has not defined and perform political incidences to improve the pregnant, in labor and post-partum women care conditions, fails the State that has been too weak when proposing and establishing appropriate public politics as those are only based on decreasing an indicator when the most important is taking actions so none of them occur, as it just not only shows the failure of the State on its function as health protector but in the right for having a dignified life and truly free of violence. What is happening is that the risk is dismissed and the possible pregnant women in conditions of poverty are economically encouraged with presumed protection with some depreciated currency to get pregnant, as well as promoting the adolescent's pregnancies (1).

Deepening in the basic principles of bioethics of Beauchamp and Childress (30), the authors express that a woman, looking forward or not, wanting or not to be pregnant, being this the most faithful expression of the exercise of their autonomy, this principle cannot be freely expressed. Many of the deceased pregnant women had unwanted and not accepted pregnancies, others had wanted and accepted pregnancies and had complications due to the absence of, or inappropriate prenatal controls; others with planned, accepted, and controlled pregnancies without proper delivery attention and another big share for improper postpartum care, as the teaching in obstetrics and gynecology in the MCP is performed in a sectorized manner, as well as in many other hospitals in the country, where the prenatal control if performed, is made by different physicians in each visit, the delivery or C-section is performed by another physician, and the postpartum is, according to us, the most unattended of all, superficially performed by another physician and probably with little attention by specialists; different from the private attention where only one physician is the responsible for all the pregnant woman events(1).

This allows us to express some bioethical questions:

Are we respecting the autonomy principle? The answer is no, as this is just one more patient considered as a number and not her identity with the analysis of her real expectative and wishes for the pregnancy.

Are we not making damage? When we do not listen to the pregnant woman, when we don´t know or take into account her familiar environment, when we don´t know, not just the number, but the children she already have and in which conditions they live, when we don´t know how is the structure of her family, the place and conditions of life, the society in which the family is developing and the conditions of life depending on an occasional alimentation program and an insufficient economic help (1).

Are we doing the good and to whom are we doing it when we are only interested in a number to be decreased as a health indicator?

Are we giving the pregnant woman what corresponds to conditions of equality? Equity does not seem to be preponderant as society as the major frequency of maternal death occurs in impoverished women (1).

The authors consider that all maternal death can be avoided and all efforts shall be added to avoid it, as every dead woman is the failure of all the performed activities trying to decrease an indicator or a number; this means that we take for granted in our culture that maternal death should keep happening (1).

Second theoretical premise

The proper family planning significantly impacts maternal death.

Studying the MM, Karolinski et al. (27) propose to add a new delay to those proposed by Thadeus and expressed by Maine (31), this fourth delay is the first one when the maternal

death is analyzed; it is the delay that occurs for a woman in exercising the bioethical principle of autonomy when she freely decides to exert her sexuality and requires or request the use of an appropriate birth control method.

Without doubt, along with the appropriate sexual and reproductive education and the proper access to the diversity of birth control methods, we shall decrease the maternal death of adolescents and those of the mothers that consider completed their progeny, that regrettably resort to abortions under unsafe conditions as a method for familiar planning, several times giving up their lives or having important mental and physical health lesions. It is considered prudent and even mandatory that the birth control methods shall be of total demographic coverage, for each woman requiring them (27).

It is not to pretend to be in favor of abortion but to be against performing it in an unsuitable or unhealthy manner, facilitating the most appropriate and safe methods so the unwanted pregnancies do not occur.

Third theoretical premise

No woman shall die for not knowing that she is in a risk situation.

Theorizing the first delay of Thadeus modified by Maine (31,32), it is explained that the time that takes the pregnant woman is taking notice that she has something that is not right and puts her life at risk influences maternal death. It is timidly avoided to speak about unwanted pregnancies and the series of events that are triggered in the search of actions that a woman performs to interrupt an unwanted, unintended, nor planned, or accepted pregnancy. It is not visualized in a neuralgic manner the quantity of maternal death that occurs due to abortive maneuvers or those performed under unsafe conditions (1).

