

## ORIGINAL PAPER

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# Trends in maternal mortality in Peru 2019 - 2023

## Evolución de la mortalidad materna en Perú 2019 – 2023

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### ABSTRACT

**Introduction:** Maternal mortality is a highly sensitive indicator of the living conditions, health and development of the population. **Objective:** To determine the situation of maternal mortality (MM) in Peru between 2019 and 2023, visualising the figures and interventions. **Material and methods.** Information was reviewed from the Maternal Mortality Epidemiological Surveillance System of the General Directorate of Epidemiology of the Ministry of Health, the HIS System for the registration and coding of information, and the Demographic and Family Health Survey for the years 2021 to 2023. **Results:** A decrease in the number of maternal deaths (264 MM in 2023) and in the maternal mortality ratio (51.9 per 100,000 live births in 2023) in Peru has been found. Direct causes of death are maintained, but in different percentages by natural regions, with hemorrhage being the leading cause of maternal mortality. The coverage of care has increased in recent years, but it is still necessary to improve the capacity for timely response and quality of health services. **Conclusions:** Although there is evidence of a decrease in MM, it is necessary to strengthen the strategies that have been implemented to meet the Sustainable Development Goal 3 target on reducing global maternal mortality to 70 per 100,000 live births. The maternal mortality reduction target set for Peru for 2030 is 41.3 per 100,000 live births.

**Key words:** Maternal mortality, Hemorrhage, COVID-19, Human rights, Quality assurance, health care, Empowerment for health, Social inequity, Reproductive rights, Sustainable Development goals

### RESUMEN

**Introducción.** La mortalidad materna es un indicador altamente sensible de las condiciones de vida, salud y desarrollo de la población. **Objetivo.** Determinar la situación de la mortalidad materna (MM) en el Perú entre 2019 y 2023, visualizando las cifras y las intervenciones. **Material y métodos.** Se revisó la información del Sistema de Vigilancia Epidemiológica de la Mortalidad Materna de la Dirección General de Epidemiología del Ministerio de Salud, el Sistema HIS para el registro y codificación de información, y la Encuesta Demográfica y de Salud Familiar de los años 2021 a 2023. **Resultados.** Se ha encontrado una disminución en el número de muertes maternas (264 MM en el 2023) y en la razón de mortalidad materna (51,9 por 100,000 nacidos vivos en el 2023) en el Perú. Las causas directas se mantienen, pero en diferentes porcentajes por regiones naturales, siendo la hemorragia la primera causa de mortalidad materna. La cobertura de atención se ha incrementado en los últimos años, pero aún es necesario mejorar la capacidad de respuesta oportuna y de calidad de los servicios de salud. **Conclusiones.** Si bien se evidencia una disminución de las MM, es necesario fortalecer las estrategias que se han implementado para cumplir con la meta del tercer objetivo de Desarrollo Sostenible de reducir la mortalidad materna mundial a 70 por 100,000 nv. La meta de reducción de la mortalidad materna fijada para el Perú para el 2030 es de 41,3 x 100,000 nv.

**Palabras clave.** Mortalidad materna, Hemorragia, COVID-19, Garantía de la calidad de atención de la salud, Empoderamiento para la salud, Inequidad social, Derechos sexuales y reproductivos, Objetivos de Desarrollo Sostenible

### INTRODUCTION

Maternal mortality is a highly sensitive indicator of the living conditions, health and development of populations. While significant progress has been made in maternal mortality over the past two decades, in 2017, some 295,000 women died during or after pregnancy and childbirth, an unacceptably high number<sup>(1)</sup>. Every two minutes a woman dies in pregnancy or childbirth, according to recent estimates by several UN agencies. There have been alarming setbacks for women's health in recent years, as in virtually all regions of the world the number of maternal deaths has increased or stagnated in decline. In Europe and



North America, and in Latin America and the Caribbean, the maternal mortality ratio increased between 2016 and 2020 by 17% and 15% respectively. The COVID-19 pandemic may have further slowed progress in maternal health<sup>(2)</sup>.

Maternal death reflects the evolution of maternal health and the response capacity of a country's health system. It is the third goal set out in the Sustainable Development Goals (SDGs)<sup>(3)</sup>. Maternal death figures allow us to show not only the reaction and response capacity of health services, but also to measure the social gaps that exist in our different populations and the accessibility of quality care, regardless of age, social status, origin and culture of the population.

