



## Analysis of the Sociocultural Aspects that Affect Malnutrition in Children from 0 to 5 Years Old Attended at the Tajamar Tulcán Ecuador Health Center During the Year 2022

Néstor Oswaldo Chicaiza Guaña<sup>1</sup>, Sara Ximena Guerrón Enríquez<sup>2</sup>, Melba Esperanza Narváez Jaramillo<sup>3</sup>

<sup>1,2,3</sup>Universidad Regional Autónoma de Los Andes Tulcán. Ecuador.

Email: [docentetp66@uniandes.edu.ec](mailto:docentetp66@uniandes.edu.ec)<sup>1</sup>, [ut.saraxge69@uniandes.edu.ec](mailto:ut.saraxge69@uniandes.edu.ec)<sup>2</sup>,  
[ut.melbanarvaez@uniandes.edu.ec](mailto:ut.melbanarvaez@uniandes.edu.ec)<sup>3</sup>

ORCID ID: 0000-0001-8356-5493<sup>1</sup>, 0000-0002-0087-802X<sup>2</sup>, 0000-0002-2025-2075<sup>3</sup>

\*Corresponding author's E-mail: [docentetp66@uniandes.edu.ec](mailto:docentetp66@uniandes.edu.ec)

Article History	Abstract
Received: 06 May 2023 Revised: 25 August 2023 Accepted: 01 Sept 2023	<p>The prevalence of undernutrition in children under five years of age in developing countries is a major concern. Worldwide, it is estimated that approximately 178 million infants are affected by this condition. It is important to note that these figures vary by country, and in Ecuador it affects almost two out of every five children. The research design used in this study was of the action research type, and the sample was composed of 40 parents with children between 0 and 5 years of age attended at the Tajamar Health Center. The results of this study indicate that malnutrition prevails mainly in children between 2 and 3 years of age, especially in males. Poor nutrition and starvation due to lack of food availability are the most frequent causes of this condition.</p>
CC License CC-BY-NC-SA 4.0	<b>Keywords:</b> Malnutrition, Food, Children

### 1. Introduction

Malnutrition is not only a consequence of food shortages, but of a combination of many other factors, such as lack of protein, calories and micronutrients, frequent presence of disease and infection, poor care and feeding practices, lack of adequate health services and the use of unsafe water and sanitation systems. There are also different types of malnutrition, from stunting to mixed malnutrition <sup>(1)</sup>. The greatest danger of inadequate nutrition is not immediate. Beyond the unacceptable death of a child from malnutrition are the consequences that will accompany him for life, slowdown in growth, reduction of intellectual capacity, propensity to contract a greater number of diseases. These are some of the effects that, in the long run, will have to face those who have suffered malnutrition in childhood. Malnutrition sometimes starts during pregnancy <sup>(2-3-4)</sup>. If the mother is not fed properly and there are deficits in nutritional components, the fetus will not grow normally. Once born, when physical and mental development may be limited, if the supply of breast milk is not adequate, the risks of malnutrition increase.

The malnutrition of children under five years of age is alarming in third world countries; in this sense it is of the utmost importance to reflect on this issue and propose strategies at the global level so that these children are offered to improve their lifestyles and enjoy equally all the privileges that correspond to them as human beings. In this sense, it is everyone's responsibility to contribute in one way or another in order to eradicate this situation <sup>(2-3-4)</sup>.

That there are about 178 million infants worldwide, 3.5 and 5 million cases of malnutrition are constantly reported, causing deaths to infants under 5 years of age both in Latin America and in the Caribbean, so it is inferred that more than 60% of the study group does not have adequate food because of the lack of fixed economic income in their families, this figure tends to vary by country.

According to a report published by the United Nations for Food and Agriculture, there are 842 million undernourished people worldwide and the prospects for reducing this figure in the future are bleak, while obesity, a disease described by the World Health Organization (WHO) is considered the "New World Syndrome" or the "Epidemic of the XXI century". In the article entitled, responses to the food crisis, published on the website of the World Health Organization (WHO) highlighted that the food crisis is due to the high cost of the basic basket especially threatening the fight against poverty and the Millennium Development Goals, also emphasizes that this crisis is more sensitive in Latin America and the Caribbean at this time that is crucial for the efforts that They are carried out to eradicate the poverty that causes malnutrition.

