June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

Received: 11 November 2022 Accepted: 28 March, 2023 DOI: https://doi.org/10.33182/rr.v8i4.187

Maternal and neonatal program and effective spending improves health in a hospital in Peru

Mg. Lourdes Neciosup Montenegro ¹, Dra. Cecilia Carbajal Llauce², Dr. Erik Obiol Anaya ³, Mg. Yudy Salazar Altamirano⁴, Dra. Patricia Montalvo Chavéz⁵,

Abstract

Budget programs are implemented in response to previously identified and defined problems; Therefore, the Ministry of Health carries out the maternal and neonatal program, planning a structured strategy, based on available evidence in critical points of maternal and newborn sexual and reproductive health; Likewise, the need to direct budgetary resources, improving the efficiency and effectiveness of spending that impact program activities, reducing complications of pregnancy, childbirth and puerperium; being the objective to propose the Friendly Model of the maternal and neonatal program for the effective execution of public expenditure in a hospital in Piura-2023. A quantitative, applied, non-experimental, descriptive-exploratory, cross-sectional and purposeful methodology was used, recruiting a census sample of 80 health workers, applying the survey technique, using a correlational inferential descriptive statistic of the study variables, taking results in relation to the perception of the program at the middle level linked to its dimensions and, for the variable public expenditure in nexus with its dimensions of efficiency and effectiveness, also the correlation between the maternal and neonatal program and public expenditure was significant positive moderate (Rho Spearman 0.581); It was concluded that there is moderate positive agreement between the maternal and neonatal programme and public expenditure, in addition to the clear need to proceed with the development of a training and intervention plan, based on human rights, with an intercultural approach, improving assistance to the health services of this institution for the benefit of the population.

Keywords: Maternal and neonatal budget program, public expenditure, public management, sexual and reproductive health and interculturality

Introduction

According to the World Health Organization in 2020, 95% of maternal deaths are from developing countries, mostly from rural and poor areas; negative indicator that expresses social injustice, inadequate health supply, inequality between men and women, lack of respect for human rights and limited income from social assistance (WHO 2023).

¹ Email: <u>ldneciosupm@ucvvirtual.edu.pe</u>

² Email: <u>cllaucect@ucvvirtual.edu.pe</u>

³ Email: <u>obiolef@ucvvirtual.edu.pe</u>

⁴ Email: <u>y.salazar.a@upch.edu.pe</u>

⁵ Email: pmontalvoc@unjbg.edu.pe

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

In Peru, after 2015, maternal death was reduced to 68% of live births; In 2020, there was a 42% increase in the death of pregnant women in relation to previous years due to epidemiological changes and the supply of health institutions; in 2022 it rose to 52.1% concentrating in 06 regions nationwide including Piura by 18% due to Dengue, COVID 19 and other causes (CNNE-PCE. 2022).

As a result of the above, the Ministry of Health, among its policies, proposes the National Strategic Plan for the reduction of perinatal maternal mortality; responding to the needs of the citizen (MINSA 2019). The reform to modernize the state, and more specifically, the Ministry of Economy and Finance incorporates the maternal and neonatal programme into the public sector budget; within the framework of the National Budget Law 2008 (Peñalosa E. 2019). The budgetary programs generated by the Ministry of Health and the decision to establish a road map to obtain positive effects on the population, through tasks that optimize resources, generating information allowing decisions to be made and sectoral strategic objectives to be worked on; developed in 12 programs, including maternal and neonatal (Azcarsa U. W. 2021).

In this context, the results-based budget, an instrument that allows generating changes in public administration, influences improving the quality of income to health benefits, identifies positive factors that help overcome mother-child health difficulties; in addition to the use of public resources, applying design principles and techniques in the realization, monitoring and evaluation in compliance with the objective (Arbaiza et al. 2017).

The maternal and neonatal program thus becomes a programmatic unit of integral actions, linked to providing products and obtaining results for the benefit of women of reproductive age, as well as in the case of mothers and their newborns (Feinstein et al., 2017 p 49-60), related of course, to a public policy, in the context of the budget for results having a series of elements that allows the fulfillment of the goals set. and the measurement of achievement achieved through performance indicators and physical production, which measures the amount of goods and services that help meet its obligations of a prioritized population (MINSA-OGPPM 2021).

On the other hand, Enríquez (2019) mentions that the provisions of goods and services in budget programs involve interventions of entities at their different levels of management, as well as the participation of various sectors of government; The evaluation of the efficiency and effectiveness of spending together with the instruments of fiscal policy, are effected in policies and programs implemented, obtaining a direct benefit in the citizen, which helps to increase the welfare state and the satisfaction of the population.