In Peru, women die from complications arising during pregnancy, childbirth and the postpartum period. The causes are direct - hemorrhage, pregnancy-induced hypertension, sepsis and abortion - with indirect causes being less common. In the years 2020 and 2021, in the context of COVID-19, the number of indirect maternal deaths increased at the national level<sup>(4)</sup>.

Evidence indicates that 90% of maternal deaths can be prevented through a combination of measures including the implementation of quality maternal care, universal access to modern contraceptive methods and efforts to address inequities in access to services.

Maternal and neonatal mortality is higher in developing countries, which is an expression of the inequity gaps in access to health services and evidence of the conditions of inequality that affect the world's population, especially women and newborns. Therefore, maternal mortality is not only a public health problem, but also a human rights and social justice issue, as it reflects social exclusion for gender, cultural and economic reasons, among others.

This article seeks to show the problem of maternal mortality (MM) in Peru between 2019 and 2023, visualizing the figures and interventions.

## DATA COLLECTION METHODOLOGY

The objective of our study was to determine the situation of maternal mortality (MM) in Peru between 2019 and 2023, visualizing the figures and interventions.

For this purpose, information from the Epidemiological Surveillance System for Maternal Mortality of the General Directorate of Epidemiology of the Ministry of Health obtained from the Epidemiological Cards of maternal death sent by the regions, the HIS System for the registration and coding of information within the database of the Ministry of Health platform, as well as the Demographic and Family Health Survey has been reviewed<sup>(4-6)</sup>.

## RESULTS

### THE SITUATION OF MATERNAL DEATH IN PERU

In Peru, the maternal mortality ratio (MMR) has been decreasing, as recorded in the report carried out by WHO, UNICEF, UNFPA and World Bank in 2015 to evaluate the achievements of the Millennium Development Goals target; the maternal mortality ratio (MMR) for Peru was 68 x 100,000 live births<sup>(7)</sup>. It also states that Peru was among the 20 countries in the world that made the most progress in reducing maternal mortality.

According to projections by the Pan American Health Organization/World Health Organization (PAHO/WHO) for Peru, an MMR of 30.7 (a two-thirds reduction) is expected to be achieved by 2030. However, based on the scenario of the group of countries that have had an MMR of less than 70, which is where Peru is located, with an average annual reduction percentage of 4%, the country would aim to reach an MMR of 41.3 per 100,000 live births in 2030.

The maternal mortality ratio may vary according to the number of live births. Thus, in 2019 it was 55.9 x 100,000 live births, in 2020 it was 80.9 x 100,000 live births, in 2021 it was 88.2 x 100,000 live births, in 2022 it was 51.6 x 100,000 live births and in 2023 it was 51.9 x 100,000 live births.

In recent years, the Peruvian Ministry of Health has made strenuous efforts to reduce maternal mortality as a result of the strategies implemented in the different regions, registering the lowest number in 2023, 264 maternal deaths. During the 10 years prior to the COVID-19 pandemic, there was a decreasing trend in maternal mortality (Figure 1). With the onset of the COVID-19 pandemic in March 2020, maternal



deaths increased during 2020 and 2021, with 439 MM in 2020 and 471 MM in 2021, i.e. 137 MM in 2020 and 169 MM in 2021 when compared to 2019. This occurred in Peru as in the countries of the Americas region. Factors explaining this increase include difficulty in accessing immunization and availability of vaccines for pregnant women, saturation of services and barriers to accessing special care. The COVID-19 immunization of pregnant women, which started in Peru in June 2021, had a positive impact on reducing maternal mortality.

During 2022, MM reported to the epidemiological surveillance system showed a decrease of 41% compared to 2021. In 2023, 262 MM were reported, representing a decrease of 10% (-29) compared to the same period in 2022 (Figure 1).