In 1986, the DANS survey conducted in Ecuador revealed the existence of high rates of acute malnutrition or wasting in children under 5 years of age, global malnutrition and chronic malnutrition or stunting. It also revealed the existence of specific micronutrient deficiencies, particularly iron and zinc deficiency<sup>(5-6)</sup>. These data have been partially updated in targeted studies, but no other nationwide study has been conducted so far.

Loa years 2011-2013, the Ministry of Public Health, together with the National Institute of Statistics and Censuses, are carrying out the National Health and Nutrition Survey (ENSANUT), to collect information on the health and nutrition situation of the Ecuadorian population, it is found that in children under 5 years, the delay in height (T/E) prevalence is 35.3%, wasting is 2.4%, underweight (W/E) prevalence is 6.4% and overweight and obesity (BMI/E>2SD) reaches a prevalence of 8.6%.

In Ecuador, various factors that lead to malnutrition affect almost two out of five children, this is evidenced, in general terms, with the short stature that a child has in relation to his age. While other factors involved in malnutrition are expressed in a very low weight in relation to height. According to the World Food Program, one in every 100 children in Ecuador suffers from acute malnutrition. Added to this is the Covid-19 pandemic, which increases the risk to the poorest children in the country, as one of its medium-term effects is that it threatens to further deepen child malnutrition rates. "Child malnutrition is a problem that is not visible to the naked eye. Not being seen, it has not been properly addressed. And in rural areas you see less," explains Joaquín González Alemán, UNICEF Representative in Ecuador<sup>(7)</sup>.

According to the National Health and Nutrition Survey (ENSANUT), the province of Carchi has chronic malnutrition (T/E) of 33.2%. In the city of Tulcán it has not been possible to show an exact figure of the most influential factors that cause malnutrition in children, however, the Ministry of Economic and Social Inclusion (MIES), within its planning and programs of food and food security, has tried to eradicate this problem since 2009. As indicated in the Diario de Prensa written, work has been done on a national plan called the Comprehensive Nutritional Feeding Project (PANI), which consists of changing the eating habits of the Ecuadorian population, specifically that of children, with the aim of rescuing nutritious food from each area and putting aside junk food<sup>(8-9-10)</sup>. In addition to sensitizing mothers that breast milk guarantees health and development for the child.

As stated above, in Ecuador the problem of malnutrition should concern its authorities and institutions. For the year 2018, malnutrition affected 35.3% of the population under five years of age and overweight affected about 16%, which were higher than the average of the region; The nutritional trend in the country, during the last twenty years, has been characterized by a limited reduction in malnutrition and an increase in child overweight<sup>(11-12-13)</sup>, which worries about the double nutritional burden that occurs in people and households, and the different prevalence's between regions and areas, possibly the last pandemic could have increased this situation and aggravated the problem that was previously critical and with few results.

Childhood is the most important stage of life, since it is constantly changing, so it is essential to take into account the importance of infant feeding. From a healthy, balanced and complete nutrition for children, a better physical and intellectual development can be achieved.

The intervention proposal for the reduction of sociocultural factors that influence malnutrition in children 0 to 5 years old attended at the Tajamar Health Center 2022.

## 2. Materials And Methods

The type of research used in the present research was of the action research type. This design was of great importance since it studied the problem in the place where the facts originate, at the same time it was tried to provide a possible solution to prevent malnutrition due to sociocultural factors that affect children from 0 to 5 years old attended at the Tajamar 2022 health center.

In the present work as a research modality, the mixed route was used, since the qualitative and quantitative paradigm was combined, through the description and decomposition of the variables under study, as well as the statistical determination of the figures and ranges related to executing a diagnosis of the main characteristics of the sociocultural factors in malnutrition in children aged 0-5 years in the sector under study.

