

The Positive Impact of Early Attachment on Mothers and Newborns: A Study in the Service of the Obstetric Center of the Tulcán Hospital

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Article History	Abstract
<p>Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 11 Sept 2023</p>	<p>Aim: The objective of the research project was to strengthen early attachment between women and newborns in the Obstetric Center Service of the Luis Gabriel Dávila Hospital in Tulcán. Material and method: Qualitative and quantitative paradigms were used, as well as various methodologies such as action, exploratory, descriptive, correlational, bibliographic, field and non-experimental cross-sectional research to obtain a comprehensive understanding of the subject. The study sample consisted of 146 patients who experienced cephalo-vaginal deliveries at said obstetric center, and the survey was used as the main data collection technique. Based on the findings found after the survey, an educational proposal focused on the benefits of early attachment for mothers and newborns in the Obstetric Center Service was designed. Statistics and Result: This proposal sought to make women aware of the importance of early attachment for the emotional and psychological well-being of both. Its implementation is expected to promote a greater affective bond between mothers and children and improve the quality of care in the obstetrics area of the hospital. The results obtained in this research will serve as a basis for future studies and will enrich the knowledge about early attachment and its impact on the early development of newborns.</p>
<p>CC License CC-BY-NC-SA 4.0</p>	<p>Keywords: Benefits, Newborns, Vaginal Delivery, Early Attachment, Mothers, Obstetrics</p>

1. Introduction

Background to the investigation

Martínez T in his study called "Benefits of early skin-to-skin contact in neonatal resuscitation" mentions The newborn presents after delivery, a special period in which he is in a state of alert, calm, in which he can interact with his mother, crawl on his abdomen, move to the breast and start breastfeeding spontaneously. The results obtained were that the benefits found were longer duration in breastfeeding, humanized delivery, reduction of postpartum depression and better thermoregulation. As disadvantages, apparently lethal episodes were found in the neonatal period (AElN), where the neonates stopped breathing. Observing in this study a greater number of advantages than disadvantages in the implementation of this technique. However, all articles refer to the need to perform an adequate assessment and determine if the newborn is able to be resuscitated in his mother's womb, in order to avoid future adverse events (Martínez & Damián, 2014; Centeno et al., 2017).

The study mentioned above refers to the fact that the process of early attachment brings more advantages, such as the benefits that this process can generate unlike the disadvantages which leads to health professionals who attend births feel safe to make this process generated thus a degree of satisfaction to the mother. Kolsoom mentions in the publication: The study entitled "Effect of early skin-to-skin contact of the mother/newborn after delivery on the duration of the third phase of labor and the initiation of breastfeeding". The aim was to determine the effect of mother/newborn skin-to-skin contact after birth. The study concluded that mothers who practice skin-to-skin contact immediately after birth experience a shorter duration of the third stage of labor and an early initiation of breastfeeding (Martinez, 2019; Lopez et al., 2017). The aforementioned study refers to the benefits that the mother can have with early attachment, one of them is that when the newborn is already in 9 the breast begins the third stage of labor that is the delivery will go unnoticed because she will be more interested in her child and in the same way will reduce the pain the suture of the tears that have been generated at the time of expulsion.

Solorzano T mentions that in his study called "benefits of early attachment in primigesta adolescent mothers" which mentions that the main benefits of early attachment in adolescent mothers during childbirth the correct early attachment takes on a transcendental value at the beginning of the fetal maternal relationship as a bioneuro hormonal regulator, stabilizer of the vital signs of the newborn, Lower probability of postpartum uterine bleeding due to the release of oxytocin and in addition to providing support for the permanence of exclusive breastfeeding, this work is focused on a population of 100 adolescent mothers whose deliveries or cesarean sections were attended at the Guasmo Sur General Hospital during January 2018 to December 2018 (Ministry, 2018; Cobo et al., 2017). In the text mentioned above mind refers to that a good early attachment will bring multiple benefits at the time of delivery and throughout the growth of the newborn, also to its mother allowing both to have positive advantages such as adequate breastfeeding, it is also important to note that the Luis G Dávila hospital recently implemented the rules or regulations of ESAMIN with the purpose of providing quality care and warmth to mothers and newborns.

