

Perceptions of nursing professionals in the prevention of childhood overweight and obesity

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Abstract

Objective: Describe and understand the perception of nurses about their role in the prevention of obesity and overweight in children from 1 to 5 years of age in the CRED (growth and development area). **Methods:** A qualitative exploratory study. Ten semi-structured interviews were conducted, and the discourse analysis technique was used for data analysis. **Results:** Nurses perceived and understood their roles, values, facilitators and barriers in their interventions in cases of childhood overweight and obesity. **Conclusion:** CRED nurses have a clear and concise perception of their role in the prevention of childhood overweight and obesity. They also recognize facilitating factors such as parental awareness and teamwork, but face challenges such as staff shortages and lack of ongoing training.

Keywords: Pediatric obesity. Overweight. Nursing. Role of the nurse. Disease prevention.

Introduction

In the present century, obesity has become a widespread issue in different countries, primarily due to its implications in the development of cardiovascular and metabolic diseases.¹ According to the World Health Organization, overweight and obesity are characterized by excessive fat storage in the body, directly related to weight and height. In the case of childhood overweight, a child is considered to have it if they are above the 90th percentile or exceed by more than two standard deviations. On the other hand, a child will be classified as obese if they are above the 95th percentile or exceed by more than three standard deviations. In the year 2016, it was estimated that a total of 41 million children under the age of five were suffering from overweight or obesity, representing a concerning public health situation that demands attention and intervention measures.^{2,3}

The most recent figures published on the Dirección Ejecutiva de Vigilancia Alimentaria y Nutricional (DEVAN) portal, in the context of the nutritional ward covering Peruvian children under 5 years old during the SIEN-HIS 2022-I period, have revealed that, nationally, 6.5% of children were overweight, while 1.9% suffered from obesity.⁴ Additionally, a more specific statistical analysis conducted in 2018 by the Ministerio de Salud (MINSA), in collaboration with the Dirección de Redes Integradas de Salud Lima Norte (DIRIS),

concluded that 7,279 children were overweight, representing 19% of the total, while 3,364 children had obesity, representing 12% of the total in the North Lima region.⁵

In 2017, the Ministerio de Salud (MINSA) issued a Technical Health Regulation aimed at monitoring the growth and development of children under 5 years old. This regulation established essential functions for nursing professionals, which included evaluating the development and nutritional status of infants through the monitoring of weight and height, complemented by nutritional counseling for caregivers. In line with the objectives of this standard, in the Control de Crecimiento y Desarrollo (CRED) area, nurses carry out preventive interventions to address childhood overweight and obesity, especially during the first 5 years of life, with the purpose of identifying any situation or risk factor early and promoting protective factors.⁶

Nursing research has shown that professionals' perceptions of childhood overweight and obesity are related to various risk factors. Likewise, a study conducted through a focus group revealed that nurses prioritize communication, sociodemographic profile, and regional culture.⁷⁻¹⁰ Additionally, related research indicated that intervention had a higher degree of success when changes were implemented gradually, following a step-by-step process together with children and parents, rather than making abrupt changes.¹¹ On the other hand, a study identified various obstacles in the specialist's work to

prevent childhood overweight and obesity, such as the lack of precise and specific roles for healthcare personnel, as well as parents' resilience to receiving information about their children's condition. In contrast, facilitative factors were identified, among which the recognition by stakeholders of the relevance of a weight control program stands out.^{12,13}

Based on all the premises mentioned previously, the central purpose of this study was to describe and understand how nurses perceive their role in preventing obesity and overweight in children aged 1 to 5 years, specifically in the CRED area.

Methodology

This study is based on a qualitative exploratory approach, and it selects as participants qualified nurses with a minimum of one year of experience in the CRED area, affiliated with the Dirección de Redes Integradas de Salud Lima Norte (DIRIS NORTE), and having provided care to at least one child with overweight or obesity. Serum personnel or those on leave were not included in the study population.

Regarding ethical aspects, the study obtained approval from the Ethics Committee of the Peruvian University Cayetano Heredia. Informed consent was sent to each participant prior to the execution of the semi-structured interview, conducted via Zoom and Google Meet, in which the dimensions of their perception regarding childhood overweight or obesity, perception of their role in preventing childhood overweight or obesity, and barriers and facilitators in the care of children with overweight or obesity were considered.