Quantitative modality: In relation to the quantitative paradigm, it was used to carry out a research based on the analysis of data collected through the survey where data were established, quantified and relevant results were indicated on the sociocultural factors causing malnutrition in children from 0 to 5 years old attended at the Tajamar 2022 health center.

Qualitative modality: This modality was useful since diverse information was collected in relation to the problem of sociocultural factors that caused malnutrition where it was observed that the affected population is in children from 0 to 5 years old, which allowed obtaining information from the subjects under study.

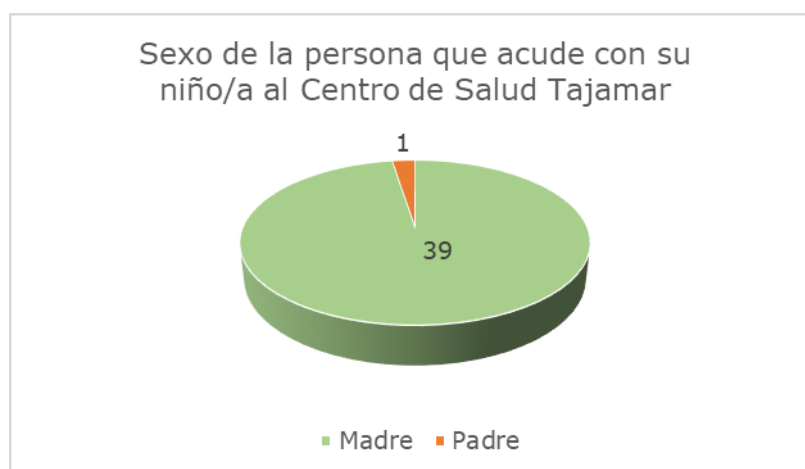
A survey was applied, which from this technique elaborated questions that allowed to obtain specific information on the malnutrition presented by the children who are cared for in the health center, in this way their results obtained allowed more detailed reports on the subject.

The instrument to be applied is a questionnaire aimed at parents and caregivers of children aged 0-5 years that will help us identify the sociocultural factors that influence malnutrition. The population consisted of 40 parents of children aged 0 to 5 years who were treated at the Tajamar Health Center.

## 3. Results and Discussion

Interpretation of the results of the survey addressed to parents who came with all the children of the Tajamar Health Center, which is equivalent to 40 children.

**Question 1.** Sex of the person who comes with their child to the Tajamar Health Center.

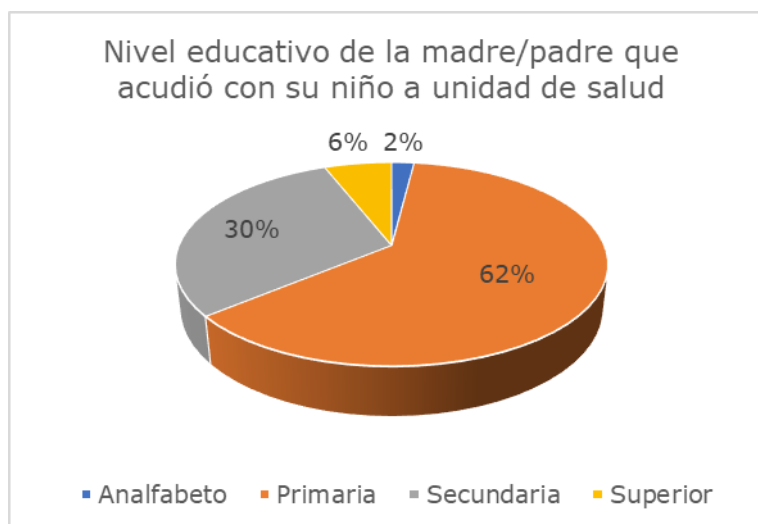


### Analysis and Interpretation:

The female sex (Mothers) is those who mostly go to the health service, from the information obtained, of the 40 children, who attended the unit, the 39 were their mothers, while only one was their father.

