

Experiences, beliefs and attitude on donation of human milk in women of Arauco province

Experiencias, creencias y actitudes sobre donación de leche humana en mujeres de la provincia de Arauco

Jacqueline Ibarra Peso^a, Samuel Meza Vásquez^a, Karina Aguayo Gajardo^b

^aDepartment of Clinical and Preclinical Science. Nutrition and Dietetics Program, Faculty of Medicine. Universidad Católica de la Santísima Concepción. Nutritionists

^bNutrition and Dietetics Program, Faculty of Medicine, Universidad Católica de la Santísima Concepción. Nutritionist

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Abstract

Introduction: Breastfeeding is the natural process in which an infant is fed with breast milk. In humans, it is a biocultural process, subject to modifications based on social, economic and cultural influences. In this context, *The United Nations International Children's Fund (UNICEF)* considers that "breastfeeding is key for survival". **Objective:** To interpret the perception about experiences, beliefs, and attitudes towards the donation of breast milk in adult women from the "Dr. Rafael Avaria Valenzuela Hospital" in the commune of Curanilahue, Biobío Region, Chile. **Materials and Methods:** Qualitative study with a phenomenological approach. The convenience sample was made up of 15 women who participated in a semi-structured interview. A content analysis was applied to the obtained results using informant triangulation. **Results:** Women presented knowledge of the act of donating breast milk, emphasizing an altruistic paradigm. They associated this act with generosity, especially for babies who do not have access to breast milk directly from their mothers. There is a smaller group that has participated in cross-nursing in a family setting, having the certainty of who is giving and who is receiving the milk. **Conclusions:** The cross-nursing is an approved practice among the interviewed women, who consider it an altruistic act. However, its practice is based on reasons of trust and closeness.

Keywords:

Perception;
beliefs;
breast milk;
donation;
Breastfeeding

Introduction

Breastfeeding is the natural process in which an infant is fed with breast milk. In humans, it is a biocultural process¹, subject to modifications based on social, economic, and cultural influences^{2,3}. In this context, *The United Nations Children's Fund (UNICEF) considers that 'breastfeeding is key to survival'*^{3,4}.

In this way, culture is understood as a system of socially shared meanings that direct and justify human behavior⁵.

The biocultural approach offers a more comprehensive perspective, for understanding and conducting research on the complex interrelationships between ecological processes and cultural dynamics⁶. It is in this context that the cultures and beliefs that each people has, depend directly on the attributed meanings that they give them.

Perception is biocultural because it depends on the physical stimuli and sensations involved and on the selection and organization of those stimuli and sensations. Sensory experiences are interpreted and acquire meaning, shaped by specific cultural and ideological patterns learned from childhood⁷.

The perception of donating human milk among women who have been donors highlights solidarity, love, and comfort, the value of milk, personal satisfaction, retribution, and helping others⁸.

The act of donating human milk has benefits for the infant, especially the premature one, promoting optimal nutrition. Since it is a living and changing fluid capable of adapting to the different requirements of the child over time (modifying its composition and volume), it facilitates its adaptation to extra-uterine life. It is a food of great biological complexity, which contains the necessary macronutrients and micronutrients, as well as immunological substances, hormones, growth factors, enzymes, and others, in addition to adapting to the different processes that the mother goes through⁹⁻¹¹.

The objective of this study was to interpret the perception about experiences, beliefs, and attitudes towards breast milk donation in adult women from the 'Dr. Rafael Avaria Valenzuela Hospital' in the commune of Curanilahue, during 2016.

Material and Method

Descriptive, transversal study, carried out according to the principles of qualitative research, which according to Watson-Gegeo 'consists of detailed descriptions of situations, events, people, interactions, and behaviors that are observable. It also incorporates what participants tell, their experiences, attitudes, be-

liefs, thoughts, and reflections, as expressed by themselves'. For its part, the phenomenological design is understood 'as the methodological prescriptive that wants to understand social phenomena from the own perspective, examines the way in which the world is experienced¹². For Taylor and Bogdan, reality is what people perceive as important¹³ with emphasis on the individual and subjective experience of each unit of analysis and the meanings it gives, being the human milk donation the phenomenon to study.

