

Assertive communication from nursing staff to mothers about vaccinations and compliance with the immunization schedule in children under 5 years old

Comunicação assertiva da equipe de enfermagem às mães sobre vacinação e cumprimento do calendário vacinal em crianças menores de 5 anos

Comunicación asertiva del personal de enfermería a las madres sobre las vacunas y el cumplimiento del calendario de inmunización en el niño menor de 5 años

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ABSTRACT

Communication is an eminently interactive activity through which the establishment of interpersonal relationships is fostered, especially trying to transmit information to others as happens with health staff, especially nurses who dedicate the greatest percentage of their time to patients care. Considering these aspects in this work, the objective was defined to analyze the relationship between the assertive communication of nursing staff to mothers about vaccines and compliance with the immunization schedule in children under 5 years old at the Atahualpa health facility, September period. 2022 – August 2023. To achieve this purpose, a phenomenological exploratory study was developed in which 183 mothers from the aforementioned health facility participated. Based on these results, 62.8% of participants were identified with an understanding of the explanations provided and adequate levels of satisfaction with the information received, as well as the corroboration of the working hypothesis that assertive communication by the nursing staff influences the compliance with the vaccination scheme by the representatives of the children.

Keywords: assertiveness, communication, nurse, mothers, children, vaccines.

RESUMO

A comunicação é uma atividade eminentemente interativa por meio da qual se fomenta o estabelecimento de relações interpessoais, principalmente entre a tentativa de transmitir informações aos outros como acontece com o pessoal de saúde, principalmente os enfermeiros que dedicam a maior porcentagem de seu tempo ao cuidado do paciente. Considerando esses aspectos neste trabalho, definiu-se como objetivo analisar a relação entre a comunicação assertiva da equipe de enfermagem às mães sobre as vacinas e o cumprimento do calendário vacinal em crianças menores de 5 anos na unidade de saúde Atahualpa, período de setembro. 2022 – Agosto de 2023. Para atingir esse objetivo, foi desenvolvido um estudo exploratório fenomenológico do qual participaram 183 mães da referida unidade de saúde. Com base nesses resultados, identificou-se 62,8% dos participantes com compreensão das explicações fornecidas e níveis adequados de satisfação com as informações recebidas, bem como a corroboração da hipótese de trabalho de que a comunicação assertiva da equipe de enfermagem influencia no cumprimento da vacinação esquema pelos representantes das crianças.

Palabras clave: assertividade, comunicação, enfermeira, mães, crianças, vacinas.

RESUMEN

La comunicación es una actividad eminentemente interactiva a través de la cual se propicia el establecimiento de las relaciones interpersonales, especialmente entre tratan de transmitir información a otros como sucede con el personal de salud, especialmente las enfermeras quienes dedican el mayor porcentaje de su tiempo a los cuidados de los pacientes. Considerando estos aspectos en este trabajo se definió como objetivo analizar la relación de la comunicación asertiva del personal de enfermería a las madres sobre las vacunas y el cumplimiento del calendario de inmunización en el niño menor de 5 años en el establecimiento de salud Atahualpa, periodo septiembre 2022 – agosto 2023. Para el logro de este propósito se desarrolló un estudio de tipo exploratorio fenomenológico en el que participaron 183 madres procedentes del establecimiento de salud mencionado. A partir de estos se identificó como resultados un 62,8% de participantes con entendimiento de las explicaciones suministradas y adecuados niveles de satisfacción con la información recibida así como la corroboración de la hipótesis de trabajo de qué comunicación asertiva del personal de enfermería influye en el cumplimiento del esquema de vacunación por parte de los representantes de los niños.

Palavras-chave: asertividade, comunicação, enfermeira, mães, crianças, vacinas.

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This study confirms that assertive communication by the nursing staff influences the compliance with the vaccination scheme by the representatives of the children.

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INTRODUCTION

Communication represents one of the fundamental skills through which human beings can be permanently in contact with other people, manage to establish agreements, transmit ideas, thoughts, feelings. In this sense, it is essential in all spaces of interpersonal interaction, especially when it comes to providing information to other people. According to what was exposed by Satir (1), communication implies the expression of verbal and non-verbal aspects that are developed in a social context.