Therefore, it follows that women are the ones who stay longer in each of their homes, and have enough time because most women are dedicated exclusively to household chores, unlike men who do not usually spend little time at home since they are the ones who go out to work and return at different times.

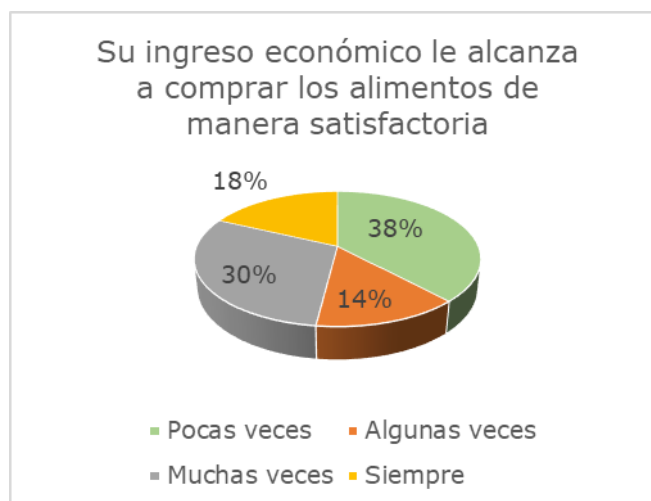
**Question 2.** Educational level of the mother / father who went with their child to the health unit



**Analysis and interpretation:**

When analyzing the level of educational instruction of the parents surveyed, it was observed that most (62%) have attended only primary school, this being one of the consequent factors that have affected the lack and difficulty in getting a job, thus damaging the economy of these representatives that in turn generates nutritional instability in infants.

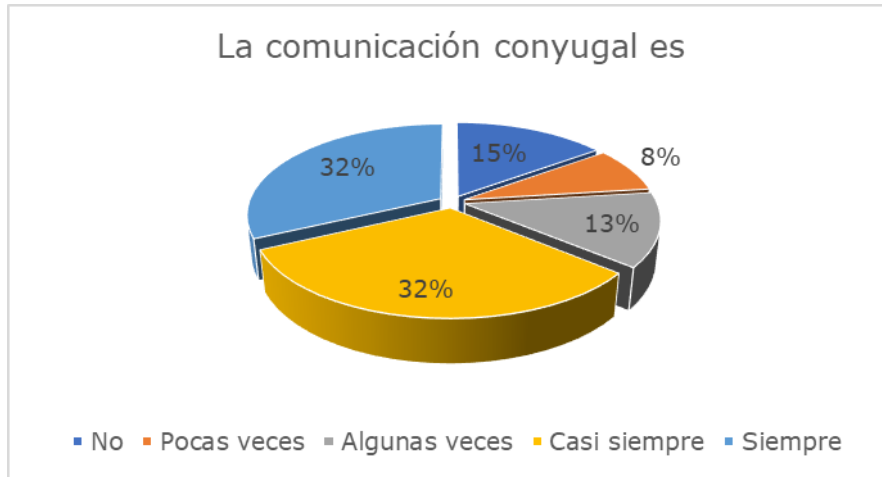
**Question 3.** From his economic income it is enough to buy food satisfactorily.



**Analysis and interpretation:**

In this question we obtained the result that 52% (38% + 14%) refers that with their economic income they do not satisfy the basic requirements for feeding their family, it was rarely what gave us to understand that a large part of the population could not buy the necessary food for the minors, this being one of the relevant factors that influence the poor diet of the same, Thus causing a drastic change in the nutrition of the child, therefore, we could affirm that the economic factor is an obstacle that prevents the normal progress in the growth of the child.