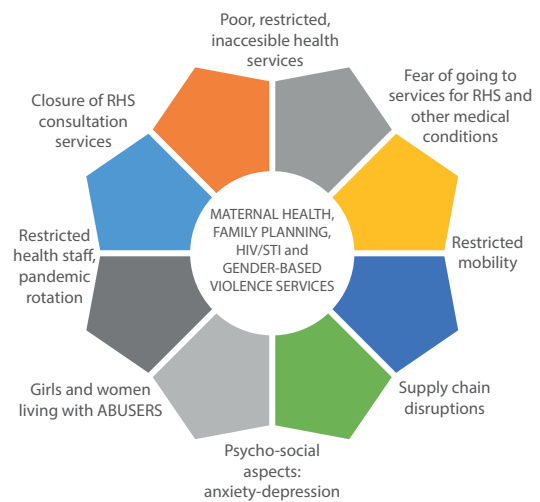
### IMPACT OF THE COVID-19 PANDEMIC ON MATERNAL HEALTH

The COVID-19 pandemic had an economic and social impact, especially on the health system and its response capacity. In sexual and reproductive health (SRH) services, there were restrictions on the continuity of care, limiting access, interruption of care and delivery of supplies, reduction in human resources and in the rotation of health professionals, as well as restrictions on means of transport. On the other hand, users were afraid to go to a health facility for fear of becoming infected. Hospitals treating pregnant women with complications did not have suffi-

cient capacity to respond to the increased demand, often forcing referrals to the hospitals of the Integrated Health Network Directorates (DIRIS) in Lima, especially DIRIS Lima Centro, which contributed to an increase in maternal mortality in this area (Figure 2).

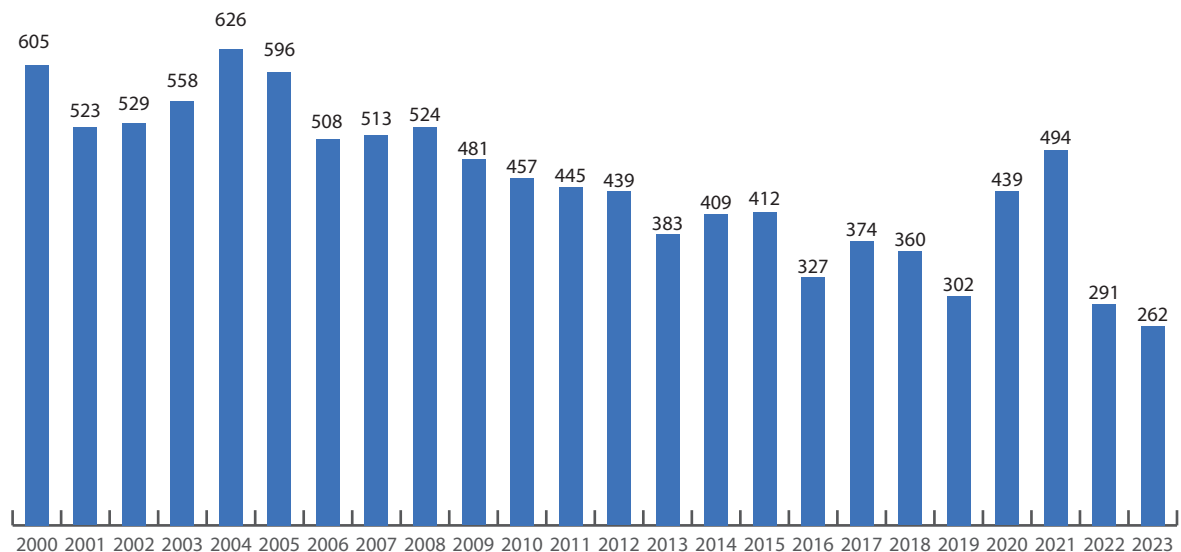
There was an increase in unintended pregnancies, unsafe abortions, obstetric complications that could not be treated due to the restriction of care in the facilities, and an increase in maternal and neonatal morbidity and mortality, especially due to infections caused by COVID-19.

FIGURE 2. IMPACT OF THE COVID-19 PANDEMIC ON SEXUAL AND REPRODUCTIVE HEALTH AND HEALTH SERVICE RESPONSE CAPACITY.



RHS=reproductive health services  
Source DSARE - MINSA

FIGURE 1. NUMBER OF MATERNAL DEATHS 2000 – 2023.



Source: National Centre for Epidemiology, Prevention and Control of Diseases, Ministry of Health Peru - MINSA.



The most vulnerable population were girls, adolescents and women in rural areas of the Andean and Amazonian zones and in the poorest quintiles.

According to studies on pregnancy and COVID-19, pregnant women are at higher risk of severe illness from COVID-19 compared to non-pregnant women of the same age group, as well as the possibility of requiring intensive care and experiencing preterm delivery.