In correspondence with what is described by the author, communication always implies interaction or transaction and includes the possibility of giving and receiving according to certain meanings and represents one of the most reliable indicators of interpersonal performance. In the context of health care, it represents a means to narrow the existing gap in aspects such as indifference, clinical observation, documentation, and information gathering.

According to what was stated by Satir (1), when people need to obtain truthful information, they must communicate clearly, a process in which assertive communication comes into play, understood as the ability to express what is thought, felt and desired at the moment. adequate, with the precise words, aimed at finding solutions and successful exchanges between the parties.

In correspondence with the above, communication is part of the activities carried out by the health staff, especially the nursing staff who directly attend to the patients and through this process must inform of the various routines and activities that the assisted must comply with to maintain or reestablish their health. As stated by Mulu (2) in an investigation carried out in Ethiopia, in a group of 590 respondents with whom compliance or not with the vaccination schedule was analyzed, according to the schedule and its link with the mothers' knowledge. The qualitative results showed that the lack of knowledge and information of the parents or caregivers, and inappropriate communication with health personnel hindered vaccination at the scheduled times, manifested by a high lateness in compliance with the immunization schedule.

Compliance with immunization activities has helped prevent around 2.5 to 6 million deaths per year caused by conditions such as diphtheria, tetanus, whooping cough, influenza and measles, as stated by the WHO (3). Based on the above, since the year 2000, new vaccines have been incorporated to prevent infections such as rotavirus (RV), meningococcus and human papillomavirus (HPV). These advances in immunization allow us to calculate that 77,000 fewer admissions for diarrhea in North American in children have been reduced, as expressed by Ventola (4). Corresponding to this, UNICEF supplies vaccines to at least 6% of children under 4 years of age worldwide. Agreements for the maintenance of immunization programs are developed between United Nations agencies, Non-Governmental Organizations and the governments of more than 50 countries. Based on these agreements, an attempt is made to involve the communities, obtain and distribute the vaccines, preserve the efficacy and safety of the supplies, and access to families who have difficulties in purchasing the vaccines on their own (5).

In the Latin American region, the immunization coverage rate has been sustained around 80% in the last five years. By the year 2021, approximately 10 million children under one year of age received doses of vaccines, such as DTP, as protection against infectious diseases that cause significant disability and death (6). In the Ecuadorian context, at least 33.4% of children presented an incomplete immunization scheme according to their age; 35.7% were candidates for possible vaccination as part of their controls, however, of the total population in need, only 44.7% turned out to be vaccinated (7). With respect to the aforementioned situation, the main causes attributed to the lack of vaccination corresponded in 76.2% of the cases with the absence of the caregiver to the health center for vaccination, while in 19% of the situations it was attributed to other problems related to the knowledge of health professionals, as highlighted by Sotomayor et. to (8).

Compliance with immunization schedules in children under 5 years of age represents a substantive objective of governments to sustain child health, as established by the 2030 immunization agenda (7), in which significant and ambitious goals were defined to ensure coverage over the course of the next decade. This as a consequence of the appreciation of a significant decrease in the figures for compliance with the schemes at the international level, caused by the period of confinement caused by the Covid-19 pandemic.

The figures presented by the WHO reveal that, during the year 2020, more than 17 million infants did not receive the corresponding doses of vaccines, as a result of difficulties in accessing immunization services. A significant proportion of the population that did not have access to vaccines comes from low-income countries such as Angola, Brazil, Ethiopia, India, Mexico, and the Dominican Republic.

In correspondence with the above, in the World Health Assembly, held in 2020, the global strategy of increasing the elimination of cervical cancer was assumed, based on the incorporation of coverage with the HPV vaccine, establishing as a goal, reach 90% vaccination, even though currently this percentage only reaches 57%, in the best of scenarios.