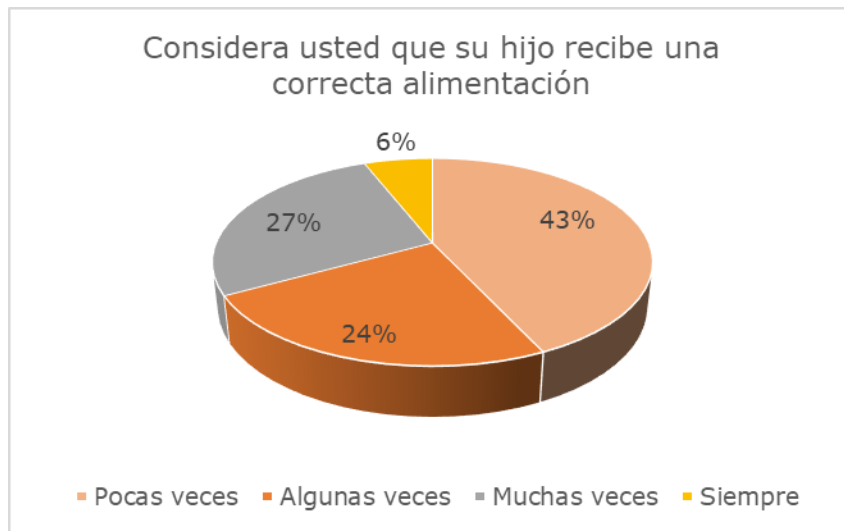
**Question 4.** Marital communication between the couple



**Analysis and interpretation:**

Although the information collected in the research shows that 64% of the people surveyed report that the communication of the couple is good (almost always-always), it should also be mentioned that 36% of couples do not have a very good relationship, it is also known that family dysfunction influences the nutrition of children.

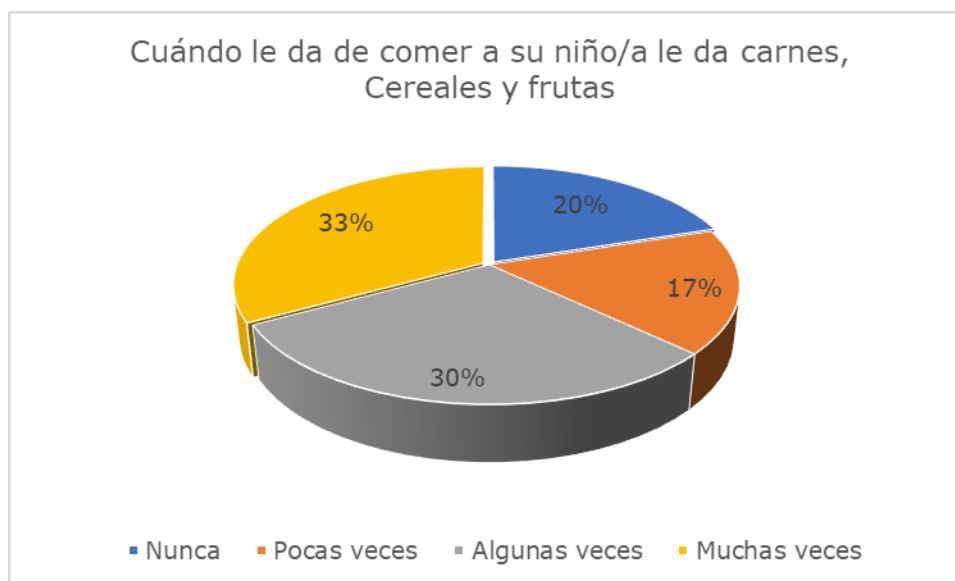
**Question 5. You consider that your child receives a correct diet**



**Analysis and interpretation:**

Most of the people surveyed (43%) told us the mother of the family considers that her child rarely receives a good diet, since the economy of the families has a lot to do with the feeding of their child and that for reasons of work and lack of time, they cannot feed them correctly and at the corresponding times, This being the cause of poor nutrition or malnutrition of some children, managing to prevent diseases that can be triggered by inappropriate eating habits.