Consequently, in a hospital in the region of Piura, an institution providing State health services, in the last five years maternal mortality has increased by 25% and the execution of the expenditure of the maternal and neonatal budget program, in relation to the fulfillment of physical goals, has

June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

shown an average execution of 95.2% in the years where this percentage increase has been seen. Therefore, we can indicate that this high level of compliance in the execution of the road map has not brought with it the expected decrease in the levels of affectation in the sector subject to its application; Therefore, the problematic reality has led us to ask ourselves the following question: How do the strategies of the maternal and neonatal program, for the effective execution of public spending in a hospital in Piura, affect the reduction of maternal and neonatal morbidity and mortality? whose general objective is To establish the strategies of the maternal and neonatal program for the execution of public expenditure in a hospital in Piura, Likewise, its specific objectives are: to make a diagnosis of the Maternal and Neonatal Program; characterize public spending on the maternal and neonatal program in Piura, Determine the influence of the maternal and neonatal program on public spending and define strategies to improve the weaknesses of the maternal and neonatal program in relation to public spending.

This research is relevant in the sense of its direction towards public, political, social and economic health issues, focused on improving maternal and newborn health, thus reducing very high-risk maternal complications, finally avoiding the death of mothers or their children; therefore, the importance of the study is justified in that the effectiveness of the expenditure of the budget of the maternal and neonatal program must have a high degree of efficiency and effectiveness, improving the health benefits of a public hospital in the city of Piura, seeking to have a humanized care approach and that can eliminate any type of barrier in terms of discrimination towards any of the socially vulnerable groups.

METHODOLOGY

Design and type of research

A research was carried out with quantitative optics, of applied type, with non-experimental, exploratory, cross-sectional, purposeful descriptive design; as explained by Jiménez et al., (2022), based on an objective criterion, admits to obtain quantifiable information through elaborated and ordered instruments.

Thus, Sánchez (2019) indicates that the analysis of the data obtained is carried out through statistical techniques, mainly based on the definition, interpretation, prognosis and control of its causes and in being able to foresee the occurrence based on the results; making the foundation of its conclusions in the strict use of quantification, obtaining its data and processes, analyzing and explaining the rational hypothetical way.

On the other hand, the study was of an applied type, which as indicated by Sánchez et al., (2018), uses knowledge obtained by basic or theoretical inquiry generating knowledge and allows solving certain problems in defined contexts of society, oriented to immediate execution through methodologies, protocols and regulations that admit to analyze them in relation to the variables

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

of the research confronting with reality, also with non-experimental and cross-sectional design, looking for the incidence of the levels of the variables describing their natural state, taking into account the data collected in a single moment and time (Hernández 2014). It is proactive, characterized by initiating a diagnosis, subsequently considering a friendly model strategy for the maternal and neonatal program in public spending.

Variables and operationalization

The study variables involved are public expenditure, which is the use of the budget allocated by the state to the maternal and neonatal program for its execution, which supposes an efficient and effective use of spending, both of the goods and services assigned for its realization (Vargas-Zafari 2019) and on the other hand the variable maternal and neonatal program, which is a strategy that contributes to restoring the sexual and reproductive health of women, men and their environment, offering comprehensive humanized and intercultural care (PPMN 2021).

Population and sample

Its population was made up of care and administrative workers related to the maternal and neonatal program of a hospital in Piura; The sample size will be a non-probabilistic census of 80 hospital workers and was selected with some characteristics by the research.

Data collection instrument-validity and reliability

The questionnaire was used; Instrument of greater use for the collection of information, was conformed by questions related to the dimensions of each of the variables, as well as to the indicators of the study, with answers in the Likert scale, obtaining a total of 46 questions of own elaboration with a score of 1 to 5: never 1; almost never 2; sometimes 3; almost always 4; Always 5. Likewise, the validity of the instrument was corroborated by 5 experts, obtaining levels between good and excellent; also; on the other hand, the level of reliability was measured through the use of Cronbach's alpha, showing consistency and coherence of the instruments, for this a pilot was carried out with 10% of the sample, reaching a coefficient of 0.716 reliability and consistent in relation to its variables.

Procedure and statistical analysis

The data processing was related to the objectives proposed by the study, for which the descriptive and inferential correlational statistical technique was used, establishing a relationship between the maternal and neonatal program and public expenditure. The information was entered into an Excel database, then transferred to the statistical software IBM-SPSS version 25, thus allowing to obtain the statistical information necessary to proceed with its subsequent analysis; the normality test of the variables was also performed, the result being non-probabilistic data (<0.05 Kolmogorov-Smimoy test), in addition the Rho Spearman test measured correlation between the

June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

study variables its result 0.581 means that there is a moderate positive correlation between the variables maternal and neonatal program and public expenditure.

Ethical aspects

In the research, the ethical standards to execute the research were respected, requesting their consent to participate through a letter to the institution where the study was carried out, in addition, personal data are not recorded so privacy is not affected and in relation to the identity of the health institution there was authorization to obtain information in relation to the research, In addition to having respected the ideas of the authors referred to in the research, the entire academic product has gone through an exhaustive review through the Turnitin program, so there is no violation of the intellectual property right of any of the authors taken as a reference for the creation of the thesis, nor of this article.