The process of data analysis and interpretation began with the collection and subsequent transcription of the interview recordings. This transcription was carried out in a complete and organized manner using the tools *oTranscribe* and *Microsoft Word*. The first tool provided necessary support for the transcriptions, while the second facilitated the organization of the interviews, which were coded according to the participants' pseudonyms.

The initial stage of the analysis consisted of coding the information to associate relevant data. Discourse analysis was used to understand and describe the thoughts and knowledge of each nursing professional using oral language. In this way, it was possible to identify that each discourse presents a coherent meaning with the investigative purposes, as suggested by Santander.¹⁴

Additionally, special attention was paid to structuring the information in accordance with the study's purposes, avoiding unrelated codes, as suggested by Moerman. Similarly, the steps proposed by Tolley et al. were followed to transcribe the obtained results, and the contribution of Gastel et al., who provided guidance on writing qualitative research, from introduction to discussion, was considered.^{16,17}

Results

A total of ten semi-structured interviews were conducted with licensed nursing professionals from the CRED area of 5 health centers in North Lima, from which information about their years of service was collected, resulting in the following breakdown: 1 nurse with 20 years of experience, 5 nurses with over 10 years, 3 nurses with over 7 years, and only 1 nurse

with 3 years of service. Two additional interviews were conducted to further delve into the discourse and gather data that had not previously been clarified.

I. Perception of the factors causing childhood overweight and obesity

Nurses expressed their views on the factors influencing childhood overweight and obesity and acknowledged that, like parents, they tend to have a better acceptance when the child is "chubby." However, they pointed out the importance of raising awareness among parents about these considerations regarding children's weight. Likewise, they noted that, despite the preconception that a child with a higher weight is healthier, the results of infants' hemoglobin evaluations may show a relationship between anemia and overweight. Additionally, nurses expressed that childhood overweight and obesity can lead to future chronic diseases: "*If the child or the family have tendencies to have chronic diseases, it may happen that the little child [with overweight or obesity] in the future suffers from diabetes, hypertension, etc.*" (K, 2 years working in CRED).

II. Perception of the role played in the prevention of childhood overweight and obesity

Regarding the functions performed by nurses, they indicated that nutritional assessments are part of their daily nursing activities, however, each one adopts different strategies according to the children's needs: "*In Control de Crecimiento y Desarrollo, one of the activities we do is nutritional assessment, we screen for nutritional disorders, not only malnutrition but also overweight and obesity... The technical standard describes the activities, but in practice, each professional has a method that best suits them because not all children are the same*" (J, 13 years working in CRED).

Furthermore, they considered direct nutritional counseling to be fundamental in inducing a change in attitude and lifestyle in parents, allowing them to adopt healthy eating habits within their economic possibilities and generating changes in the lifestyle of children.

III. Perception of limitations and barriers in the care of childhood overweight and obesity

Nurses highlighted the shortage of nursing staff within the CRED area as a limitation in care, affecting the evaluation of children and intervention with parents since high demand and lack of time hinder conducting adequate assessments and providing detailed explanations to parents. Additionally, they considered the lack of training on childhood overweight and obesity to be another barrier that hinders effective intervention in children, emphasizing its importance and necessity in the work they carry out: "*Frankly, I haven't received any invitation for either of the two cases..., more than anything, it's because of the same training that we sometimes have... we should give it more importance, and truly, we should have more training from the Ministry of Health or DIRIS*" (R, 3 years working in CRED).

IV. Perception of facilitators for the prevention of childhood overweight and obesity

Nurses expressed that some parents initially adopt a negative stance towards hemoglobin screening, but upon being informed about its necessity, they gain awareness and acceptance, which facilitates subsequent intervention in children: *"The first part is denial, because mothers think that their chubby children are healthy, but when the hemoglobin screening is taken and it results in the child having anemia, mothers start to become aware"* (K, 2 years working in CRED).

On the other hand, nurses indicated that another facilitator in their functions is related to the nature of the team, which is multidisciplinary and operates under established health regulations, highlighting an appreciation towards the idea of conforming as a team.