In 2021, maternal deaths due to COVID-19 accounted for 29.2% of the total causes of MM, with the departments of origin being mainly Lima (42) and the coast, highlands and northern jungle of Peru, which accounted for 76.9% of all maternal deaths due to COVID-19. Vaccination against COVID-19 began in June 2021, with a significant decrease in maternal deaths.

### CAUSES OF MATERNAL DEATHS

In 2019, direct causes of maternal death predominated with 59.1% over indirect causes with 36.6%. In 2020 and 2021, indirect MM increased due to COVID-19 infection, which accounted for 16.7% in 2020 and 29.2% in 2021 (Table 1). The most frequent direct causes of maternal death were hemorrhage (uterine atony, retained placenta, ectopic pregnancy, placental accretism, among others), pregnancy-induced hypertension, abortion and its complications, and obstetric infections.

TABLE 1. CAUSES OF MATERNAL DEATH IN THE PERIOD 2019-2023.

Causes of death	2019	2020	2021	2022	2023
<b>Direct causes</b>	<b>59.1%</b>	<b>56.1%</b>	<b>50.8%</b>	<b>63.2%</b>	<b>62.6%</b>
Obstetric hemorrhage	25.2%	19.0%	19.8%	25.7%	21.8%
Hypertensive disorders	18.5%	21.6%	17.1%	21.9%	19.8%
Abortion and its complications	3.9%	2.3%	3.8%	2.4%	5.3%
Obstetric infection / sepsis	3.1%	3.1%	3.6%	2.4%	4.1%
Other direct causes	8.2%	10.1%	6.5%	10.8%	11.5%
<b>Indirect causes</b>	<b>36.6%</b>	<b>43.9%</b>	<b>49.2%</b>	<b>36.8%</b>	<b>37.4%</b>
COVID-19	----	16.7%	29.2%	3.5%	0.4%
Cerebrovascular disease/NS	9.1%	3.5%	2.5%	4.5%	1.2%
Neoplastic diseases	4.7%	2.1%	2.0%	3.8%	4.1%
Cardiovascular / vascular disease	2.4%	3.1%	2.5%	3.5%	4.5%
Respiratory system disease	1.2%	4.2%	1.6%	3.5%	6.2%
Digestive system disease	3.1%	1.6%	1.1%	3.1%	2.1%
Infectious and parasitic diseases	3.5%	4.5%	2.2%	3.5%	8.6%
Other indirect causes	5.6%	8.2%	8.0%	10.1%	10.3%

Source: CDC Epidemiology MINSa.

Indirect causes increased in 2020 with 43.9% and in 2021 with 49.2%, due to COVID-19 infections. Many of the other pathologies could have been avoided if the woman had received preconception care to identify reproductive risk factors, pathologies and their treatment before gestation, and then prenatal care with identification of risk factors, follow-up and timely referral.

### TIME OF DEATH

Table 2 shows that the puerperium is the time when maternal deaths occurred most frequently in Peru, especially in home births. This proportion increased due to COVID-19.

### PLACE OF DEATH

Maternal deaths (MDs) occurred most frequently in health institutions, at around 70%-75%, with Ministry of Health hospitals I and II recording the highest number. The majority of MDs were recorded between the ages of 25 and 39 years, with some increase in young women <19 years in 2023.

### LEVEL OF EDUCATION

The highest number of maternal deaths occurred in women with completed secondary education, contrary to what was observed in the 1990s, when there were more maternal deaths in lower levels of education.

### DELAYS

One of the methods used in the multi-causality of maternal mortality is that described by Dr. Deborah Maine<sup>(8)</sup>. The model assumes that in order to reduce maternal mortality it is not enough for health services to function efficiently, as women face a series of delays in accessing and using them. For Peru, four delays are considered, in addition to the attitude of health professionals and public policies (Table 3):

TABLE 2. TIME OF DEATH.

Time of death	2019	2020	2021	2022	2023
Puerperium	59.1%	63.1%	66.1%	60.7%	62.0%
Pregnancy	29.9%	29.8%	26%	33.1%	28.1%
Delivery	9%	6.8%	6.7%	6.2%	8.4%
Unknown/Other	1.7%	0.2%	1.2%	1.5%	1.7%

\*Source: CDC Epidemiology MINSa.



1. Delay in recognizing the problem.
2. Delays in making the decision to seek help.
3. Delay in getting to the health facility.
4. Delay in receiving appropriate treatment.
5. Attitude of sexual and reproductive health professionals (DSARE proposal), and
6. Policy that prioritizes sexual and reproductive health to achieve healthy, safe and voluntary motherhood (DSARE proposal).