RESULTS AND DISCUSSION

Next, the results are presented according to the objectives of the study carried out, in terms of the diagnosis of the maternal neonatal program, we can see that from the statistics extracted from the total of investigated, it was possible to demonstrate that in terms of the variable maternal neonatal program, the statistical perception shows us that of the participants 58% consider that it is of medium level; in the high level in 28% and in the low level 14%, in relation to its dimension Knowledge in sexual and reproductive health perceives it at the medium level 58%, at the low level 25% and at the high level 18%, in terms of dimension Accessibility to family planning perceives it at the medium level 61%, at the high level 25% and at the low level 14%; regarding the dimension Reduction of extreme maternal morbidity perceives it at the medium level 48%, at the low and high level 26% respectively, also the dimension Reduction of maternal mortality perceives it at the medium level 64%, at the high level 26% and at the low level 10%, likewise the dimension Reduction of neonatal morbidity perceives it at the medium level 53%, in the high level 45% and in the low level 3% and finally the dimension Reduction of neonatal mortality is perceived in the medium level 66%, in the high level 30% and in the low level 4%.

Therefore, the statistics applied show us that, for the most part, the personnel in charge of the execution and monitoring of the maternal and neonatal program, for the effective execution of public spending considers that the relationship between expenditure and results is direct, so we must understand that the higher the level of compliance with the budget we should obtain positive results on the reduction of the levels of mortality and morbidity of pregnant mothers and neonates.

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

With regard to the variable public expenditure, 59% perceive it at the medium level, 41% at the low level and 0% at the high level; regarding the Efficiency dimension, 54% perceive it at the medium level, 37% at the low level and 0% at the high level, and regarding the Effectiveness dimension, 58% perceive it at the medium level, 43% at the low level and 0% at the high level, which makes it clear that despite being at a high level of budget compliance, the expenditure does not cover the needs, Therefore, we could infer from this that an updated roadmap is probably required, more in line with social reality, especially considering that when we execute a project, one of the first phases is to statistically test reality, in order to obtain a result that allows us to establish a panorama, which is not done effectively in any state program.

As a result, of the total number of professionals regarding the influence of the maternal and neonatal programme on public expenditure, 68% perceive it at the middle level and 32% perceive it at the low level and 0% perceive it at the high level, with which there is a consensus among specialists on the scarcity of economic resources for the purposes set out in the maternal and neonatal programme. for the effective execution of public expenditure.

Taking into account these statistical results, the discussion of them and the corresponding crossing with the theoretical aspects of it began to be raised and that is where it has been possible to appreciate that indeed the state when creating the budget program had a clear intention to improve the health of the mother and her newborn in Peru, and so since 2008 Maternal and Neonatal Health Care has been implemented as a strategy; generating interventions by various public entities for the prevention, promotion, care and recovery of the health of women of reproductive age and men, adolescents, pregnant women, women after childbirth and neonates (Vargas-Zafari 2019; Vargas et al., 2020); The results obtained from the previous studies analyzed the perception of the professional who develops activities of the program in relation to the diagnosis, indicating that it is located at the middle level (58%) in relation to the provision of knowledge in sexual and reproductive health, accessibility to family planning, reduction of extreme maternal morbidity, maternal mortality, neonatal morbidity and neonatal mortality.

The same happens with the findings, in their dimension knowledge in sexual and reproductive health, which can also be perceived at the middle level (58%) indicating professionals that technological strategies are means of information or training that are easy to use in health issues; similar studies such as that of Goyes et al., (2019) report that after a training program for medical and obstetric health professionals, they present a significant improvement in skills, abilities and knowledge in health issues; different from the common thinking of the majority of citizens of the countries of the South American zone where there are still large sectors of the population that consider the figure of the midwife, as essential within the communities, where in addition to helping mothers in childbirth, they provide information on contraception as an important part

June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

of their role, However, most have not received training to improve their knowledge and information skills, which is basically empirical and transmitted from generation to generation.

On the other hand, the clear importance of the provision of sexual and reproductive health education is clear; building trust and practices in providing attention to the needs of society; thus, De Castro et al., (2020) makes the implementation of the open line MOOC virtual training model in sexual and reproductive health, refers that the immediate and beneficial evaluation tools originate improvements in knowledge and improvements in professionals who have dealings with the populations especially with adolescents, as stated by Herrera et al., (2022) in an experience obtained from the professional perspective in developing skills and knowledge for intervention with young people on sexual and reproductive health.

Regarding the dimension accessibility to family planning perceived at the middle level (61%) this explains that there is almost always availability of contraceptive methods for the population of childbearing age, however, this access is not free, since the methods are usually offered by private entities, I feel low percentage participation of the State in responsible adolescent birth control, in addition to not having clinics with an intercultural approach; results that resemble what was seen in the research of Nagai et al., (2019), where he explains that the lost opportunities in family planning are high, facing barriers in reproductive health services including laws, policy, the social, cultural environment and the structure of the system to improve the availability and counseling to the primary care user; along the same lines, Avilés et al., (2022) refer that midwives are sensitized professionals knowledgeable about postpartum family planning, but it is not always their responsibility to inform about contraception after childbirth, a situation that would affect women's health and that does not generate the reduction of unplanned pregnancies; Zelalem et al. (2018) reveals that the communication barriers granted in relation to cultural and language discrepancies in refugee and migrant women with sexual and reproductive health care limit attendance and quality of care in health systems.