Discussion

Our research primarily revealed that some nursing professionals show a preference for attending to overweight children rather than those with lower weight, associating it with the belief that a heavier child is less likely to suffer from anemia, metabolic alterations, or growth and developmental deficits. In response to this, an awareness campaign has been initiated currently as this attitude could lead to chronic diseases and nutritional imbalances at early ages.¹⁸

A significant finding is how nursing interventions can positively influence the promotion of healthy habits within the family. Given that, if a child consumes the same foods as their family and the family does not provide a balanced diet, it is very likely that all family members will be prone to overweight or obesity. This finding aligns with the research of Bräutigam et al., who emphasize the crucial role of nurses in providing guidance on healthy lifestyles, which contributes to addressing the issue of childhood obesity.¹⁹

Regarding the role played in the prevention of childhood overweight and obesity, with a striking similarity to the expressions made by nurses in Cheng et al.'s research, they pointed out that, when admitting a child with childhood overweight or obesity, a series of protocol activities are carried out, such as conducting a physical evaluation, a detailed anthropometric analysis, providing appropriate nutritional guidance, and detecting possible cases of anemia.²⁰ However, despite the existence of a standardized Technical Health Regulation and, on the other hand, a Technical Norm for Therapeutic and Preventive Management of Anemia in Children and Adolescents, to date, no regulations have been established specifically defining the functions and strategies that should be adopted by nurses in the field of overweight or obesity prevention in children and adolescents.^{8,21}

Regarding the limitations and barriers perceived by the nurses who participated in our study, similar to the study by Cheng et al., there is a shared perception of limited time to perform their duties and provide effective counseling to parents, as well as a shortage of clinical resources. In this regard, despite the Technical Health Regulation stipulating that each CRED consultation should last approximately 45 minutes, the reality can be very different, causing the time to vary in different scenarios.^{8,20}

Regarding the issue of childhood overweight or obesity, another limitation present in most interviews is the lack of specialized training, whether provided by government or private institutions. Consequently, nurses opt to pursue studies independently. These results align with a study on the perception of care quality, in which nurses expressed that one aspect related to quality is the implementation of continuous training programs.²² Similarly, the study by Bucher et al. demonstrates that healthcare professionals responsible for obesity care tend to self-train.²³ Additionally, it is worth mentioning that when searching for courses or training related to this issue on the platform of the Colegio de Enfermeros del Perú (CEP) and the Ministerio de Salud (MINS), no options are available.^{24,25}

This study also revealed a link with parental perception and attitudes towards childhood overweight or obesity. This finding aligns with the research by Cheng et al., which indicates that parents often consider a child with a high weight to be synonymous with good health, which hinders acceptance of overweight and predisposes them to modify their children's eating habits. Additionally, according to Novianti et al., certain parents may experience sadness and fear upon learning that their children are overweight, fearing they may be subject to ridicule for their physical appearance.^{20,26}

In our country, it can be observed that malnutrition and anemia receive prominent attention and dissemination, while overweight and obesity elicit a less surprising or negative response from parents. However, nursing staff are trained to intervene and achieve changes in the family diet, aiming to improve children's health and achieve the proposed objectives.²⁷

Finally, nurses expressed that a multidisciplinary approach is routinely carried out in their health center, actively involving all relevant stakeholders, facilitating the referral of cases of childhood overweight or obesity. The research conducted by Bräutigam et al. partially aligns with the findings of our study, as nurses in that research maintained good collaboration with other healthcare professionals. Similarly, a study on the perception of nursing care quality corresponds to the idea that higher-quality care is explained by the existence of a favorable social environment, such as the formation of a multidisciplinary professional team.²⁸ Additionally, these results are consistent with the Technical Standard, which indicates that children should have consultations and evaluations with a pediatric dentist, a pediatrician, a psychologist, and a social worker, complementing the assessment performed by nurses under the mentioned multidisciplinary approach.^{8,19}

Conclusions

Nurses in the CRED area demonstrate a clear perception and understanding of their role in preventing childhood overweight and obesity. Their role is based on the responsibilities and professional actions they undertake to address this health issue. Additionally, it is important to recognize their initiative to conduct hemoglobin screening in children with overweight or obesity, with the purpose of detecting the presence of anemia and ruling out possible related complications. Moreover, nurses perceive and understand the existence of factors that aid in their role in prevention, such as parental awareness, which fosters a greater willingness to implement dietary changes in the family environment. Furthermore, nurses ap-

preciate the value of teamwork as a second facilitating element in effectively carrying out their preventive tasks.

Finally, these nurses are aware of the various barriers that may hinder their role in preventing childhood overweight and

obesity. Among these barriers are the shortage of nursing staff in the health centers where they work and the insufficient training received, which affects their lack of constant updating regarding new strategies and approaches in this area of care.

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