The world immunization agenda is a global strategy that is based on different elements that make it up, such as

maintaining the confidence of users towards vaccines, equity orientation, this contemplating that 70% of children who do not get vaccinated come from developing countries; reduction of the effects of displacement, assurance of immunization for all age groups, reduction of conflicts as a result of political conditions, effects of climate change and the presence of disease outbreaks (9).

In the regional context, immunization processes according to the Pan American Health Organization (10) reaches 70%, which includes the recently introduced vaccine for Covid-19. However, each type of vaccine presents different figures. The figures presented for 2021, expressed that approximately 10 million children received doses of the DTP vaccine, which protects children from infectious diseases that can cause serious illness and disability or death (11). In Ecuador, 33.4% of children presented an incomplete vaccination scheme for their age; of which, 35.7% were candidates for a possible vaccination during their visit to the health center, but only 44.7% were vaccinated. The main causes attributed to the lack of vaccination were that the caregiver had not taken the child to the health center for vaccination, represented by 76.2% and causes related to the knowledge of health professionals, 19% as mentioned. Sotomayor et. al, (12). In accordance with the above, in the immunization process, the nursing staff plays a fundamental role in meeting the established objectives, which is why in this research it is defined as a problem.

Approach

What is the relationship of the assertive communication of the nursing staff to the mothers with the fulfillment of the immunization schedule in the child under 5 years of age in the Atahualpa health establishment, period September 2022 - August 2023?

Assertiveness

Communication is part of all human relationships, a large part of personal development takes place in interaction with other people, in such a way that one of the central elements of the links is expressed through communication, consequently, the performance of adequate relationships It implies the establishment of clear, spontaneous, conflict-free, unambiguous and empathetic dialogues, which are included in assertive communication.

Assertive communication is described as: "The ability to express oneself in the right way, in the right place and conditions" (13). In this regard, the author states that it is a skill which represents a challenge for nursing staff, especially those who are in the process of training, which led to a phenomenological analysis with a sample of this population through whom it was obtained. six significant aspects as mainly influential in said activity, which were circumscribed to a high sense of responsibility/duty, feelings of failure when it is not fulfilled, the importance of mentors in promoting self-confidence and self-esteem, and a sense of membership in placement. Students responded well to positive role models and were able to identify negative role models. Accurate and constructive feedback and support were important in helping students to reflect appropriately. On the other hand, assertiveness has been described as the ability to accept and value oneself to issue personal opinions that involve their defense and respect for the thoughts and beliefs of others (Castro and Calzadilla, (14). Over a period of time it was understood as the "appropriate expression, towards people of emotions not linked to reactivity" (Ayhan and Seki, (15), hence its importance as a fundamental aspect in the quality of care in health personnel, due to its impact on the balance of relationships, increased satisfaction and the facilitation of understanding.

Likewise, Omura et al, (16) investigated the cultural factors that influence assertive communication. To do this, they addressed the issue with a group of Japanese nurses in whom they tried to understand the impact of cultural variables and values that affect their assertive communication style. The results showed the discrimination of two main themes, such as the sense of collectivism and the perception of hierarchy - power, which include other dimensions such as implicit communication and ambiguity. According to the results obtained, it was possible to demonstrate the influence of culture in the assertive communication of the nursing staff.

Assertiveness in nursing staff

The nursing staff is considered to be one of those with the greatest number of interactions with patients, above doctors and other specialists, consequently, it is based on these close relationships, and with respect to the fact that they are mediated by a helping relationship, in which aspects such as reflective listening, empathy and other essential aspects that have been discriminated as relevant in adherence to treatment come into play (del Cisne et al, (17).

Assertive communication was studied in nursing students at a University in South East Australia by Hanson et al, (18) who studied the perception of students and nursing staff about the effectiveness of assertive communication as part of clinical practice, the research was quantitative with a sample of 535 people who underwent interviews and an online survey. The data allowed us to conclude that the teaching of assertive skills and the conditions to communicate safely represents an essential aspect in the education of nurses, due to the psychosocial implications it represents.

