Impact of disruptive education on nursing intervention targeting mothers of newborns in the context of COVID epidemic-19

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ABSTRACT - Describe the effect of results of the nursing intervention in tele-guidance received by mothers with newborns exposed to COVID-19. In this context, it is necessary to take important measures that allow the maintenance of people's health, especially newborns, the health of the newborn will be directly linked to the health of their mothers and other members of the family. A systematic review was carried out with a bibliographic search using the keywords' covid19, nursing care, mother, and newborn, as well as disruptive education. Since July and August 2020. In relation to the SARS-COV 2 pandemic. (8). Of the 100% (209 patients in the month of July), 33% of the total (69) mothers and neonates with suspected and diagnosed with positive covid and, to date, in the National Hospital of level 4, there was that most studies reported that newborns and mothers were asymptomatic or had mild symptoms and had no adverse perinatal outcomes. 64 mothers (92.7%). Among the studies with positive mothers, 5 (7.2%) of mothers reported moderate clinical characteristics. In these case studies, placenta, and no positive results were reported. In the studies that analyzed breast milk, negative results for Covid 19 were reported. Therefore, tele-orientation for breastfeeding and two other modules proceeds by initiating programs Using disruptive education in the context of a pandemic with telework, Telorientation and tele-monitoring, a program that began in June 2020 in a level 4 national hospital, in Lima-Peru.

Additional Keywords and Phrases: Disruptive Education, Nursing, Mother and Newborn, Covid 19.

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1 Introduction

IT seeks to provide health teams with tools that can be useful to carry out those activities that cannot be executed as standard, but that also require their attention. Many of them cannot be resolved with the use of tele guidance, require assistance to health centers or also the integration of health equipment for resolution. [1]. It is important to note that these guidelines seek to compensate for previously issued recommendations only for the duration of the pandemic. This includes practices related to health controls of the pregnant person during pregnancy in the context of the pandemic, monitoring of the high-risk newborn during the pandemic, entry of families to neonatology services in the COVID-19, among others. [2]

Strategies indicated, reorganize, and facilitate shifts by telephone, or alternative digital means.

Provide clear information and signage on changes in the mode of care during postnatal and neonate control from 0 to 28 days. Evaluate results of complementary studies and/or follow-up. Ensure early consultation. Use telemedicine (video conferencing, WhatsApp, other social networks, etc.) Clayton M. Christensen, professor at Harvard Business School, coined the term disruptive technology. In his

1997 best-selling book, "The Innovator's Dilemma," Christensen separates new technology into two categories: sustained and disruptive. Sustained technology is based on incremental improvements to an established technology. Disruptive technologies today in the health sector impose a new challenge not only for their acquisition, but also for the proper management and implementation of these according to the common and social benefit of the population, which allow to guarantee a health care in this case of efficient, sustainable, and quality nursing, as well as the latter for advice. [3]

Disruptive technologies or innovation is defined as one that leads to the emergence of products and services that preferably use a disruptive strategy ('which causes a sudden rupture') versus a sustainable strategy to compete against a dominant technology. But accepting this terminology as a semantically terminal definition would leave many gaps in knowledge [3]. Our plan is to add beneficiaries and enjoy the tele orientation of the four modules such as: "Alo Bebe", "Newborn Care" "Breastfeeding" and "Growth and Development" in the context of pandemic by covid 19. Since the beginning of time, each new technological invention has been a paradigm shift for the way people

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operate in their work and in the activities of daily a. life, making it easier to act individually and collectively. They are usually small changes or mere adaptations, but sometimes there is an innovation that leaves the previous mechanisms obsolete. This is what is known as "disruptive technology" [3] The combination of affordability and an easyto-use interface of the Windows operating system were critical to the rapid development of the personal computing industry in the 1990s to the present day. Personal computing disrupted the television industry, as well as many other activities. Email transformed the form of communication, largely displacing letter writing and disrupting the postal and postal card industries. Cell phones made it possible for people to call anywhere, disrupting the telecommunications industry. Laptop and mobile computing made a mobile workforce possible, allowing people to connect to corporate networks and collaborate from anywhere with their workplaces.[3], That is why the obvious need for its use these days is so evident, in the context of pandemic by COVID 19.