According to Ríos Cet, al. in his study called "Skin-to-skin contact immediately at birth and benefits in the healthy newborn in the first 30 minutes" mentions that birth is a unique stage for the newborn and his mother; who experiences a sudden change at birth, which could be minimized by placing it on the abdomen-chest of the mother at birth and benefit its physiological and psychological adaptation to the external environment in addition to this mentions that skin-to-skin contact categorically improved the physiological and psychological adaptation of the NB in the experimental group. It is necessary to sensitize and train the health professional to comply with the norm and contribute to the survival of the neonate (Giraldo et al., 2017). With the aforementioned early attachment generates a great impact between the mother and the newborn creating an unbreakable bond which at a time is short or long will have its benefits physiologically and psychologically allowing the individual a healthy and comfortable quality of life. From the position of Jaramillo et, al. (2020) in his article whose theme is "Demographic factors related to maternal and infant attachment" in which he mentions that postpartum is one of the determining moments to strengthen the attachment between the mother and child dyad, however, there are demographic factors that can limit this interaction and become a disadvantage for the proper development of the child. It is important to consider that, when reviewing the frequency of attachment in Latin American countries, a very low scientific production has been identified in articles related to the prevalence of maternal and infant attachment (Gago, 2014; Jaramillo et al., 2020). The mother and the newborn at the time it enters the postpartum stage goes through a series of changes whether physical or psychological if they are not accompanied by people who complement this situation this would get out of control, as for the newborn, thus generating a bad attachment having as a disadvantage the development of the baby and demographic factors are work, economic factor, breastfeeding, time. Gago in his study Attachment Theory. The link refers to the fact that attachment theory owes its existence to the British psychoanalyst John Bowlby (1907-1990). At the end of World War II, WHO conducted a study on the needs of children without families. Bowlby would handle the mental health aspects. It involves their contact with the effect of maternal deprivation. In "Maternal Care and Mental Health" (1951), he exposes the unfavorable effects of the deprivation of the maternal figure and points out the means to prevent such deprivation. His theory

questions some theoretical assumptions of psychoanalysis. He concluded that the child's tendency to form a strong and fundamental bond with a maternal figure is part of an archaic inheritance, whose function is the survival of the species, and that this tendency is independent of other needs such as food (Menéndez et al., 2017; Valles et al., 2020).

General objective.

- Develop educational strategies for strengthening early attachment in women and newborns born who attend the obstetric center service of the Luis Gabriel Dávila Hospital in Tulcán.

Specific objectives.

- To substantiate the theoretical references on early attachment, its strengthening and its benefits that

It has the same in mothers and newborns.

- Diagnose the current situation of early attachment in women and newborns who attend the obstetric center service of the Luis Gabriel Dávila Hospital in Tulcán.
- Design educational strategies for strengthening early attachment in women and newborns born who attend the obstetric center service of the Luis Gabriel Dávila Hospital in Tulcán.

2. Materials And Methods

Paradigm and types of research.

Paradigm

In the research, the modality used was mixed, since the quantitative and qualitative paradigm of the research was combined.

A. Qualitative modality The qualitative paradigm was used because an investigation of field that allowed to diagnose and analyze the current situation of early attachment in mothers and newborns of the obstetric center service of the hospital of Tulcán thus seeking benefits for patients who come to this service.

B. Quantitative modality The use of the quantitative modality was through the use of techniques, as is the tabulation of data reached with a survey applied to patients who attended the obstetric center service of the Luis Gabriel Dávila Hospital in the city of Tulcán, which provided us with important data for their respective analysis.

Types of research according to their purpose and objectives

Types of research by design

a. Action Research Research is guided through this design as it was aimed at solving problems on a daily and immediate basis, as is the case of ignorance of the benefits of early attachment in mothers and newborns of the Luis Gabriel Dávila hospital in the city of Tulcán, for this the survey instrument was applied to solve the research problem.

b. For its non-experimental design of transversal type. Its design was non-experimental of type Transversal, because data was collected on the benefits, importance, historical, legal framework of early attachment, in addition the information collected at a given time such as ideas and concepts was analyzed, as well as its two variables both independent and dependent.