Analyzing the delays that occurred in maternal deaths in the years 2022 and 2023, there is an increase in the third and fourth delays and a slight decrease in the first and second delays (Table 3). Data on the fifth and sixth delays are not yet available.

## INDICATORS RELATED TO MATERNAL MORTALITY

### PROBLEM SOLVING CAPACITY

Measuring obstetric and neonatal functions (ONF) by level of care is a tool for assessing the capacity of health facilities to address the processes associated with maternal and neonatal morbidity and mortality. Only 2.5% of health facilities evaluated in 2022 scored over 90% in their capacity to meet obstetric and neonatal functions according to their level of care. In the 2022 assessment of obstetric and neonatal functions by region, it was observed that the San Martín region, located in the north-east of Peru, did not have any facility that qualified with more than 90% (ONF Computer System).

### FAMILY PLANNING

During the COVID-19 pandemic there was limited access to sexual and reproductive health services, both on the supply and demand side. This situation has been overcome by 2021, as shown in Figure 3.

Although fertility has declined, there are regions that still have a high fertility rate, mainly in the northern jungle and the Amazon, which is related to a higher number of maternal deaths. In

TABLE 3. DELAYS CONTRIBUTING TO MATERNAL DEATH IN PERU.

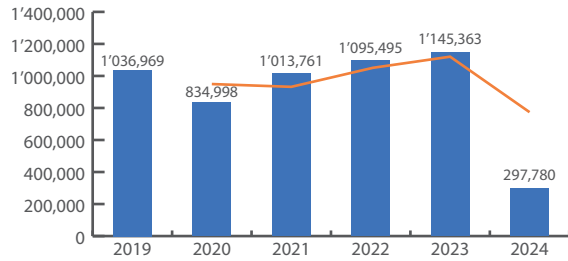
Delays	2022	2023
<b>1. Delay in recognizing the problem</b>		
Yes	58.1%	57.6%
No	34.1%	3.0%
No data	7.9%	11.4%
<b>2. Delay in making the decision to seek help</b>		
Yes	73.5%	69%
No	18.6%	20%
No data	7.9%	11%
<b>3. Delay in getting to the health facility</b>		
<b>Yes</b>	<b>29.0%</b>	<b>31.4%</b>
Geographical inaccessibility	4.7%	0.4%
Distance	10.0%	6.5%
Transport	5.7%	7.8%
Beliefs/customs	5.7%	5.7%
Other	1.8%	6.9%
No data	1.1%	4.1%
<b>No</b>	<b>61.6%</b>	<b>56.7%</b>
No data	9.3%	11.8%
<b>4. Delay in receiving appropriate treatment</b>		
<b>Yes</b>	<b>19.0%</b>	<b>24.5%</b>
Economic	0.7%	0.8%
Administrative / Paperwork	2.2%	2.0%
Delay in attention	3.6%	5.7%
Poor service	4.7%	6.5%
Language	6.8%	9.0%
Other	1.1%	0.4%
<b>No</b>	<b>72.0%</b>	<b>61.6%</b>
No data	9.0%	13.9%
<b>5. Attitude of health professionals</b>	<b>No data</b>	<b>No data</b>
<b>6. Public policies in favor of sexual and reproductive health</b>	<b>No data</b>	<b>No data</b>

2023, according to preliminary data, the fertility rate remains at 1.9.

The National Family Health Survey (ENDES) 2023 records that 77.4% of women currently in union use some method of family planning at the national level (MINSa, ESSALUD, Armed Forces, Clinics) and, of these, 58.6% use a modern method, such as the quarterly injectable in 19.5%, male condom 11.5%, female sterilization 11%, implants 7.1%, pill 6.8%. As many as 18.8% use traditional methods, including periodic abstinence in 9.9%, withdrawal 9.8%, folkloric 0.3%.



FIGURE 3. NUMBER OF COUPLES PROTECTED BY ALL CONTRACEPTIVE METHODS, YEAR 2019 TO MARCH 2024.



Source: HISMINSA March 2024

### PRENATAL CARE

According to ENDES data by natural region, in the year 2023, prenatal care in pregnant women who received six or more prenatal check-ups was higher in the highlands (88.9%) than in the coast and jungle (85.9% and 85.8%, respectively). Antenatal care has increased, but it is still necessary to strengthen the quality and identification of risk factors.