Likewise, Irons (2019) states that there is a very real problem in the issue of family planning treatment, and this is that although there is sufficient confidence of the Quechua-speaking user to attend the family planning offered by the state, however the lack of training of the health professional who usually does not know the Quechua language or native languages, make health personnel focus on understanding, as far as possible, the expectations of patients to access health services, according to Pérez-Urdiales et al., (2018) indicates that there are as well as the language barrier, considerable barriers of various kinds and therefore with less facilities to the assistance of immigrant women to public health services and sexual and reproductive health in their research carried out in the country Basque; presenting a panorama similar to that seen in our countries in the Latin American area, where there is a totally different treatment in private health centers that allow assistance, improving the health of this population.

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

In another context, Höglund, B. et al., (2019) reports that there are midwives with limited knowledge and experience to address a small group of women with intellectual disabilities in need of advice on contraceptive issues, which violates the sexual and reproductive rights of the sectors with the most socio-economic needs.

On the other hand, in the research it was possible to perceive that in the dimension reduction of extreme maternal morbidity it is perceived at the middle level (48%); it is explained that prenatal care with a risk approach does not have the inputs and differentiated strategic equipment for its care with an intercultural approach based on the rights of the user. delivery with companion should be part of humanized care refers Ospina et al., (2020), creating an affective bond in the couple, the decrease in cesarean section is not always the only strategy to solve the obstetric problem, on the contrary it can be a predisposing factor to maternal morbidity, in addition to not having an infrastructure that meets the minimum quality standards for maternal care, with a focus on law; these results are similar to the research carried out by Hoyos et al., (2019), who indicate that there are barriers to prenatal care in women with extreme maternal morbidity considering that the health system does not guarantee the benefit for the mother and her child, impacting on the absence of consultations of the risk pregnancy being probability of a death.

Ferrer et al., (2018), for their part, explain that the extreme fertile age and the lack of an adequate delivery by previously scheduled cesarean section, have a high incidence and prevalence within the levels of morbidity and high mortality of mothers and neonates, being important the identification of risk in the mother and establish prevention plans to improve maternal health; Ortiz et al., (2019) indicate that follow-up improves the quality of obstetric care by implementing epidemiological surveillance, which is an effective option for the recognition of interventions and more efficiently foresee the death of a mother, while strengthening the best obstetric care, through reliable sources of information; on the other hand, Ceccon et al., (2019) refers that sociodemographic indicators and access to health services are criteria of inequality in the regions, however, prenatal care contributes to reducing the death of a mother, so it is the duty of the State to align these possibilities based on the principle of equality; on the other hand, the process of humanization of pregnancy and childbirth responds to the feelings and sensations it awakens. against these processes during pregnancy. Lafaurie et al., (2020) agree with the aspects of the level of quality of care, the opportunity for information to the parturient and the accompaniment in the birth process, responding to the request for warmth, attention and security in the treatment of the mother.

The reduction of maternal mortality, in the statistical application, showed that it is perceived, at the middle level (64%), which turns out to be a critical public health problem, multifactorial and multisectoral; in addition to the inadequate infrastructure for care of maternal complexity,

June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

acceptance of referrals to a higher level of care not opportune, and, of course, a poor surveillance system where prenatal control is carried out on the pregnant mother; Avila-Jaquez (2018) indicates that the improvement of infrastructure and the option of respect for interculturality in childbirth care, have allowed the decrease in maternal deaths, however Mendoza (2021) in his analysis indicates that the approach to socio-economic inequalities, access to quality sexual and reproductive health services, attention to obstetric emergencies, before or during the reproductive process of planning their pregnancies, have a positive impact on reducing maternal mortality; in this context is that Guevara-Ríos (2019) contributes on the management of complications of pregnancy and childbirth, where the aforementioned author points out that the timely reference to an establishment of greater resolution capacity has had an impact on the reduction of the death of the mother and her newborn; so Rodrigues, et al., (2023) mentions the cultural, socio-economic, education and skin color barriers in women in rural areas, predisposing the death of a mother with a higher health risk and inadequate prenatal care, to the factors of discriminatory acts suffered by sectors with fewer economic resources.

With regard to the reduction of neonatal morbidity, it can be seen in the applied statistics that this is perceived at the average level; which explains that training for the management of complications in neonates occurs sporadically, and that the initiation of maternal attachment (skin-to-skin contact) is indeed scarce, allowing the reduction of complications in the baby, it should be linked to the early initiation of breastfeeding, which is significant; On the other hand, newborns with pregnancy complications is a negative indicator for the development of life; Hernández et al., (2020) indicates that extreme maternal complications are a factor of high affectation in newborns; however, Agudelo et al., (2020) reports that skin-to-skin contact immediately at birth is an intervention to help prevent prevalent diseases in newborns, generating a low risk in these births; as Costa et al., (2019) who indicates that, this procedure is an indicator of good practices, but after cesarean section this is not performed due to maternal instability or perinate, in addition there is resistance on the part of professionals violating the right of the person and health; Hernández et al., (2020) state that these possible serious complications that may occur in the mother during the gestation process are conditions that subsequently impact the life of the fetus and even later in the newborn.