2 PROCEDURES FOR PAPER SUBMISSION

- 2.1. Therefore, this is aimed at the Neonatal population cared for in the Neonatology services, of the national hospital level 4, being activities that are carried out after discharge of the newborn, which at present have been discontinued, due to the emergency of COVID 19, with remote work guides that allow efficient, effective, and quality care to be provided to Mothers with newborns from 0 to 28 days old. [6]
- 2.2 Remote Work for vulnerable personnel (25 neonatology nurses, national hospital level 4) Urgency decree No. 026-2020 that contemplates exceptional and temporary powers in a pandemic due to covid 19, which in article 16 defines remote work as: "[4] the provision of subordinate services with the physical presence of the worker in his home or place of home isolation, using any means or mechanism that makes it possible to carry out the work outside the workplace, provided that the nature of the work allows it. [5] The current development of ICTs allows us to imagine, for the first time since the educational reforms that substantially expanded the coverage of education systems, an education that is both massive and personalized. [3]
- 2.3. Four modules and follow-up AT HOME WITH HEALTH education for the mother and caregiver of healthy newborns and children of covid-positive mothers.

To reduce complications after discharge of a from the neonatology services of the national hospital of level 4 of **Lima - Peru. - mothers wer** carried out with the mothers in the four modules of the program. [7]

- .2.4 The present work aims to show the application of the different disruptive technologies according to the area of public health through the examples not only used in Peru, but at the universal level in the health sphere. The Mobile Internet: It's ubiquitous connectivity and an explosive proliferation of apps that are allowing users to continue their daily routine with new ways of knowing, perceiving, and even interacting with the physical world. As an example of this we have multiple applications for mobile, which today allow you to interact with basic information of sanitary activity as Android OS Package. In addition to WhatsApp social networks, Facebook Etc. other educational platforms such as Zoom and Google meet. Etc. [3]
- 2.4.1 TELEPHONE TRIAGE. It is the triage of the tele orientation program and tele monitored is the gateway for efficient and effective assistance and consequently, a quick and easy tool to apply in the current context, prioritizes the rapid identification of suspicious case and implementation of measures that decrease the dissemination of Sars Cov-2, realization of virtual medical history of the neonate, which will then be included in a matrix that shows the work carried out with the mothers in the four modules of the program. [7]
- 2.4.2 NEWLY BORN CARE. No cases of coVID-19 confirmed newborns have been reported so far [2]; July 2020) of 69 mothers (33%) of a total 209, These are the cases that have been reported, experienced a mild illness, even some were asymptomatic (64) mothers. The risk of horizontal COVID-19 transmission for the neonate (by droplet or contact) is the same as in the general population, usually by an infected proximo relative or by the mother. [6]:
- 2.4.3 The present work aims to show the application of the different disruptive technologies according to the area of public health through the examples not only used in Peru, but at the universal level in the health sphere. The Mobile Internet: It's ubiquitous connectivity and an explosive proliferation of apps that are allowing users to continue their daily routine with new ways of knowing, perceiving, and even interacting with the physical world. As an example of

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- .2.5. Carry out an information and accompaniment process for mothers and families that allows to make an examination of the possibilities, risks, as well as the hygiene and contagion prevention measures to be developed in specific relation to skin-to-skin contact, breastfeeding and isolation. [8]
- .2.6 All children of women with suspicion or confirmation of COVID-19 should be ruled out against SARS-CoV-2 infection The diagnostic tests used in neonates are the same as those used in the pediatric population.
- .2. 7 PCR-RT should be performed 24 to 48 hours after delivery to all children of mothers with confirmation of SARS-CoV-2/COVID-19 infection. If the molecular test is negative and if you have high suspicion of SARS- Cov 2, the molecular test RT- PCR 48 to 72 hours should be repeated.

General care of the newborn and mother:

- 2.7.1 Clean the umbilical stump daily with soap and water during the baby's bath, dry thoroughly.
- 2.7.2 Keep baby clothes clean and dry.
- 2.7.3 Change the diaper frequently to prevent burns to the genital area.
- 2.7.4 Do not lie face down to sleep baby, this can increase the risk of sudden death. e. Do not leave the baby in the care of inexperienced persons, minors, or strangers.
- 2.7.5 After feeding it, take out the gases to the baby, it is not necessary to slap or move sharply, lifting it on your chest may be enough.
- 2.7.6. Maintain eye contact with the baby while feeding it. Favor the mother-child bond.
- 2.7.7 The couple and family must ensure a protective and friendly environment for the mother, supporting her in the tasks daily care and baby care.
- 2.7.8 Monitor signs of alarm in the mother: foul and heavy vaginal bleeding, fever, headache, puffy feet, paleness, impaired consciousness, shortness of breath. crying and sadness. In the event of a file one or more, go to the emergency department.
- 2.7.9 Watch for alarms in the newborn: Does not eat, vomit, do not urinate, does not deposition, cry without

- 2.7.10. apparent reason, has a fever (temperature greater than or equal to 38 degrees), turns purple, makes
- 2.7.11 noises breathing, your ribs sink when you breathe. If you submit one or more, please contact to the emergency department.