Types of research by scope

a. Exploratory research: This research allowed us to expand our knowledge about benefits of early attachment in mothers and newborns of the Obstetric Center Service of the Hospital de Tulcán.

b. Descriptive research: It was based on the description of the reality of the variables, events,

people, groups that were addressed in the subject and to which it was intended to analyze in the research carried out, which helped in a concise way in the current situation of early attachment in mothers and newborns who come to the Obstetric Center Service of the Hospital of Tulcán.

c. Correlational research: This type of research was used as it allowed us to measure the independent variable that is benefits of compliance and the dependent which is early attachment in mothers and newborns since we were able to link these phenomena that were presented in the research.

d. Bibliographic research: This type of research is very important since it allowed us to Collect information necessary to our topic in different places, such as books, academic texts, theses, websites, scientific articles which helped me to argue positively in the theoretical framework and our research in general expanding knowledge to be able to socialize with the people of our environment.

e. Field research: Field research was also carried out because it allowed to make a study in the place of the facts that is the service of obstetric center of the hospital of Tulcán, applying the survey leading to a collection of information necessary to satisfy all the questions that have been generated throughout the investigation, in order to have optimal results and with credibility.

Procedures for searching and processing data

Population and sample

a. Population: corresponds to 236 patients who had their vaginal cephalic deliveries attended in obstetric center of the Luis G. Dávila Hospital in the months of October, November and December of the year 2021 according to statistics.

b. Sample: Sample formula is applied resulting in 146 patients who had their deliveries vaginal cephalus, who were selected at the time of postpartum at the Luis G Dávila Hospital

$$n = \frac{Z^2 * P * Q * N}{e^2 * (N - 1) + Z^2 * P * Q}$$

Where:

Z: coefficient that takes into account the level of confidence with which you work, it is established to work at least with 95% confidence for which the value of $Z = 1.96$.

P: percentage of the population that meets the characteristics of interest for the study.

Q: percentage of the population that does not meet the characteristics of interest for the study. $Q = 1 - P$ When these proportions are not known, the assumption of maximum statistical variability is assumed $P = Q = 50\%$.

E: error with which you work must ensure that the error is the least possible, it is suggested that it is less than or equal to 10%, an element that guarantees that the study can be conclusive.

$$\begin{aligned} n &= \frac{Z^2 * P * Q * N}{e^2 * (N - 1) + Z^2 * P * Q} \\ n &= \frac{1,96^2 * 50\% * 50\% * 236}{5\%^2 * (236 - 1) + 1,96^2 * 50\% * 50\%} \\ n &= \frac{226,6544}{1,5479} \\ n &= 146 \end{aligned}$$

Information processing and analysis plan: Research methods, techniques and tools.

Theoretical methods

Empirical research methods

- a. **Scientific observation:** Through scientific observation it was possible to appreciate the reality that

Health professionals live day by day in the care of births, directly evidencing the application of the process of early attachment.

- b. **Documentary analysis: Documentary** analysis is based on the compilation of information, this

It allowed in this research to collect information from the documents that synthetically represent the originals, contain basic information of the original document and are freely consulted, which are not a constituent part of the bibliographic sources expressed in articles, essays and books, for their subsequent development.

Theoretical research methods

- a. **Analytic – synthetic:** This method admitted the decomposition of the two variables such as

Benefits of compliance and early attachment in mothers and newborns, to then study in an integral way, collecting information from different authors either thesis, websites among others to achieve good research.

- b. **Inductive – deductive method:** It is based from the general to the particular and vice versa, which is

will use in the development of the entire project, quantifying the level of acceptance to reach the problem that consists of what are the benefits of early attachment associated in mothers and newborns of the obstetric center service of the Luis Gabriel Dávila Hospital in Tulcán

- c. **Systemic method:** It allowed to study the object according to its components and the set of Relationships between early attachment in mothers and newborns, with the benefits of compliance

- d. **Historical-logical method:** A previous study of the research topic was carried out, such as The background, to have a clear idea that directs the investigation, also the logical allowed to know basic and specific concepts for the development of the same

Research techniques and tools

- a. **Technique**

The survey: it is a technique that was used is the survey with its respective questions for which a questionnaire was elaborated with questions that were applied to the patients who gave birth in the obstetric center service whose information served to analyze the topic studied.

- b. **Instrument**

The questionnaire: allowed the structuring of the open questions, multiple choice and then apply to patients who gave birth in the obstetric center service. This quiz contains structured multiple-choice questions.