Finally, the reduction in neonatal mortality is perceived at the middle level (68%) demonstrating an exposure of the high level of importance of technology for the surveillance of newborns who have had health complications, whether these are typical of delivery or post-natal situations, the probability of acceptance of reference of a newborn at risk to the higher care level is not opportune, That is why the importance of having an intensive care unit avoiding deaths of

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

premature babies or with complications is an urgent emergency; these results that have been obtained from the statistical compilation are consistent with what we can see in Sánchez et al., (2022) who indicates that neonatal mortality is a health priority, for this, it is necessary to expand the offer of services with comprehensive and timely care existing a moderate positive relationship between mortality and hospitalization in an intensive care unit, Not being a definitive alternative, since it also depends on whether the newborn manages to withstand the difficulties, for genetic, climatic, environmental or any other reasons.

The characterization of the public expenditure of the maternal and neonatal program in relation to its dimensions of efficiency and effectiveness is perceived at the middle level (59%) explains that the table of needs for goods and services is not prepared in relation to a diagnosis of the program, this is not always timely in its execution, however, it is related to the fulfillment of physical goals and result indicators, although there is no training plan for professionals on administrative rules of the program, as well as a plan for purchasing strategic medical equipment, in addition to the absence of an analysis of the program's budget execution; and thus, Dale (2020) indicates that there are relevant advances in the processes in order to reflect priorities based on results in particular in maternal and newborn health, but there is little incentive to improve the efficiency and quality of the personnel that provide care to the public, limiting the execution of the state budget; on the other hand, Bravo et al., (2022) indicates that the budget by result and the quality of expenditure have a positive relationship; however, there is a scarce articulation between the administrative system of the state and efficiency; on the other hand, the effectiveness of the result that directly impacts public investments in the matter.

It is in this sense that authors such as Huicho et al., (2018) conclude that public spending on reproductive, maternal, neonatal and child health has increased significantly, however findings that influence trends are evident, such as inertial spending, which usually impacts the budget by results, increasing public spending and that in principle, As a result, they should generate a considerable differential manifestation in efficiency and effectiveness, as well as an improvement in the process of decentralization of mixed effects; Also, authors such as Calán et al., (2018) conclude that the budget for results establishes a challenge to improve the quality of public spending, optimizing resources and prioritizing its needs.

As can be understood in the previous paragraph, Wu et al., (2018) indicate something that we must not lose sight of, which is results-based financing, which consists of improving the coverage and effectiveness of the provision of maternal and child services; on the other hand, Hall (2021)

June 2023

Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

refers that by increasing state revenues, a direct and favorable impact on the health sector will be allowed, that will bring with it a decrease in mortality, mainly in countries with low per capita income, where what is required is that there is an adequate direction of the allocation of public funds, in order to establish an improvement in the effectiveness of investments, for which it is necessary that the design of the budget focuses on budget programs with closing gaps. On the other hand, Pinilla-Rodrígues et al., (2021) show usa positive and long-term impact between public spending and the health situation, however, for countries with lower *per capita* income, this seems to have exceeded its optimal point, which would indicate its inefficiency in health terms; conjecturing that the above is due to the low institutional capacity of these countries, preventing higher spending from leading to better health outcomes; Wu et al., (2018) indicate that coverage and quality increased significantly with the results-based budget in maternal and child care in rural areas of Zambia, however from what is perceived by the applied statistics we could not refer the same in the case of what happened in Piura-Peru.

CONCLUSIONS

The diagnosis of the maternal and neonatal program that was identified in a hospital in the region of Piura, a public health institution, is at the middle level (58%) in relation to the six (6) dimensions studied, so there is a very real problem, and this is that the percentage of effectiveness of the program does not coincide with the percentage of the level of compliance. which is at a high level, this makes more than clear the need for a change in the established roadmap.

1.

The level of public expenditure on the maternal and neonatal programme in the hospital is at an average level (59%), in relation to efficiency and effectiveness, which is worrying, since there should be a better maximization of the use of public resources in order to establish an adequate level of effectiveness, taking into account the level of public expenditure; although for the present research we have seen that the non-parametric statistical test Rho Sperman that determined the correlation of the two study variables Maternal and Neonatal Program and public expenditure, affirms that there is a significant relationship between the maternal and neonatal program and public expenditure.

2.

The dimensions identified as most deficient in the maternal and neonatal programme in relation to public expenditure are knowledge of sexual and reproductive health, accessibility to family

June 2023 Volume: 8, No: 4, pp. 2697 - 2713

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

planning, extreme maternal morbidity and maternal mortality, which are precisely the points to which the public programme is directed.

3.