Similarly, in the field of health, assertiveness is considered an essential aspect of practices that are based on

communication, especially those involving nursing staff. Element which has been considered to negatively affect their communication and can cause a deterioration in the quality of care and job satisfaction, according to what has been exposed in different investigations about the levels of assertiveness of nurses (Omura et al, (19).

The nursing staff corresponds to those who develop the greatest interaction and permanent communication with the patients; in this context, assertiveness plays a preponderant role, due to the quantity and quality of the transmission of information that takes place between these groups. In this regard, the research carried out by Mansour and Mattukoyya (2019) was developed, who investigated the appreciation of newly qualified nurses on how nursing preceptory programs contribute to shaping their assertive communication skills, in a group of 42 newly qualified nurses, belonging to four hospitals. The results indicated that the programs help newly graduated nurses to improve their competencies, therefore it is imperative that nursing preceptory programs be adapted to allow newly qualified nurses to learn and practice assertive communication skills.

In the same way, the research developed by Diaz et al., (2020) was located, in which the issue of effective communication in nursing staff was addressed. The study was developed with the aim of assessing the social skills required in communication in humanized nursing care. We worked under a quantitative approach from which a sample of 30 nurses and 30 patients were approached, in hospitalization condition. The results showed that 63% of the nurses rated themselves at a medium level of communication, while 63% of the patients appreciated it highly. From the data it was possible to identify the skills required by these personnel to carry out an appropriate, empathetic and humanized communication with their patients.

In the same context, the research carried out by Espinoza et al. (2021) directed to analyze in the published literature about the communication between the significantly ill adult patient and the nurse. A qualitative study was developed, under the review modality, which allowed to identify as main results that nursing functions exclusively represent biomedical measured activities and relegate emotional conditions to the background. Based on this, it is necessary to improve communication skills to ensure that they can communicate effectively with the patient and their environment and act as agents of change to reinforce care in an integral way.

Immunization in children under 5 years of age

The immunization of children under five years of age is a process that has represented significant improvements in the health of the people, however, despite the advantages it represents, the increase over the last decades in the percentages of coverage and access to Through the public health systems, certain barriers continue to exist for its full compliance, this is how studies have been carried out in which the existence of certain factors that affect this practice is evidenced. In this regard, Cooper et al, (20) studied the influential factors in the considerations and practices of parents in relation to childhood vaccination, through a systematic review process, 27 publications were selected, carried out both in urban and rural areas.

Cooper et al, (20) obtained among their main results, the existence of a certain degree of influence on the ideas, conceptions and practices of parents that depends on their broader notions about health, disease in general, in relation to their children and perceptions about the role of vaccination in this context. The second finding identified that the ideas and practices of parents are influenced by the other people with whom they associate. Similarly, ideas and practices help representatives create social relationships, which influence their point of view.

Lastly, Cooper et al, (20) identified that parents' immunization ideas and practices may be influenced by broader political issues and concerns, and in particular their trust (or mistrust) of those associated with programs. of vaccination. All of this led to the conclusion that parents, especially those from high-income countries, understood decisions about health and medical care as matters of individual risk, choice, and responsibility. Some parents experienced that this understanding conflicted with vaccination programs, which emphasize widespread risk and population health. This perceived conflict led some parents to be less accepting of their children's vaccinations.

On the other hand, the concept, 'social exclusion', was identified, suggesting that some parents, particularly from low- and middle-income countries, were less accepting of childhood vaccination due to their experiences of social exclusion. Social exclusion can damage relationships of trust between government and the public, generate feelings of isolation and resentment, and lead to demotivation in the face of poor-quality and difficult-to-access public services. These factors, in turn, led some socially excluded parents to mistrust vaccination, to reject vaccination as a form of resistance or change, or to avoid vaccination because of the time, cost, and distress it creates (20).