Sample

A non-random sampling for convenience was carried out which, according to Bernard R., is obtained when a population is chosen and it is not known how many subjects may have the phenomenon of interest. Here we use the subjects that are found, and it is also used in very frequent phenomena, but not visible. This type of sampling has the following characteristics: a) to establish different stages of sample selection, and b) to identify subjects who have the phenomenon in general¹⁴. The sample was achieved by saturation point and consisted of 15 women who met the following inclusion criteria:

- Women between 18 and 39 years of age.
- Patients of the Dr. Rafael Avaria Valenzuela Hospital of the commune of Curanilahue, during February 2016.
- Mothers of children from newborns to infants up to two years of age and/or pregnant.
- Women donors and non-donors of human milk.
- Women who sign an informed consent letter.

Implementation

The data collection instrument developed was a semi-structured interview with ten open-ended questions (Appendix I), validated by experts, which after the suggested modifications was applied in a pilot test to a population with similar characteristics to those of the selection.

The interviews were conducted in the waiting room of the Primary Care Center of the Curanilahue Hospital.

Analysis

Once the interviews had been carried out, they were digitally transcribed, applying an analysis of the content of the speech. It is important to note that a qualitative data analysis is a unique, creative, and artisanal process that depends in large part on the skills and abilities of the researcher, which are streamlined and perfected with experience. As Castro Nogueira¹⁵ points out, the intuition, empathy, background, and sensitivity of the researcher constitute the heuristic capital of qualitative research.

The data analysis consisted of simplifying the information, cleansing the interviews conducted without losing the units of analysis; the second step was to establish the speech categories, carrying out an inductive process of conceptual classification of units under the same criteria¹⁶. After finishing the second phase, in which a rigorous categorization of all interviews was carried out, the obtained results were reduced into simple elements, and then the information was stored in files, which had been organized into easy access units. Finally, in the third phase, the analysis of qualitative data begins, consisting of the definitive structuring of the information that will form part of the results. The writing of results begins with the development of the subtopics from the files that make up each of the units of analysis to be investigated¹⁷. In order to reduce interpretation biases and to increase the credibility of the obtained results, informant triangulation was used which is understood as a “*Confrontation technique and tool for comparing different types of data analysis with the same objective; it can help to validate a survey study and enhance the conclusions derived from it*”¹⁸.

Results

From the speeches of the women interviewed regarding the experience of donating human milk, it appears that most of them know what the practice of donating breast milk means, only one of them stated that she did not know. However, this practice would not be a common activity among the interviewed women. Most of them have not had experience donating or receiving breast milk, nor is it common in their network of relatives or acquaintances.

- “...I haven’t at least had the experience of donating my breast milk and I haven’t had to receive it either... The truth is, I don’t know of any case of a breast milk donor...”

Only three interviewed women have had experiences of donating or receiving breast milk, highlighting the fact that this practice was among women and infants who have affective ties of closeness and trust, either family or friendship.

- “...my nephew, when he was little, I breastfed him because he was the same age as my son.”

Among those who have donated or witnessed the donation of breast milk from others, they say that it is not a common practice, instead, it occurs in particular situations, especially when it is necessary to reassure the infant:

- “Specific situations, suddenly my sister went to Concepción and so that not, when he was fussy and fell asleep...”

- “I’ve seen when a mother breast-feeds another child because they don’t produce enough milk... a cousin, she gives a baby of a sister-in-law of hers, because she doesn’t produce enough milk.”

A minority of the interviewed women, without having any direct experience, said that they had learned about the donation of breast milk through the media:

- “...I heard it once on the radio... here in Chile there were some moms who wanted to, who had a lot of milk and wanted to donate it, but they questioned it, others because I don’t know if it was a lack of information, but some of them didn’t want to because of the diseases, they thought they were transmitted through milk, there was some questioning, that’s what I heard more or less”.