Validity of the instrument

A pilot test was carried out to observe the obstacles that were presented in the application of this, and then obtain a positive validation in the application of this.

3. Results and Discussion

Results of the diagnosis of the current situation

Question 1. Age

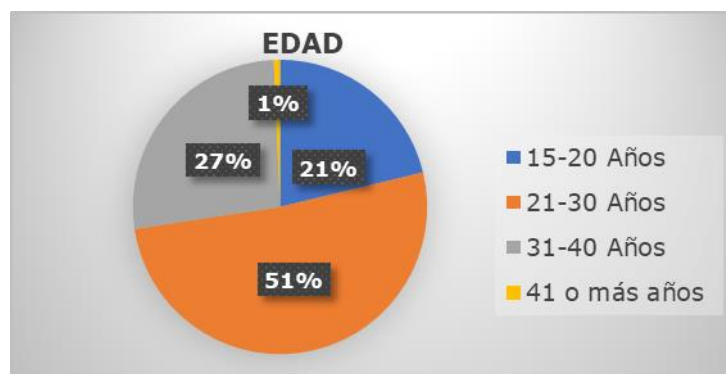


Figure 1. Age

Analysis and interpretation. According to the people surveyed who came to give birth at the Luis G Dávila Hospital, it can be evidenced that in the health home there has been greater attention to pregnant women between the ages of 21 and 30 who prefer the Hospital, some of the women who participated in this study mentioned that this age range is the most appropriate to have their children and with the passage of time It becomes a little more complex.

Question 2. Instruction

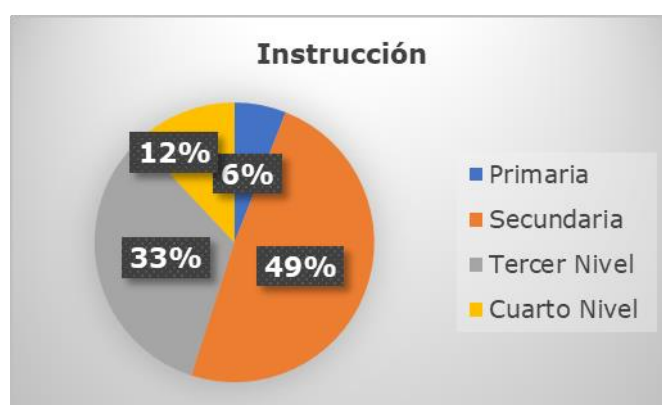


Figure 2. Instruction

Analysis and interpretation

As you can see in the graph most of the population surveyed belongs to the level of secondary education which could be found a great conformity with the knowledge acquired at this level, finally we have the fourth level instruction, in which it has been possible to show that the degree of knowledge of early attachment and its benefits is greater since its education is more complete unlike the others Levels of educational instruction.

Question 3. Do you know what early attachment is?



Figure 3. Early attachment

Analysis and interpretation. As can be seen in the graph in the first place we have that most of the surveyed population does not know or has heard very little about what is the skin-to-skin contact between the mother and the newborn in an immediate way, thus generating that this process is not taken with the seriousness that deserves it by the mothers, losing the great benefits that early attachment has both for the mother and for example improving pain tolerance at that time and for the newborn improving heart rate, helps thermoregulation among others and finally we find that women who gave birth in the hospital of Tulcán if you know about the benefits of early attachment generating unique experiences in the care of your birth.

Question 4. Do you know the benefits of early attachment?

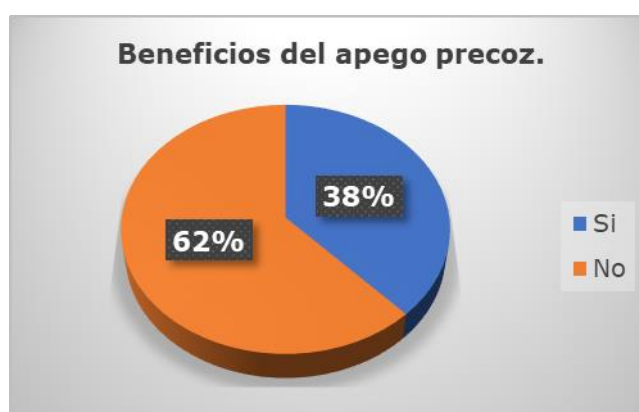


Figure 4. Benefits of early attachment

Analysis and interpretation

According to the women surveyed at the Luis G Dávila Hospital, most do not know the benefits of early attachment, thus privatizing new experiences that it can generate in the birth process, both for the mother and for the newborn, it will have difficulty in developing psycho-affective effects and in a small amount the mothers surveyed know about the benefits that early attachment has, mentioning that this process decreases anxiety, stress at the time of childbirth and improves proper breastfeeding.