The Friendly Model of the maternal and neonatal program as a proposal to improve the effectiveness of public spending, considering the dimensions of higher level of deficiency for its intervention, we can say that they require an urgent review to be able to determine through a work structure breakdown, which are the points of improvement required to optimize the use of public resources.

REFERENCES

Agudelo Sergio I., Gamboa Oscar A., & Molina Carlos F. (2020) Cost-Effectiveness Analysis of Early vs. Immediate Skin-to-Skin Contact at Birth in Neonatal Morbidity of Low-Risk Newborns, Value in Health Regional Issues, Volume 30, 2022, Pages 100-108, ISSN 2212-1099,

https://doi.org/10.1016/j.vhri.2022.01.002.

https://www.sciencedirect.com/science/article/pii/S2212109922000802

Arbaiza L., Álvarez P., Hernández C., Sarria, S., & Villalba, E. (2017). Monitoring of the Maternal and Neonatal Health Budget Program for the public sector. ESAN University. Retrieved 07.30.22

https://repositorio.esan.edu.pe/bitstream/handle/20.500.12640/1216/SGD 62.pdf?sequence =1&isAllowed=y

Avila-Jaquez, C. (2018). Reduction of maternal mortality in Peru and the capacity approach. Convergence Journal of Social Sciences, (80), 1-24. https://doi.org/10.29101/crcs.v26i80.10790

Avilés Martínez, M., Sellán Soto, M. C., & de la Cruz Troca, J. J. (2022). Differences on postpartum family planning among nursing professionals. Revista española de salud pública, 96:3, e202202011.https://ojs.sanidad.gob.es/index.php/resp/article/view/26/66

Azcarsa Urribari William Richard (2021) General Congress of the Republic. Draft Budget 2022-Health Sector. Executive Summary. MINSA.https://www.congreso.gob.pe/Docs/comisiones2021/Presupuesto/files/cronograma_de_sectores/salud/resumen_ejecutivo_sustento_proyecto_presupuesto_2022_10oct[r].pdf

June 2023

Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

Bravo Saucedo, M. To., Flores Olivos, J. A., & Centurión Cabanillas, C. A. (2022). The Management of the Budget for Results and the Quality of Spending, advances in Peru and Latin America. Educational Synergies. https://doi.org/10.37954/se.vi.259

Calán Peñafiel, Tatiana Elizabeth, & Moreira García, Gaudelia Adriana. (2018). Analysis of the stages of the budget cycle in the Public Administration of Ecuador with the results approach. UISRAEL Scientific Journal, 5(1), 9-22. Epub April 08, 2018. https://doi.org/10.35290/rcui.v5n1.2018.61

Ceccon, R., Meneghel, S., Portes, V., Bueno, A., Ramíres, G., & Bueno, A. (2019). Maternal mortality in the provincial capitals of Brazil. *Cuban Journal of Public Health*, 45(3). Retrieved from https://revsaludpublica.sld.cu/index.php/spu/article/view/835/1262

Costa Romero, Marta, Lalaguna Mallada, Paula, & Díaz Gómez, Nuria Marta. (2019). Skin-to-skin contact after cesarean delivery. Update and proposal for action. Revista Española de Salud Pública, 93, e201902006. Epub September 07, 2020. Retrieved on July 29, 2023, from http://scielo.isciii.es/scielo.php?script=sci arttext&pid=S1135-57272019000100020&lng=es&tlng=es.

Dale E, Prieto L, Seinfeld J, Pescetto C, Barroy H, Montañez V. (2020) Budgeting for results in health: key features, achievements and challenges in Peru. Geneva: World Health Organization. (Health Financing Case Study; no. 17. Health budgeting). License: CC BY-NC-SA 3.0 IGO. Cataloguing (CIP). Available in http://apps.who.int/iris.

- 4. De Castro, F., Rodríguez-Hernández, J. A., Hubert-López, C., Sánchez-Pájaro, A., Rosas-Magallanes, C., Villalobos, A., & Barrientos-Gutiérrez, T. (2020). Massive online course "Sexual and reproductive health": changes in knowledge, dropout, failure and satisfaction. Salud Pública de México, 62(5, Sep-Oct), 559-568. https://doi.org/10.21149/11183
- Enríquez B. F. (2019) Quality of Public Expenditure under debate. Consortium of Autonomous Provincial Governments of Ecuador – CONGOPE. Ediciones Abya Yala: Incidencia Pública del Ecuador: El Instituto de Trabajo y Economía - ITE. Retrieved 19.07.2022 https://biblio.flacsoandes.edu.ec/libros/150858-opac

Feinstein, O., Ligero Lasa, J. A., Rein, M., Schon, D., Majone, G., Weiss, C. H., ... Picciotto, R. (2017). Policy evaluation. Conceptual and analytical foundations. Book. Buenos Aires: CAF. Retrieved from Pag. 17-18. http://scioteca.caf.com/handle/123456789/1008

Ferrer FAM, Millán VMM, Rosales BY, (2018) Severe maternal morbidity in Granma province. Multi Med. 2020;24(2):380-398.