Despite the fact that most of the women had not had direct experience, the majority expressed themselves in a positive way and said they agreed with the practice of other women breastfeeding children other than their own, considering this to be beneficial, as it would help those who do not have direct access to the benefits of breast milk.

- “...they say that it is not of any risk because, so many benefits for the mother of the baby, as also for the baby, because that link also exists with... with that lady, because when accepting her milk.”

Of those who have donated, they also see this practice as beneficial and only one of them says she approves it only among people in the same family:

“Ah yes, but it’s that, there within the family.”

In one particular case, it appears that desperation was one of the reasons for asking a family member to feed her child:

- “...I thought that my milk was not ‘feedable’ for my daughter and I had to go to a cousin... because I couldn’t find anything to do because my daughter fell asleep at 5 am and I couldn’t find anyone else to turn to...”

It is worth mentioning that a minority of the interviewees consider that the donation of milk should be regularized by the health authority and thus, one of them also expresses her agreement with this feeding alternative, but emphasizes in considering the mother’s willingness to accept it or not:

- “...but always seeing that the... the place is fine, by the Ministry of Health.”
- “it’s all right, but that’s up to each mother, because maybe... some mothers don’t like other mothers feeding their children.”

A minority disagrees with other women breastfeeding their children, expressing feelings of rejection or mistrust of this practice, particularly awareness of the food and non-food precautions that a woman should consider in the breastfeeding process:

- *“For a cleaning thing, for a trust thing and because you don’t want your son to see, I don’t know, I wouldn’t want to see another lady giving my son titty, no, I’ll take it away, no, I don’t like that.”*

Beliefs

The beliefs associated with risks associated with the donation of breast milk to recipients. Most of the women interviewed do not consider that there is any risk since they refer to this process as something standardized and supervised, either by medical examinations of the women donors or of the institutions receiving the milk:

- *“Not because I think the milk would be tested, they’re not going to give him/her milk without first going through processes, I don’t know, I don’t think there are risks, no.”*

A group of interviewees says that there are associated risks, and referred to that the main disadvantage is the transmission of diseases through milk. They also refer that a mother must make the donation responsibly:

- *“...through milk, you can still transmit some kind of disease, so if it’s not well..., well checked, I don’t know, it can cause a disease”*
- *“...one has to be in this case, aware of what one is doing and take care of oneself, if one is going to take this support in pumping, one must also eat well, eat healthily and to be able to help well the other babies who need it.”*

One of the interviewees does not know if there is any associated risk to milk recipients.

- *“I don’t know, I couldn’t answer that question because I don’t understand more about the topic, I don’t know”*

With regard to beliefs about the risks to a woman who donates milk, the vast majority of interviewees do not consider that there are risks, most of them stating that a woman must be in good health to be a donor, only one of them considers that it is necessary to have excess breast milk to be a donor.

- *“...I think, she must be in good health, I imagine, and a lot of milk...”*

Only one of those interviewed was overwhelmed and said she was not aware of the risks that the donation of milk has to the mother:

- *“I don’t know. I couldn’t answer that question.”*

Most of the interviewees consider that a woman cannot be a donor if she is a carrier of an infectious disease, to a lesser extent, they do not specify which diseases in particular, but the majority refer to diseases of transmission, with HIV/AIDS as the main cause. One of them mentions the syphilis disease as a reason for not donating milk.

- *“...it can be HIV too when, by the way, we’re being monitored if we have that disease but there are people who are not aware of it and maybe they could still donate the milk.”*

One of them says cancer as a cause that prevents the donation of milk (in addition to HIV/AIDS) and other one diabetes, which could be associated with the treatments and medications that are transmitted through breast milk:

- *“Reasons? ...HIV, diabetes, some disease that attacks the immune system, like that.”*

One of the interviewees said that a woman could not donate if she has a lifestyle that is not compatible with the good nutritional quality of breast milk:

- *“To be an alcoholic, a drug addict, something like that...”*

And a smaller group feels that they do not know or doubt that there are impediments to donating breast milk:

- *“I don’t know, I have no idea, I think there might be some... mmm infectious, I don’t know, it might be”*

One respondent says that the only impediment a healthy woman has to donate milk is the lack of interest in helping:

- *“No, I don’t think, no other, that she just doesn’t want.”*

Attitude

When analyzing the attitudes that women show towards the action of donating or not donating breast milk, it was found that the vast majority of women would be willing to donate their milk, altruism being the main reason. They express a sense of help focused on infants who cannot have access to breast milk directly from their mothers, some referring to premature babies as the main beneficiaries of the breast milk donation.

- *“...because I could help others...other babies, I wouldn’t think so much of myself, because if I had enough to...as extra, it could help him/her.”*

It is important to note that one of the mothers re-

ported that she would donate breast milk as long as she received health examinations.

- *“Yes, but... first I have to get examined before to donate the milk.”*

As well as other mothers, in their minority, put themselves in the place of those who are distressed by not being able to breastfeed their children and therefore have a feeling of help towards them:

- *“Because I put myself in the place of a woman who has a premature baby or that the mother has no milk to produce for her baby. Yes, I would donate.”*

To a lesser extent, mothers report that they would donate breast milk if they had an excessive production and always thinking of feeding their child as the first beneficiary.

- *“As long as I had enough for my baby and that I could donate, of course, but always thinking about me, about my baby! There would be a possibility but if I see that it's not enough for my baby, obviously I couldn't do it because there isn't much, that I don't produce much but if it was in abundance, obviously I would contribute to another baby could access what is breastfeeding...”*

It was found that in only one case a woman said she would donate breast milk with the intention of helping other infants, because of the health benefits of breastfeeding for children.

- *“Because I know the benefits because I have exclusively breastfed my 3 children with breast milk, and they don't get sick, no, you can tell the difference compared to other children of friends who as I said, have been raised with milk powder...and, they are smarter, I don't know, all positive benefits”.*

Another case states that she would donate milk only if strictly necessary.

- *“I don't think so, but if, in case of some... I don't know, accident, something happened to my baby and I could, I think I would.”*

A very small group of women stated that they were unwilling or unclear to donate breast milk, since in one case the woman stated that she had low production of breast milk and, assuming otherwise, they would only breastfeed their own children:

- *“I don't know I'd have to think about it... it depends how much milk you have in your breasts to breastfeed, well I'm not a very good milk producer...”*

Discussion

With regard to cross-breastfeeding, the speeches show an attitude of approval of this practice. Coincidentally, in the Brazilian study ‘Cross-breastfeeding, from neglect to moral virtues: a descriptive study’ Gomes C. S. et al. 2015¹⁹, the results show that, although women recognize that cross-breastfeeding may have contraindications, they do so and relate the practice to a greater good, associating it with a symbol of solidarity, and presenting itself to a greater extent as a relationship of trust between the parties who practice it. The obtained results are consistent with those of this study since the women who have had the experience of donating did so in particular situations and for charitable purposes, especially with people in a relationship of trust, mainly relatives. From the point of view of hygiene and food safety, the fact that women also consider that donation should be regularized, based on a mother's personal awareness of the care to be taken during breastfeeding, is highlighted. From this last point, we can compare the results of the Gomes 2014 study, where a reference is made to the reception of milk from an ‘ideal woman’ from the health point of view, such as the one who would cross-breastfeed, but who would involve examinations and awareness of giving something healthy²⁰.