Question 5. Did you receive information about early attachment during prenatal care?



Figure 5. Information

Analysis and interpretation

The data obtained indicate that a large percentage of women surveyed have not received information from the nursing staff of the Luis G Dávila Hospital about early attachment during prenatal control, however, a smaller percentage affirms whether they have received such information sometimes, so it is important to strengthen health promotion in this area and implementation of actions that promote better living conditions in women in state of gestation.

Question 6. If yes, where did you get this information?

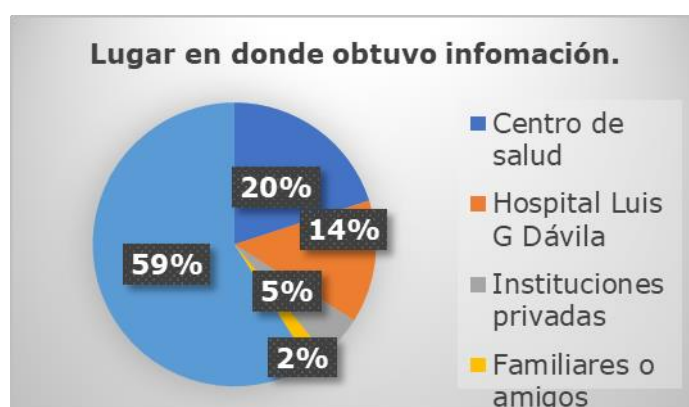


Figure 6. Where you obtained information

Analysis and interpretation

As can be seen in the graph, most of the surveyed population did not receive information on what is early attachment or skin-to-skin contact, pregnant women received information at the different health posts where their controls were carried out, also in health centers, private institutions, family or friends and the Luis Gabriel Dávila Hospital the latter provided this information because it was in a stage of ESAMIN accreditation which allowed generating great benefits to mothers and newborns.

Question 7. Early attachment was performed at the Luis Gabriel Dávila Hospital



Figure 7. Early attachment at the Luis Gabriel Dávila Hospital

Analysis and interpretation

Most of the population surveyed mentioned that early attachment was not performed in the hospital due to different factors that occurred at that time such as lack of personnel, complications in mothers or newborns, unlike people who did make early attachment it was because they know the importance of early attachment for both the mother and the newborn.

Question 8. Was the early attachment immediately after birth? If your answer is don't say why.



Figure 8. Application of early attachment immediately

Analysis and interpretation

As we have already been analyzing in the previous graphs, early attachment has not been made due to different situations that have happened at that time of delivery or if it has been done but in an incorrect way by professionals and in a small amount we find that if early attachment has been made properly thus achieving great satisfaction towards mothers.

Question 9. How was the process of early attachment?

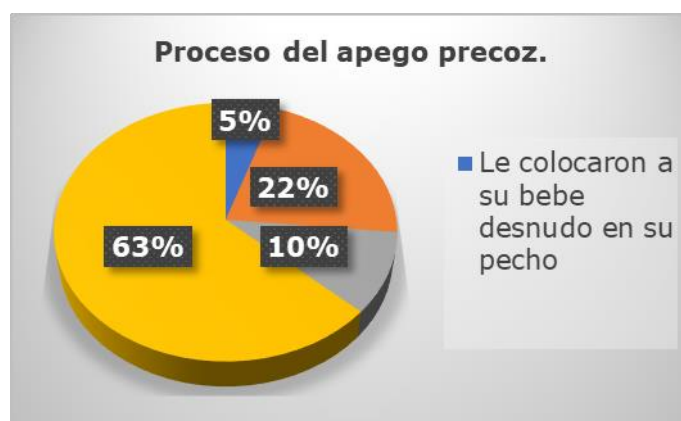


Figure 9. Early attachment process.