It is presented a bioethically analyzed dilemma between the sacrality of life, the don´t do harm principle that is applied to an embryo in the pregnancy, and is it beneficent with the unborn? On the other side, there is the autonomy principle and we are unfair with the operator when we have legislation that punishes and have even double penalties for the healthcare staff when they are only helping so these events occur under safe conditions (1).

When the causes are analyzed it is observed that the MM origin causes order, according to its frequency in the MCP, is as follows: sepsis, hypertensive disorders, and hemorrhages. The sepsis and the hemorrhage are closely linked to abortions under unsafe conditions at early gestational age, as well as the absence of a timely diagnose of ectopic pregnancy where the death occurs by hemorrhage. In later gestational ages the hypertensive disorders and hemorrhages are part of the obstetric complications that when the patient has the appropriate information and can realize that she is having problems, she can timely search for help, so nowadays it is difficult that a pregnant woman with a second or third quarterly period hemorrhage does not notice that something is wrong. Regarding hypertensive disorders the perspective changes, the depersonalization of the doctor-patient relationship in the control visits, where the physician gives priority to the performing of a sonogram not paying attention to other important aspects as the interrogation of the patient about how she is feeling, weigh, measurement of uterine height and abdominal circumference, measurement of blood pressure, and palpate of the abdomen, the beneficent in prenatal control is not in the practice; giving origin to what is more important, making invisible the principle of not harming (1).

The authors are supporters of the idea about the pertinence of the early start of prenatal control, including a pre-pregnancy visit, as incredible as it may seem, such a natural fact can become in a risk pregnancy at any moment (1).

The legislation establishes justice in the Act for the Women Rights to a Free of Violence Life "Ley Orgánica del Derecho de las Mujeres a una Vida Libre de Violencia" (33), This Act has a great altruistic and bioethical spirit, but within its structure, it has an article named "Obstetric Violence". The authors disagree with this article even from its definition, as from the beginning as qualifies as delinquency the practice of a basic medical specialty, through which every human must pass when born. It is as in the laws concerning the protection of infants and adolescents there would be an article of pediatric violence, or an article for surgery violence,

urological violence, or that of any other of the medical specialties (1).

A gestation is an event that must be pleasant, wanted, followed by a specialist or expert in pregnancy, delivery, and postpartum, the author considers that the proper term for that article shall be "violence performed in the expectant mother" and carefully redefine the article with the participation of experts in the theoretical and practical exercise of obstetrics (1).

Education is an important element for this delay, a well-informed patient during her sexual and reproductive education, and carefully oriented in her prenatal control, should very well know her risks during all her pregnancy (1).

Fourth theoretical premise

The pregnant woman should be next to health centers with obstetric care and have the possibility of transport before any risk event, for the proper care.

Another of the factors that influence maternal death is poverty, and along with it, far away or highly dangerous homes due to the violence of the "red or dangerous zones" where the home is located. It is undeniable the social inequity regarding those pregnant women that have familiar cars for timely go to a health center where she should be attended, and others in poverty that must use cargo trucks wrongly described as "dog shelters" to be able to go to a health center, this makes the second delay of Thadeus and Maine (31,32), to extend, seems that the community is harming and, therefore, not beneficent, as very few pregnant women have warranted the possibility of going to a near and appropriate health center safely. It is added the dilemma of which risk is bigger, to go out risking the life before a society that does not control the overflowing crime or the risk of waiting for morning hours when a safe transport can be found; considering the social injustice that makes this delay more prolonged nowadays making it farther for obtaining the timely proper assistance (1).

Fifth theoretical premise

The emergency obstetric assistance of the pregnant woman shall be performed on time.