### INSTITUTIONAL DELIVERY

Institutional delivery is a birth attended in a health facility by skilled health personnel, which is considered less risky for both mother and newborn than a home birth. Internationally, two of the factors most associated with maternal death or survival are considered to be the place of delivery and the decisions of the woman and her family about where to go in the event of a complication during pregnancy, childbirth or the postpartum period. In Peru, between 2018 and 2023, institutional delivery remained at 93.3%, increasing slightly in rural areas from 81.3% to 81.9%.

### DISCUSSION

Maternal mortality in Peru is related to inequality and the lack of empowerment of women to exercise their rights, especially their sexual and reproductive rights, and to the capacity of facilities to respond. Knowing the situation of maternal mortality in Peru between 2019 and 2023 and having analyzed the figures and their favorable variations during the interventions adopted, as well as the outcome in pregnant women infected by SARS-CoV-2, the decisions taken by the Ministry of Health through the Directorate of Sexual and Reproductive Health (DSARE) to continue with the commitment to reduce maternal mortality will be presented.

### INTERVENTIONS TO REDUCE MATERNAL MORTALITY

Table 4 shows the causal chain that can lead to maternal death, as well as the interventions considered for its solution.

### INTERVENTIONS TO REDUCE MATERNAL MORTALITY

We esteem important to consider and implement the following interventions at the different administrative and executive levels of the Ministry of Health to reduce maternal mortality figures.

- Public policies in favor of sexual and reproductive health to achieve healthy, safe and voluntary motherhood.
- Strengthening the response capacity of health facilities.
- Prevention of unplanned pregnancy with family planning. Prevention of adolescent pregnancy. Ensured availability of contraceptive methods.
- Preconception care with identification of reproductive risk factors and treatment of pathologies to ensure that these do not complicate a future pregnancy.

TABLE 4. CAUSAL CHAIN FOR THE OCCURRENCE OF A MATERNAL DEATH AND THE INTERVENTIONS PROPOSED FOR THE SOLUTION.

Causal chain	Interventions for the solution
The woman may be pregnant	Education for women Exercising sexual and reproductive rights Preconception care, identification of reproductive risk factors, personal and family history Family planning
The pregnant woman has a complication	Prenatal care Screening for obstetric risk factors Timely referral Institutional delivery
Complication is adequately treated / not treated / not treatable	Timely management of complications Improve response capacity, closing the gaps to provide timely care for obstetric emergencies Monitoring of extreme maternal morbidity
Maternal death	If the complication is not resolved



- Quality prenatal care, with identification of risk factors.
- Skilled delivery care in health centers with the capacity to respond and cultural appropriateness.
- Timely care of obstetric complications - hemorrhage, pregnancy hypertension, sepsis, abortion - in health centers with the capacity and human resources (HR) trained and committed,
- Post-partum and post-abortion contraception, after counseling.
- Timely referrals to facilities with greater capacity (national maternal WhatsApp referral).
- Implementation of epidemiological surveillance of extreme maternal mortality (EMM).
- Education for women - Know and exercise their sexual and reproductive rights.
- Strengthen the proactive attitude of health professionals.
- Infrastructure, equipment, among others). It is carried out every year.
- Plan of monitoring sexual and reproductive health services in DIRESAS/GERESAS/DIRIS hospitals, through technical assistance visits to the regions.
- Implementation of registration and monitoring of cases of extreme maternal morbidity.
- Training in the management of obstetric emergencies for medical professionals and midwives.
- Strengthening the management of DIRESA/GERESA/DIRIS and the hospitals that reported the highest numbers of maternal deaths.
- Follow-up and monitoring of pregnant women and postpartum women in the networks in each region to identify risk factors and make timely referrals.
- Implementation of the national WhatsApp for referrals of cases of extreme maternal morbidity, obstetric emergencies.