Analysis and interpretation

A large part of the surveyed population has not carried out this process of skin-to-skin contact and secondly we have that if the early attachment has been made correctly to the surveyed population which consists of placing the newborn immediately on the mother's chest wearing a hat, diaper, stockings and covered with a dry cloth thus preventing the baby from losing heat and in a small amount we have that the health personnel performs an inadequate process of early attachment as it is that the newborn is placed completely clothed or completely naked.

Question 10. How did you feel when you had the early attachment?

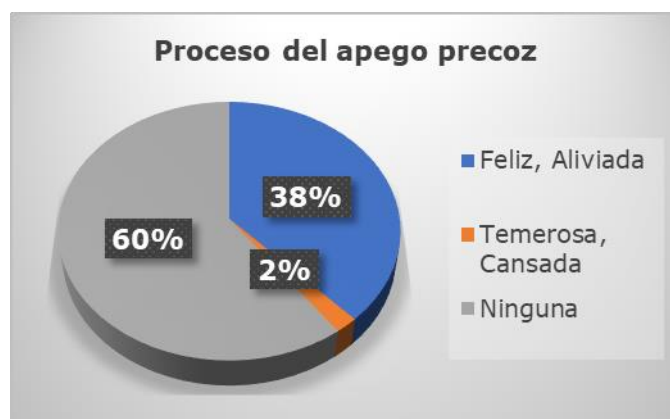


Figure 10. Early attachment process

Analysis and interpretation

A part of the surveyed population which if an adequate early attachment was made by the health personnel who attended their births, mention that they felt happy, relieved and that this process of skin-to-skin contact has been an inexplicable experience, on the other hand we have the vast majority that did not perform early attachment thus preventing mothers from not achieving early connections with their children and losing The effectiveness of the first blowjob, reducing the time for effective breastfeeding.

Question 11. What was the duration of the early attachment process?



Figure 11. Time of early attachment

Analysis and interpretation of

For an early attachment to be adequate we must take into account the duration that the newborn must be in skin-to-skin contact with its mother, in this graph it can be seen that the vast majority did not make early attachment, then we evidence that if early attachment has been made but inadequately by health personnel or the different situations that were presented at the time of delivery since the duration of this process is less than 60 minutes and finally we have that only 13% of the surveyed population if an adequate early attachment has been made, lasting this process greater than or equal to 60 minutes generating benefits such as thermoregulation, Shorter duration of crying, improving the level of heart and respiratory rate.

The issue of early attachment and the importance of providing breast milk are aspects of vital relevance for the well-being of both mother and newborn. Although some parents may not be fully aware of the need for this practice, multiple studies and recommendations support its benefits, and in many parts of the world, as noted by (Martinez, 2014; Barrero et al., 2020) in their article "Benefits of Early Skin-to-Skin Contact in Neonatal Resuscitation," it is accorded great importance. From a psychological approach, early attachment establishes an affective bond between mother and baby, generating beneficial feelings for both. In addition, various research and guidelines have shown that skin-to-skin contact between the newborn and its mother, and in some cases, also with the father, favors the successful establishment of breastfeeding (Ayala et al., 2020; Moncayo et al., 2020). In fact, it has been observed that even when early contact is with the father, the baby can initiate sucking on his nipple, which shows the importance of affective contact for the well-being of the newborn.

In this sense, it is essential to continue promoting in our country, as in others, the preference for breastfeeding as a way to avoid diseases and strengthen the immune system of newborn children. Breast milk is an essential source of nutrients and antibodies that contribute to the optimal development of babies, and early attachment favors a parenting with greater emotional attachment and security for the child in his early stage of life. It is essential that educational strategies that promote the importance of early attachment and breastfeeding continue to be disseminated and implemented in health institutions, as well as in the community at large (Ayala et al., 2020; Moncayo et al., 2020). In this way, it will contribute to improving the health and well-being of the neonatal population, and to strengthening the affective bond between parents and children, creating solid foundations for healthy development and a society more committed to the care and well-being of its most vulnerable members.