In relation to the same topic of influential aspects in immunization processes in children under five years of age, the effectiveness of personal interventions to inform or educate parents about this activity has also been assessed. Correspondingly, Kaufman et al, (21) studied this issue with the objective of evaluating the effects of personal interventions to inform or educate parents about vaccination in early childhood on vaccination status and knowledge, the Parental attitudes and intention to vaccinate. Based on a documentary review, they selected 10 studies, from which they obtained as results that the information or education interventions may have improved the vaccination status of children, have slightly improved the

knowledge or understanding of vaccination by parents and have slightly improved parental intention to vaccinate. Consistent with the above discussion, these interventions may have had little or no impact on parents' attitudes or concerns about the intervention. Only one study evaluated the cost of a face-to-face case management strategy. In this study, the cost of fully immunizing an additional child was eight times that of usual care, but the intervention was complex and the study was old and not generalizable

METHODS

A quantitative, descriptive, field research was carried out. According to what was stated by Hernández et al. (2016) this corresponds to one of the two main approaches at the methodology level, which is supported by a rigorous, systematic and orderly process of using the scientific method. A quantitative research, of a descriptive type, was carried out in the field with pregnant patients who go to a first, second or third level Health Center to carry out adequate control. The experiences, lifestyles, emotional aspects and prenatal care that the patient has taken during her gestational stage were investigated, in addition to that the different sociodemographic aspects.

A questionnaire was administered to 183 participants, who were selected under a probabilistic sampling process that resulted in that sample size. The designed instrument was made up of ten items from which information related to the research variables was extracted, using a Likert scale that allowed differentiating the alternatives of always, almost always, sometimes and never. From the collected data, tables of frequencies, percentages and graphs were elaborated that allowed to show the results in a synthetic graphical way. A sampling of this type was carried out, because it is described by Hernández and Mendoza (2018) as one that allows the participation of those who reliably wish to be part of the study.

The administration of the instruments was carried out in accordance with the ethical norms of access to data and respect for the principles of the Declaration of Helsinki, through which the confidential use of the information, preservation of the identity of the participants, use of data, not causing damage to the sample and respect for their willingness to participate or not in the study.

Table 1. General characteristics of the sample.

| Academic level | | |
|----------------------------|------------------|-------------------|
| | Frequency | Percentage |
| Bachelor's degree | 120 | 66% |
| Mastery | 7 | 4% |
| Completed high school | 50 | 27% |
| Incomplete high school | 6 | 3% |
| Total | 183 | 100 |
| Gender | | |
| | Frequency | Percentage |
| Female | 183 | 100 |
| Total | 100 | 100 |
| Self-gender identification | | |
| Age | | |
| | Frequency | Percentage |
| Valid | | |
| 18 to 25 | 120 | 66% |
| 26 to 30 | 50 | 27% |
| 31 to 35 | 4 | 2% |
| 36 to 40 | 4 | 2% |
| 41 to 45 | 1 | 1% |
| 46 to 50 | 1 | 1% |
| 51 to 55 | 2 | 1% |
| 56 or more | 1 | 1% |
| Total | 183 | 100 |
| Average | 25 | |
| OF | 26,89 | |

Source: Own elaboration with research data.

RESULTS

Regarding satisfaction with the experience of vaccinating, 62.8% always perceive it as satisfactory to those who are added almost always, with 4.4%; followed by the sometimes with 17.5% and never represented by 15.3%. The data shows that the majority of representatives perceive the experience as satisfactory.

Table 2. Satisfaction is with the experience in coming to vaccinate

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 62,8 | 62,8 |
| | Almost Always | 4,4 | 67,2 |
| | Sometimes | 17,5 | 84,7 |
| | Never | 15,3 | 100,0 |
| Total | | 100,0 | |

Source: Own elaboration with research data.

Table 3. Importance of vaccines

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 62,8 | 62,8 |
| | Almost Always | 27,3 | 90,2 |
| | Never | 9,8 | 100,0 |
| | Total | 100,0 | |

Source: Own elaboration with research data.

As for considering vaccines important for 62.8%, it is always like that, followed by 27.3% of those who almost always, then a minority percentage of 9.8% was located for those who are never like that. The results show that for 92% the vaccination process is important.

Table 4. Importance of knowledge of vaccines

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 55,7 | 55,7 |
| | Almost Always | 23,5 | 79,2 |
| | Sometimes | 10,4 | 89,6 |
| | Never | 10,4 | 100,0 |

Source: Own elaboration with research data.