### **ACTIONS CARRIED OUT BY THE MINISTRY OF HEALTH THROUGH DSARE**

The Directorate of Sexual and Reproductive Health (DSARE) based on the analysis of the maternal death situation has carried out the following actions:

- Advising and monitoring the functioning of the Regional Committees for the Prevention of Maternal, Fetal and Neonatal Mortality (CPMMFN).
- Strengthening the surveillance and response of the CPMMFNs, which evaluate the situation in which maternal deaths occur and propose strategies to prevent them.
- Identification of the response capacity of the facilities through the Obstetric and Neonatal Functions (ONF) instructions and their respective strengthening (human resources, implementation of current SRH regulations, medicines, contraceptive methods, supplies,
- Continuous monitoring of the supply of contraceptive methods, medicines and supplies used in family planning, prenatal care, childbirth, puerperium, obstetric emergencies, obstetric codes (red for hemorrhage, blue for pregnancy-induced hypertension, yellow for sepsis) and kits for the care of cases of sexual violence.
- Integration of the Wawared system and operationalization of the prenatal care, childbirth, puerperium, family planning and violence module.
- Approval of NTS N° 180-MINSA/DGIESP-2022 'Prevention and Elimination of Gender Violence in health facilities that provide sexual and reproductive health services'.
- Strengthening of performance indicators: complete preventive package for pregnant women, institutional post-partum and post-abortion contraception, specialized care for pregnant women at risk.



- Budget allocated to the Maternal and Neonatal Health Budget Programme for the implementation of interventions. Quality of spending.
- Implementation of Maternal Waiting Homes, vertical childbirth, birth plan, pregnant women's radar and cultural adaptation of services.
- Working in coordination with community health workers.
- Comprehensive Health Insurance, Universal Health Insurance, prioritizing the poorest.

The following have been considered as limitations in the implementation of measures to reduce maternal mortality in Peru:

- Still limited policies in favor of sexual and reproductive health.
- Social determinants.
- Harmful gender norms and/or inequalities that result in women's and girls' rights, including their right to safe, quality and affordable sexual and reproductive health services, not being adequately prioritized.
- Women's failure to exercise their sexual and reproductive rights due to lack of knowledge, limited access to education, cultural factors.
- Pregnancy in adolescents, the vast majority between 10-14 years of age as a result of rape.
- Limited comprehensive sex education in schools.
- Inadequate response capacity of health facilities.
- Safe blood is not always available in a timely manner at the national level.
- Insufficient maternal and neonatal intensive care units.
- Lack of human resources, specialists in obstetrics and gynecology, anesthesiologists, neonatologists, surgeons, as well as midwives.
- Geographical access, distance from the home to the health facility.

- Climatic phenomena
- Insufficient budget and lack of accountability to improve quality of care and equity.

## CONCLUSIONS

Peru has suffered social problems in recent decades due to political and economic factors, corruption, discrimination, COVID-19 pandemic. When evaluating the evolution of maternal mortality in recent years, it is observed that, nevertheless, the medical teams working in sexual and reproductive health are made up of people who are willing to improve women's health, managing and complying with directives aimed at reducing maternal deaths. This achievement has been obtained in spite of the aforementioned limitations and the COVID-19 pandemic and continues to be in force due to the decision and action of MINSA's Directorate of Sexual and Reproductive Health, its officials and committed health professionals.

Health statistics alert us to changes in lifestyles and reproduction that are occurring in the world population, such as the postponement of the first pregnancy at an older age, decreased fertility, increased use of assisted fertilization and cesarean sections without medical indication, preterm birth, fetal growth restriction, among others, which will force the design of new national guidelines and new biomedical interventions to conform to these new lifestyles and reproductive processes.

We consider that the study presented has shown a favorable situation of maternal mortality in Peru between 2019 and 2023, which has been demonstrated by the figures shown in this paper, and that it is necessary to continue reviewing the interventions carried out and to plan for what is to come.

A list of recommended actions at the different levels involved is provided:

- Increased political commitment to maternal and perinatal mortality reduction at national, regional and local levels.
- Raise awareness among regional and local governments, especially those with the highest number of maternal deaths, so that they lead





actions in favor of reducing maternal mortality: optimal response capacity, maternal and neonatal obstetric network, human resources, communications, transport and financing.

- Guarantee the availability of contraceptive methods and supplies for family planning and maternal health care.
- Reduce the unmet demand for family planning with emphasis on populations in quintiles I and II.
- Implementation of the cultural adaptation of health services, vertical childbirth and waiting houses at the national level.
- Improve budget execution, quality of spending.
- Strengthen the information system for decision-making. Implement Wawared in all health facilities.
- Contribute to meeting the Sustainable Development Goal 3 target of a global maternal mortality ratio of 70 x 100,000 live births.

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