4. Conclusion

The theoretical foundation of this research was of vital importance to obtain a comprehensive perspective on early attachment and its benefits. Through the collection of information from various reliable sources, such as books, articles and scientific journals, concepts and ideas from different authors could be explored, supported by their respective citations. This allowed a critical analysis from the perspective of the researcher, enriching their knowledge and obtaining a broader vision on the subject. Regarding the methodology used, this research focused on diagnosing the current situation of early attachment in pregnant women. The results of the study revealed a low level of knowledge on this topic due to the lack of socialization and application of the skin-to-skin contact process by health professionals. Based on these findings, an intervention plan was designed with the aim of strengthening and improving early attachment between mother and newborn.

The proposed intervention plan includes educational, promotion and prevention strategies. Through these actions, quality information was provided to the study group, which led to a significant increase in their knowledge about early attachment and allowed them to develop skills related to this topic. The implementation of these strategies at the Luis G Dávila Hospital has contributed to improving skin-to-skin contact between mothers and their newborns, thus promoting a healthier start to life and strengthening the emotional bonds between them. In conclusion, the theoretical foundation and methodology applied in this research have been fundamental pillars to understand the importance of early attachment and its implications for the health and well-being of mothers and newborns. Through the intervention plan implemented, significant progress has been made in the promotion and improvement of early attachment in the hospital environment, contributing to better care and early development of babies, as well as greater satisfaction and empowerment of mothers in the maternity process. This research work has laid solid foundations for future research and has generated an impact on the quality of care and attention in the obstetrics area of the aforementioned hospital.

References:

- Ayala, J. M. B., Cando, J. L. M., & Gallegos, S. B. (2020). Analysis of the principle of concurrence in the electronic reverse auction in the Santo Domingo canton using Pestel analysis combined with Satty's AHP. *University and Society*, 12(6), 366–372.
- Barrero, R. A., Hernández, Y. S., & Pravía, M. P. (2020). Key dimensions of effective public management in local governments: Application in a case study. *University and Society*, 12(6), 411–420.
- Centeno, P. A., Cadena, A. A., León, G. P., Campaña, L. C., Paul, A. C., Absalón, A., et al. (2017). Student competences and neutrosophic personality.
- Cobo, D. A., Jami, J. E., Medina, G. E., Neutrosophic, R., Cobo Álvarez, D. A., Elizabeth, J., et al. (2017). Neutrosophic study on the levels of physical activity in undergraduate medical students.
- Gago, J. (2014). Attachment theory: The link.
- Giraldo-Montoya, D. I., Castañeda-Palacio, H. L., & Mazo-Álvarez, H. M. (2017). Demographic factors related to maternal and infant attachment. *Universitas Medica*, 58(2), 233-243.
- Jaramillo, M. E. N., Hernández, C. E. P., & Pico, O. M. A. (2020). Lead poisoning and neurobehavioral effects in the association of Carpenters city of Tulcán, 2018. *University and Society*, 12(5), 431–437.
- López, A. S., Fong, M. I., Jordán, D. L., Suárez López, A., Fong Betancourt, M. I., Lorena, D., et al. (2017). Use of neutrosophy in the evaluation of a health education program for undergraduate medical students.
- Martínez, J. (2019). Analysis of compliance with early attachment during the immediate puerperium in women and neonates attended at the Obstetric Center of the Calderón Teaching General Hospital during the period October 2018- March 2019. <https://doi.org/10.1016/j.socscimed.2019.05.029>
- Martínez, T., & Damián, N. (2014). Benefits of early skin-to-skin contact in neonatal resuscitation. *Revista Universitaria de Salud*, 11(2).
- Menéndez Guerrero, G. E., Navas Cabrera, I., Hidalgo Rodríguez, Y., & Espert Castellanos, J. (2017). Pregnancy and its complications in the adolescent mother. *Rev Cubana Obstet Ginecol*, 38(3), 333-342.
- Ministry of Public Health of Ecuador. (2018). Comprehensive care for children. Manual. Quito: Ministry of Public Health, National Directorate of Normatization. <https://doi.org/10.3390/w13081017>
- Moncayo, J. C. N., Giler, S. A. M., & Street, W. A. C. (2020). Legal logic, a substantial tool for understanding the relationship between the state and law. *University and Society*, 12(6), 437–443.
- Valles, V. M. R., Collaguazo, W. M. A., Gudiño, C. W. M., Cuesta, P. Y. C., & Morales, L. G. C. (2020). The accounting expertise and its contribution as evidence to the administration of justice canton Ibarra. *University and Society*, 12(5), 69–74.