Regarding the importance of knowing about vaccines, 55.7% always consider it, another 23.5% almost always, then a group of 10.4% sometimes and only 10.4% never. Data that show a significant majority for whom knowledge of this process is important.

Table 5. Value of the information provided by health personnel

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 62,8 | 62,8 |
| | Almost Always | 16,4 | 79,2 |
| | Sometimes | 11,5 | 90,7 |
| | Never | 9,3 | 100,0 |

Source: Own elaboration with research data.

In relation to the value of the information for 62.8% it is always like this, then 16.4% differ for those who almost

always; followed by 11.5% who responded with sometimes and only 9.3% never. These data show that the highest percentage values the information received from the nursing staff.

Table 6. Knowledge to act after vaccination

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 50,8 | 50,8 |
| | Almost Always | 16,4 | 67,2 |
| | Sometimes | 10,4 | 77,6 |
| | Never | 22,4 | 100,0 |

Source: Own elaboration with research data.

Regarding knowledge about what to do after vaccination with children, 50.8% always stated; then 16.4% almost always, followed by 10.4% sometimes and a group of 22.4% never. The results show that most of the representatives know what to do after vaccinating the children, but a significant group doesn't know about it.

Table 7. Knowledge about the vaccination scheme

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 50,8 | 50,8 |
| | Almost Always | 16,4 | 67,2 |
| | Sometimes | 10,4 | 77,6 |
| | Never | 22,4 | 100,0 |

Source: Own elaboration with research data.

Regarding knowledge about the vaccination scheme, 50.8% always answered, 16.4% almost always, 10.4 sometimes and 22.4% never. The data reveals that there is a majority of people with knowledge about the scheme, but 32.8% do not know it, which constitutes a valuable percentage, considering the importance of this activity.

Table 8. Knowledge about the time to apply the vaccines

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 50,8 | 50,8 |
| | Almost Always | 16,4 | 67,2 |
| | Sometimes | 10,4 | 77,6 |
| | Never | 22,4 | 100,0 |

Source: Own elaboration with research data.

In relation to knowledge about how often vaccination should be applied, 50.8% always know it, 16.4% almost always, 10.4 sometimes and 22.4% never. The results in this aspect are important to consider since it represents that 32.8% are not clear about the specific times to execute the scheme and as a consequence they can forget it.

Table 9. Importance of vaccination

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 62,8 | 62,8 |
| | Almost Always | 16,4 | 79,2 |
| | Sometimes | 20,8 | 100,0 |
| | Total | 100,0 | |

Source: Own elaboration with research data.

Regarding the importance of vaccinating children, 62.8% agreed always, 16.4% almost always, and 20.8% never. It is a curious fact that at this historical moment there is a percentage of the population for whom it is not important to carry out this activity, which may be due to the influence of news that has emerged as a result of the Covid-19 vaccine and the negative opinion matrices in this regard.

Table 10. Importance of immunization

| | | Valid percentage | Cumulative percentage |
|-------|---------------|------------------|-----------------------|
| Valid | Always | 62,8 | 62,8 |
| | Almost Always | 16,4 | 79,2 |
| | Sometimes | 20,8 | 100,0 |
| | Total | 100,0 | |

Source: Own elaboration with research data.

As for the importance of immunization, 62.8% always stated, that is, they consider it important, followed by 16.4% almost always, and 20.8% sometimes. These results show that for the highest percentage of the representatives they think that immunization through vaccination processes are relevant.