Regarding beliefs, the donation of milk does not represent a risk to the health of the receiving infant since, as they say, it is a process subject to sanitary control. This can be contrasted with what was found in a quantitative study carried out in Guatemala ‘Beliefs, attitudes, practices and perception in postpartum women regarding the donation of breast milk to a human milk bank’¹, where 72% of women report that receiving children risk their health by receiving donated breast milk. With regard to the risks that the donation of milk can mean for the donor mother, the results show that more than half of those interviewed do not perceive a health risk, based on the fact that donor women must be in good health, coinciding in this point with the study mentioned above in Guatemala, in which 72% show that the health of the donor woman is not affected, without finding the justification for this. In addition, most women believe that a woman with infectious diseases, including HIV/AIDS, cannot be a donor of breast milk, which is contrary to the results of the Guatemala study, which indicate that only 36% consider the mother's disease as a contraindication for milk donation. Although, when comparing the research with the study carried out in Guatemala, it is observed that both disagree in their methodology, so it was necessary to resort to this type of study due to the lack of related studies. Regarding the attitude towards milk donation, the answers in first place mention the feeling of help

towards the receiving infants, recognizing this as altruism on the part of the women. It is worth mentioning the feeling of empathy expressed when thinking about donating surplus milk since they are put in the place of those mothers who cannot breastfeed their children, disinterested help is what is expressed to the greatest extent. Among the points made by some women who would donate only if necessary and if they had surpluses, preference would be given to feeding their own children. In a study conducted in Spain 'Experiences of human milk donation in Andalusia-Spain: a qualitative study'²¹, the main motivations for donating milk were the beliefs of the benefits of breastfeeding, having lots of milk, altruism and moral retribution, while in another Brazilian study by Estevez, L. (2006) 'Doação de leite humano no distrito federal: Aspectos psicossociais e experiências de mulheres doadoras'²², altruism is the main reason why women donate human milk, followed by high milk production, experiences in favor of donation, where women's self-esteem of having an important social role stands out.

It should be noted that the results presented in this study correspond to a sample with homogeneous characteristics, without prior selection of women who practice or not cross-breastfeeding. Such selection could enrich future studies in order to build a holistic analysis of the phenomenon.

Finally, this research opens a research gap regarding the interpretation of the perception of beliefs and attitudes of women with ancestry of native or migrant cultures. Thus, new questions arise: will cross-breastfeeding be considered as a validated method within the Mapuche culture? How have the beliefs about breastfeeding changed among indigenous peoples?

Conclusions

Cross breastfeeding is an approved practice among the interviewees; there is a smaller group that has carried it out, only three women, based on reasons of trust and closeness; however, the vast majority, although they have not done so, say they agree with this activity and consider it an altruistic act.

The future task is to inform the population about

the characteristics that donors must reach, the uses of donated milk and its recipients in order to reduce the insecurity of women, including women whose children are recipients, appealing to the fact that knowledge creates strength and conscious decision-making, so that they can face informed the moment when a legal framework for milk donation exists.

Ethical Responsibilities

Human Beings and animals protection: Disclosure the authors state that the procedures were followed according to the Declaration of Helsinki and the World Medical Association regarding human experimentation developed for the medical community.

Data confidentiality: The authors state that they have followed the protocols of their Center and Local regulations on the publication of patient data.

Rights to privacy and informed consent: The authors have obtained the informed consent of the patients and/or subjects referred to in the article. This document is in the possession of the correspondence author.

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Conflicts of Interest

Authors declare no conflict of interest regarding the present study.

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Annex I: Measuring Instrument

Semi-Structured Interview

"Perception of the donation of human milk in women ages 18 to 39 who are patients at the Curanlahue Hospital"

Knowledge:

1. What do you understand a human milk bank to be?
2. What do you know about human milk? or Do you know anything about human milk or breastfeeding?
3. Do you know of any benefits of breastmilk? If so, what are they?
4. How do you think that donating breastmilk to a milk bank could help society?

Experiences:

5. Have you had the experience of donating breastmilk or do you know of any experiences? Complement: (direct or indirect cases, family, friends, news stories).
6. Can you tell me what you think of this practice?

Beliefs:

7. Do you believe that donating milk involves any risks? If so, what are they?
Suggestion: Why is it good/bad?
8. What might prevent a woman from donating milk? Why?

Willingness:

9. After everything that you have shared with me, would you donate excess breastmilk to a milk bank? Why or why not?
10. Would you allow your child to receive milk from a milk bank? Why or why not?

(Reference: Authors' elaboration.)

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