2.8.BREASTFEEDING



If the mother is symptomatic and does not feel good to breastfeed or in situations of serious illness or complications that prevent direct breastfeeding, or the mother does not wish to do so, it is recommended that the mother remove milk to avoid problems of breast congestion and to maintain milk production. If the mother is symptomatic and does not feel good to breastfeed or in situations of serious illness or complications that prevent direct breastfeeding, or the mother does not wish to do so, it is recommended that the mother remove milk to avoid problems of breast congestion and to maintain milk production. You can offer the baby food with a glass or spoon.

2.8.1. GROWTH AND DEVELOPMENT REMOTE WORK PLAN To promote and benefit in providing care coverage to children 0 to 28 days after discharge from the national hospital level 4 for healthy newborn control and home follow-up with health education for the mother and caregiver of healthy newborns and COVID mothers. (Weight, size, vaccine, reflexes, etc). The growth and development program at home through Tele Communication, in addition to the provisions of the decree Urgency

No. 026-2020 that in Article 16 defines remote work as: " the provision of subordinate services with the physical presence of the worker in his domicile or place of home isolation, using any means or mechanism that makes it possible to carry out the work outside the work center, provided that the nature of the work permits."[1]

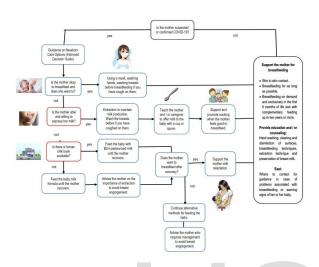


Figure 1. Considerations for BREASTFEEDING in mothers or Newborns with Suspicion or confirmation by SARS COV 2. (MINSAL COLOMBIA)

3 RESULTS

- **3.1 Table.1** Of 100% of 209 mothers were cared for (209)98% i.e., 204 mothers received Telorientation (2%) received not by various factors.
- **3.2 Table 2**. 100% COVID 19+ mothers cared for July (69)97.6% i.e., 64 mothers received Telorientation in breastfeeding and other modules. only the 7.3% (5) did not receive for avariety of factors.

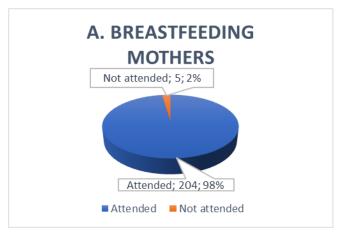


Table.1	BREASTFEEDING	Columna1
TELEORIENTATION	Mothers	Porcentage
Attended	204	97.60%
Not attended	5	2.40%
TOTAL	209	100%

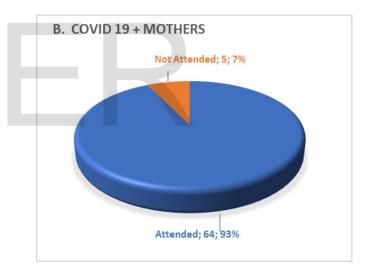


Table.2	COVID 19 + MOTHERS	Columna1
TELEORIENTATION	Mothers	Porcentage
Attended	64	92.70%
Not Attended	5	7.30%
TOTAL	69	100%

4 CONCLUSIONS

- The population served with the Virtual Counseling Methodology with educational sessions was 209 mothers. The achievement obtained in the month of July is 98%, corresponding to 204 mothers with exclusive and successful breastfeeding and tele education another module.
- Nursing care through Tele-guidance was given priority and emphasis on education 64 mothers who have had COVID 19 (93%) of 69 mothers, achieving safety in mothers, for breastfeeding
- The population served with remote work has 100% acceptance with results of user satisfaction with lessons learned and virtual sessions that provide teaching and learning about the care of the newborn, growth and development Making use of virtual platforms such as: Zoom and Google meet, which promotes learning.

5 RECOMMENDATIONS

- Peru, despite the socio-economic conditions it faces, has the desire to introduce disruptive technologies based on the well-being of the patient and newforming times of pandemic.
- Disruptive technologies today in the health sector impose a new challenge not only for their acquisition, but also for the proper management and implementation of these according to the common benefit of the neonatal maternal population, which guarantee more efficient, sustainable, and quality care, in the context of Covid 19.
- This is my modest way to provide a better knowledge and understanding of its use.

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