Table 11. Contingency table of nursing explanations versus knowledge about vaccines

| | | | | 2. Do you know the scheme that your children have to take for vaccination? | | | | | |
|--|---|---|--------|--|--------|--------|-----------|--------|-------|
| | | | | | Almost | | | | |
| | | | | | Always | Always | Sometimes | Never | Total |
| 1. Do you understand what the nursing staff explains about vaccinations? | Always | Count % within 2 | | | | | | | |
| | | Do you know the scheme that your child has to take for vaccination? | 74 | 0 | 0 | 41 | | 115 | |
| | | | | 79,6% | ,0% | ,0% | 100,0% | | 62,8% |
| | Almost Always | Count % within 2 | | | | | | | |
| | | Do you know the scheme that your child has to take for vaccination? | 0 | 30 | 0 | 0 | | 30 | |
| | | | | ,0% | 100,0% | ,0% | ,0% | | 16,4% |
| | Sometimes | Count % within 2 | | | | | | | |
| | | Do you know the scheme that your child has to take for vaccination? | 0 | 0 | 19 | 0 | | 19 | |
| | | | | ,0% | ,0% | 100,0% | ,0% | | 10,4% |
| | Never | Count % within 2 | | | | | | | |
| | | Do you know the scheme that your child has to take for vaccination? | 19 | 0 | 0 | 0 | | 19 | |
| | | | | 20,4% | ,0% | ,0% | ,0% | | 10,4% |
| Total | Count % within 2 | | | | | | | | |
| | Do you know the scheme that your child has to take for vaccination? | 93 | 30 | 19 | 41 | | 183 | | |
| | | | 100,0% | 100,0% | 100,0% | 100,0% | | 100,0% | |

Source: Own elaboration with research data.

DISCUSSION

The results of Table 1 regarding the understanding of nursing explanations about vaccines showed the highest percentage of respondents managed to understand what was explained to them. These findings are different from those obtained by Trifunović et al., (15) who explored the communication process about vaccination between health workers and parents (acceptance, indecision, delay, rejection), and identified the barriers and factors that promote effective communication.

According to the results obtained by Trifunović et al., (15) it could be concluded that communication took place mainly between pediatricians and parents, while nurses focused on administering vaccines. (2) Health workers were confident in their abilities to communicate and address the concerns of both vaccination-accepting and undecided parents, successfully applying specific strategies. (3) When interacting with parents who delayed vaccination and with those who refused it, they

sometimes agreed to delay vaccination to maintain relationships, trusting that most parents would vaccinate in due time.

According to what is stated in Table 2, regarding satisfaction with the experience of vaccinating, the data showed that the majority of the representatives perceived the experience as satisfactory. These results are contradictory to the findings obtained by Ebi et al., (16) who studied the search for information on vaccination, satisfaction and trust of parents in medical providers in Switzerland. They addressed 501 parents as vaccine averse and 889 parents as non-averse. The findings identified that reluctant parents were less likely to be satisfied with their primary care biomedical provider than non-reluctant parents.

Based on what is stated in Table 3, in terms of considering vaccines important, the results showed that for 92% the vaccination process is important. These findings are compatible with the results obtained by Gidengil et al., (17) who presented the study "Beliefs about childhood vaccines in the United States: a systematic review", based on the objective of identifying and summarizing the variety of beliefs about childhood vaccines, was developed through a systematic review that allowed us to identify as main findings that parents considered the importance of carrying out this act, due to opinions in favor of vaccines and the desire for autonomy.

Regarding the importance of knowledge of vaccines, shown in Table 4, the findings showed a significant majority for whom knowledge of this process is important. These data are contrary to those obtained in the research carried out by Hijazi et al., (18) who presented the study "Groups in favor of vaccination that express hesitant attitudes: a cross-sectional study on the difference between attitudes and actual behavior in Israel" in which the objective of identifying wavering attitudes among parents in favor of vaccination was presented. The results showed that despite the fact that 26% of the parents had hesitant attitudes, only 19% hesitated in practice. This led to the conclusion that pro-vaccination people may have wavering attitudes toward vaccines.

In relation to the value of the information provided by the health personnel, shown in Table 5, the highest percentage valued the information received by the nursing personnel. These results are similar to those presented by Matta et al., (19) in their study "Knowledge, attitude and practice of parents towards childhood vaccination in Lebanon: role of communication between parents and doctors" in which they approached 3,500 fathers, mothers or both of children of vaccination age. Their findings showed that good communication developed by health personnel was important to improve the knowledge, attitude, and practice of parents toward vaccinating their children.