Once the pregnant woman is in a suspected risk situation, the procedure demands a diagnosis that must be verified and a timely treatment received must be received, there is the risk that the site is not able to provide the proper care due to reasons from the lack of supplies to the absence of trained staff that can provide the right attention, not taking into account the back and for procedure "ruleteo" or multiple references that imbricate with the second delay, that implies the visit to the proper site where there also exists all the conditions to be attended (1).

From the creation of the MCP in 1938 to the end of the twentieth century, within the work rules and by institutional regulation, it was established that once a patient attended for her care "she must not be referred to any other healthcare center", as the MCP was considered as the most specialized national reference obstetric center with 24 hours attention the 365 days of the year. From the beginning of this century, this was ruled out, the appropriate institution resources were diminished and now it is common that the MCP is part of the unpleasant back and forth "ruleteo" of the patients (1).

It is also true that in previous years there were hundreds of physicians aiming to be trained in the specialty that after the appropriate selection could study and perform it "the best ones", nowadays to perform the postgraduate studies, there is an assignation and not selection process as few physicians apply, and therefore not precisely the best prepared are those in charge of the pregnant women health (1).

On the other hand, the creation of the Maternal-Fetal Medicine specialty that teaches integrally the complications of the mother and those of the fetus has significantly decreased the maternal death, where the patient is treated as a person and not as a number, or a case in which the correct and timely diagnosis is not only presented, but it is also attended appropriately until the achievement, according to what is possible and with the lack of resources, of the mother and child integration to their family; in this specialty, the study of bioethics is of high importance. Also, deficient

education in the area of critical obstetrics could contribute to the maintaining of unacceptable figures of MM.

Sixth theoretical premise

It is indispensable to issue public politics of sexual and reproductive health properly and effectively.

With no doubt, the investigation performed concludes that there is a delay in public policies to decrease the MM. The curve decreases with the creation and opening of the MCP, there were public policies that contributed to the reduction of the figures, which is maintained through the years in numerically accepted values with an asymptotic behavior. The epistemological and axiological makes us aware that we have even signed agreements and declarations that have not been taken into account for defining concrete actions to enforce them.

The ontological indicates us that every maternal death, only one, implies the failure of all the stakeholders, including the present ones, by the application of deficient political incidences due to the fear or apathy from one side and by the other, attributed to public policies exerted by subjects with a low qualification to perform them.

CONCLUSIONS

The hermeneutic understanding of the background analysis of the medical, social, and public policies causes associated with the MM and the MCP, allows us to conclude that with the emergence of the six previously stated theoretical premises, there is an open possibility of maintaining the investigation and the planning of strategies before the current reality of maternal death, to serve as support, incentive, reflection, and knowledge for all those health professional and medical and postgraduate students interested in deepening, studying and expanding such important subject. Therefore it is necessary:

- That the Venezuelan, as the guarantor of the public healthcare, implements preventive public policies to decrease the high RMM in the country.
- The deepening in public healthcare policies oriented to the pregnant women's attention in the prenatal, partum and the post-partum period.
- To maximize the implementation and improvement of family planning services to avoid a higher index of unwanted pregnancies and those at an early age, i.e. adolescents.
- To offer contraceptive services and provide pertinent information that facilitates the prevention of unwanted pregnancies and the complications of abortions performed under risk conditions.
- To create strategies as prevention measures that maximize the promotion to a maximum level the attendance of the pregnant women to the prenatal control service to avoid possible complications during pregnancy, labor and post-partum that are difficult to predict, as all pregnancy is exposed to risks.
- To train physicians in the maternal-fetal medicine area to prevent and control appropriately the "extreme maternal morbidity" or "*near miss*".
- To implement quality management in health services without overlooking the primary care services for pregnant women.
- To prioritize governmental policies that decrease the social, educative, economic, and cultural barriers that limit the options of women for deciding on having a child, without thinking in the possibility of an abortion performed in conditions with the risk of losing their lives,
- The world has the necessary knowledge and resources to eradicate extreme poverty. All that is missing is the political will.

Conflict of interest disclosure statement

The authors declare no conflict of interest.

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