https://www.medigraphic.com/cgibin/new/resumen.cgi?IDARTICULO=99238

June 2023

Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

6. https://dx.doi.org/10.4067/S0718-07642020000600159

Guevara-Ríos, E. (2019). Current status of extreme maternal morbidity in Peru. Revista Peruana de Investigación Materno Perinatal, 5(1), 7–8. https://doi.org/10.33421/inmp.2016156

Goyes Pabón, P. E., & Moposita Tenelema, M. A. (2019). Evaluation of breastfeeding skills, abilities and knowledge in health professionals of the People's Committee Health Center in the period from February 2019 to June 2019. PUCE-Quito.

http://bibliotecavirtualoducal.uc.cl/vufind/Record/oai:localhost:123456789-1615640

Hall, S. (2021) "Government Revenue and Child and Maternal Mortality." Open economies review. 32.1: 213–229. Web. Retrieved: 21.07.2022

DOI: 10.1007/s11079-020-09597-0

Hernández Sampieri Roberto, Fernández Collado Carlos, Baptista Lucio María del Pilar. (2014) Research Methodology. Sixth Edition. Mexico PP 92-101 https://www.uca.ac.cr/wp-content/uploads/2017/10/Investigacion.pdf

Hernández Mendoza, S., & Duana Avíla, D. (2020). Data collection techniques and instruments. Scientific Bulletin of the Economic and Administrative Sciences of the ICEA, 9(17), 51-53. https://doi.org/10.29057/icea.v9i17.6019

7. Hernández Cabrera, Yoan, León Ornelas, Michael Enrique, Díaz Puebla, Jorge Luis, Ocampo Sánchez, Amparo, Rodríguez Márquez, Aymara, & Ruiz Hernández, Marioly. (2020). Clinical characterization of patients with extremely severe maternal morbidity and its perinatal repercussion. Cienfuegos 2016-2018. *MediSur*, 18(5), 789-799. Epub October 02, 2020. Retrieved July 17, 2023, from http://scielo.sld.cu/scielo.php?script=sci-arttext&pid=S1727-897X2020000500789&lng=es&tlng=en.

Herrera Zuleta, I. A., Rodriguez Ruiz, M. F., Fernández Durán, V., & Sánchez Cabrera, L. T. (2022). Nursing in sexual and reproductive health for youth and adolescents. *Nursing Research: Image and Development, 24.* Javeriana-Bogotá https://doi.org/10.11144/Javeriana.ie24.essr

Hoyos-Vertel, Luis M. and Muñoz De Rodríguez, Lucy (2019) Access barriers to prenatal controls in women with extreme maternal morbidity in Antioquia, Colombia. Journal of Public Health [online]. v. 21, n. 1 [Accessed 14 July 2023], pp. 17-21. Available in: https://doi.org/10.15446/rsap. V21n1.69642>. ISSN 0124-0064. https://doi.org/10.15446/rsap.V21n1.69642.

June 2023

Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

Huicho, L., Hernandez, P., Huayanay-Espinoza, CAet al. Understanding the drivers of domestic public spending on reproductive, maternal, newborn and child health in Peru at the district level: an ecological study. BMC Health Serv Res. 18, 833 (2018). https://doi.org/10.1186/s12913-018-3649-x

Höglund, B. & Larsson, M. (2019). The work of midwives and attitudes towards contraceptive counselling and contraception among women with intellectual disabilities: focus group interviews in Sweden. The European Journal of Contraception & Reproductive Health Care, 1–6. doi:10.1080/13625187.2018.1555640

Irons, Rebecca (2019) Qualitative analysis of care in family planning services offered to Quechuaspeaking patients in Ayacucho, Peru. Peruvian Journal of Experimental Medicine and Public Health [online]. 2019, v. 36, n. 2 [Accessed 14 July 2023], pp. 188-195. Available in: https://doi.org/10.17843/rpmesp.2019.362.4356. Epub 26 Aug 2019. ISSN 1726-4642. https://doi.org/10.17843/rpmesp.2019.362.4356.

- 8 Jiménez Moreno, José Alfonso, Contreras Espinoza, Iván de Jesús, & López Ornelas, Maricela. (2022). The quantitative and qualitative as methodological support in educational research: an epistemological analysis. *Humanities Review*, 12(2), 113-128. https://dx.doi.org/10.15517/h.v12i2.51418
- 9. Lafaurie Villamil, María Mercedes, Angarita de Botero, María del Pilar, & Chilatra Guzmán, Clara Inés. (2020). Humanized pregnancy care: the look of pregnant women who come to a hospital health unit. *Current Nursing of Costa Rica*, (38), 180-195. https://dx.doi.org/10.15517/revenf.v0i38.38376
- 10. Mendoza, Walter. (2021). Prioritize reproductive health and maternal health. *Annals of the Faculty of Medicine*, 82(3), 187-188. Epub July 00, 2021. https://dx.doi.org/10.15381/anales.v82i3.21856

Ministry of Health (2019); Annex N° 2 - Budget Programme 0002 Maternal and Neonatal Health. Minimum Content of the Budget Program. Directive No. 002-2016-EF/50.01. Retrieved 20.07.2022

11. https://www.minsa.gob.pe/presupuestales/doc2021/ANEXO2 2.pdf

Nagai M, Bellizzi S, Murray J, Kitong J, Cabral EI, Sobel HL (2019) Missed opportunities: Barriers to increasing effective contraceptive use in the Philippines. PLoS ONE 14(7). Retrieved 20.07.22 https://doi.org/10.1371/journal.