As shown in Table 6 regarding knowledge about what to do after vaccination with children, the results show that most of the representatives know what to do after vaccinating children, but a significant group does not know about it. . These findings are similar to those obtained by Restivo et al., (20) who studied "Knowledge and attitudes of parents after the implementation of compulsory vaccination in kindergartens in Palermo, Italy", research carried out within the framework of the project "Sportello Vaccinale" in which an advisory service was provided to parents in the kindergarten in Palermo. The results showed that despite the parents expressing their consent for the vaccination practice, there was a group of 8% who delayed the placement of the vaccine and 87% expressed fear for non-compliance with said activity.

Likewise, knowledge about the vaccination schedule, shown in Table 7, the data reveals that there is a majority of people with knowledge about the schedule, but 32.8% do not know it, which constitutes a valuable percentage, in the case of the importance of this activity. These results differ from the findings obtained by García and Soliz (21) in which the inquiry about knowledge about vaccines showed that the highest percentage of respondents didn't have knowledge about the subject, while in this study at least 50% if expressed such information.

In relation to the knowledge about how often vaccination should be applied, expressed in Table 8, the results in this aspect are important to consider since it represents that 32.8% are not clear about the specific times to execute the scheme and as a consequence they can forget the same. These results are compatible with the findings obtained by Meca and Montenegro (22) who studied the level of knowledge about immunization and compliance with the vaccination schedule in mothers of children attending a health post.

Regarding the importance of vaccinating children, presented in Table 9, 62.8% agreed always, 16.4% almost always, and 20.8% never, a significant percentage given all the information projects that have been made.

Moreover, the importance of immunization, shown in Table 10, 62.8% always stated that is, they consider it important, followed by 16.4% almost always, and 20.8% sometimes. These results show that for the highest percentage of the representatives they think that immunization through vaccination processes are relevant. These results are compatible with the findings obtained by Amaya (23) who studied the importance of childhood vaccination, according to the educational health plan for mothers and fathers, from which a documentary review was developed that allowed highlighting the relevance of said process. and within this information activities directed towards parents.

The results of the value of the Chi test, shown in the table, demonstrate the existence of a positive association between the variables, said in terms of the hypothesis, the assertive communication of the nursing staff influences compliance with the vaccination scheme by children's representatives.

These results are consistent with findings from research by Kaufman et al., (24) who evaluated the effects of face-to-face interventions to inform or educate parents about early childhood vaccination, on vaccination status, and the knowledge, attitudes and intention to vaccinate of the parents, for this they developed a documentary study, through a bibliographic review, from which they obtained moderate and low suggestive evidence that personal information can improve or slightly improve the state of child vaccination, parental knowledge, and parental intention to vaccinate. Face-to-face interventions may be more effective in populations where a lack of knowledge or understanding of vaccination is identified as a barrier (for example, where people are unaware of new or optional vaccines).

CONCLUSIONS

In the present investigation, we worked with a sample characterized by mothers from the Tungurahua province, representatives of infants under five years of age belonging to the Atahualpa health establishment in the Ambato city for compliance with the vaccination scheme.

62.8% of the mothers understand the explanations provided by the nursing staff, while 10.4% only understand it sometimes. Additionally, they perceive the vaccination experience as satisfactory and the highest percentage consider the information provided by the nursing staff to be valuable. The assertive communication of the nursing staff is positive and influences the compliance with the vaccination scheme by the representatives of the children.

This research work presented, among its limitations, aspects concerning to the methodology used, since it was based exclusively on a quantitative approach, which reduced the possibility of extracting qualitative data, which in studies such as these represent a significant balance, because they facilitate the incorporation of the personal appreciation of those involved. In accordance with the aforementioned, it is considered that from this research future projects can be developed in which a similar topic is worked on, incorporating the qualitative perspective of the patients, that is, studying the assertive communication of the nursing staff, from the appreciation of the patients who are cared for by them. Additionally, studies can be developed in which the perspective of relatives is added, in this way reliable data will be available on the same problem.

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