World Health Organization – WHO (2023) Publication: Trends in maternal mortality from 2000 to 2020: estimates by WHO, UNICEF, UNFPA, the World Bank Group and

June 2023 Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

UNDESA/Population Division. Retrieved: 08.04.2023 https://www.who.int/publications/i/item/9789240068759

Ortiz EI, Herrera E, De la Torre A. (2019) Extreme maternal morbidity: a follow-up event to improve the quality of obstetric care in Latin America Colombia Medellin (Cali). 2019; 50(4): 286-92. http://doi.org/10.25100/cm.v50i4.4197

Peñalosa L. E. (2019) Guide for the monitoring and evaluation of public policies. Mayor of Bogotá – Colombia. Retrieved 09.25.22

https://www.sdp.gov.co/sites/default/files/guia para el seguimiento evaluacion de politica s publicas.pdf

- 12 Pérez-Urdiales, I., & Goicolea, I. (2018). How do immigrant women access health services in the Basque Country? Perceptions of health professionals. Primary Care, 50(6), 368–376. doi:10.1016/j.aprim.2017.05.011
- Pinilla-Rodríguez, DE, Jiménez Aguilera, JD, & Montero Granados, R. (2018). Public expenditure and health in the world, 1990-2012. Revista Cubana de Salud Pública, 44 (2), 240-258.
- 14. https://www.redalyc.org/comocitar.oa?id=21458813005

Rodrigues CB, Thomaz EBAF, Batista RFL, Riggirozzi P, Moreira DSdO, Gonc alves LLM, et al. (2023) Prenatal care and human rights: Addressing the gap between medical and legal frameworks and the experience of women in Brazil. PLoS ONE 18(2): e0281581. https://doi.org/10.1371/journal.pone.0281581

- 15. Sánchez-Bayle, M., & Palomo, L. (2018). Health model, care quality index and public health expenditure. Primary Care, 50(6), 378–379. Retrieved 06.12.2021 doi: 10.1016/j.aprim.2017.10.006
- 16 Sánchez Flores, Fabio Anselmo. (2019). Epistemic foundations of qualitative and quantitative research: consensus and dissent. *Digital Journal of Research in University Teaching*, 13(1), 102-122. https://dx.doi.org/10.19083/ridu.2019.644

Sánchez Carlessi H Hugo, Romero Reyes Carlos & Mejía Sáez Katia (2018). Manual of terms in scientific, technological and humanistic research. First Edition, June 2018. Ricardo Palma University. Lima

https://www.urp.edu.pe/pdf/id/13350/n/libro-manual-de-terminos-en-investigacion.pdf

June 2023

Volume: 8, No: 4, pp. 2697 - 2713 ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

Sánchez-Dávila, K., Arévalo-Fasanando, L., Bartra-Reátegui, A., Torrejon-Pezo, C. A., & Torres-Pinedo, R. P. (2022). Mortality and hospital stay in a Peruvian Neonatal Intensive Care Unit. *Revista Salud Amazónica y Bienestar*, 1(2), e393. https://doi.org/10.51252/rsayb.v1i2.393

Vargas Merino, Jorge Alberto, and Zavaleta Chávez, Walter Enrique (2020). The Management of the Budget by Results and the Quality of Spending in Local Governments. Scientific Journal "Visión de Futuro", 24 (2), 37-59. [Accessed on December 7, 2021]. ISSN: 1669-7634. Available in: https://www.redalyc.org/articulo.oa?id=357963491002

Vargas-Zafra L. (2019) Effectiveness of public budget spending allocated to maternal and neonatal health. International Journal of Maternal and Fetal Health; Vol. 4(3): 1-2.

http://ojs.revistamaternofetal.com/index.php/RISMF/article/view/109

Wu Zeng, Shepard, DS, Ha Nguyen, Chansa, C., Das, AK, Qamruddin, J., & Friedman, J. (2018). Cost-effectiveness of results-based financing, Zambia: a cluster-randomised trial. Bulletin of the World Health Organization, 96(11), 760–771. Chicago 17th edition (Author-Date) https://doi.org/10.2471/BLT.17.207100

Zelalem B. Mengesha, Janette Perz, Tinashe Dune, Jane Ussher (2018) Talking about sexual and reproductive health through interpreters: The experiences of health care professionals consulting refugee and migrant women, Sexual & Reproductive Healthcare, Volume 16, 2018, Pages 199-205, ISSN 1877-5756, https://doi.org/10.1016/j.srhc.2018.03.007.

https://www.sciencedirect.com/science/article/pii/S1877575617302744