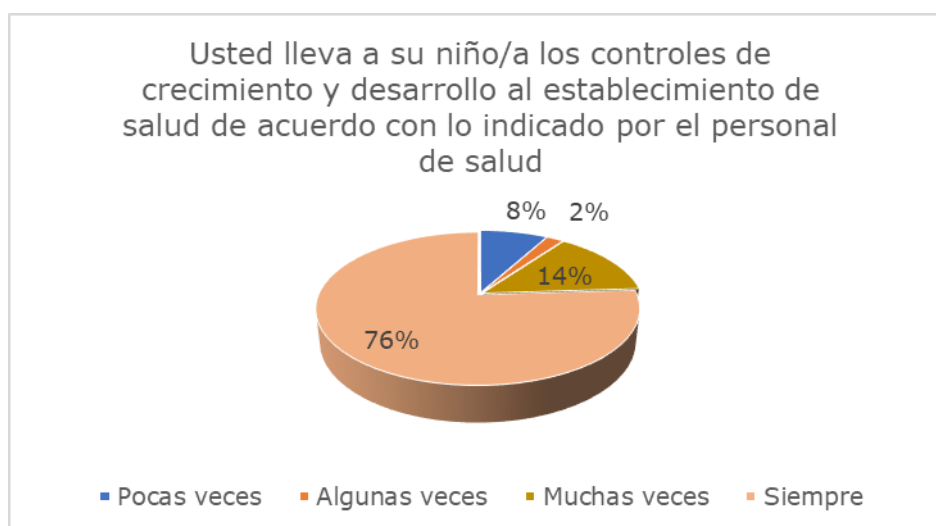
**Question 6.** When do you feed your child meats, cereals and fruits?



**Analysis and interpretation:**

Many of the people surveyed answered us that sometimes and many times (63%), which gave us to understand that their child if they have a varied diet according to their age for good development and growth, since at this stage of their life it is necessary for children to ingest several nutrients, The same ones that are found in this type of food and that help maintain a varied and healthy diet of the child. But the survey also showed that 37% of children do not have a very good diet, especially varied food and that can be a risk factor for malnutrition.

**Question 7.** You take your child to the health facility for growth and development screenings as directed by health personnel



**Analysis and interpretation:**

Most of the people surveyed (76%), told us that they as mothers are usually always aware and careful of the paediatric control of their children to verify growth and development in order to prevent problems in their health and nutrition thus maintaining health and well-being helping to improve their quality of life, But there are also 10% of children who do not go preventively to health checks and who only take them when they have an illness.

Malnutrition is not only a consequence of food shortages, but of a combination of many other factors, such as lack of protein, calories and micronutrients, frequent presence of disease and infection, poor

care and feeding practices, lack of adequate health services and the use of unsafe water and sanitation systems. There are also different types of malnutrition. From stunting to mixed malnutrition <sup>(14-15-16)</sup>.

Social and cultural factors are very important in the lives of human beings because the health situation of people depends on them, especially when child malnutrition is registered as a primary problem of public health and well-being of the child.

Malnutrition is directly related to extreme poverty; environmental and social factors have their own characteristics that do not allow them to be grouped into a single phenomenon. It not only considers the few economic resources, but also the production of negative effects on health, taking into account the poor environmental conditions in which living beings develop, which in the future generates functional limitations, low performance and fewer job opportunities <sup>(17-18)</sup>.

For hundreds of millions of people living in poverty, food expenditure accounts for more than 75% of their income and they are often forced to fast. The economy plays an important role since through it it is guaranteed that human beings satisfy their basic needs, in this sense in areas where extreme poverty can be identified, in fact, that the target population will have the opportunity to acquire malnutrition either mild or often chronic that will later mark in the child's life certain imbalances in their health.

From the research carried out at the Tajamar Health Center, the direct relationship of the economic factor as a risk factor for malnutrition in children is confirmed, the lack of a source of work, with job stability and low remuneration, will always be risk factors for children to be more likely to reach malnutrition.

Health along with education, are part of the key components of human well-being, and that is why the need is created to impact on the social determinants that keep these components stable, the level of education of parents, will also be important as protective factors against child malnutrition, this is also observed at the level of research carried out in order to avoid cases of malnutrition.

On the other hand, those who consume excess animal meat, some seafood, eggs and other foods of animal origin will have undesirable amounts of saturated fat and cholesterol in the diet, balanced consumption is key. Relatively few people or societies oppose the consumption of cereals, roots, legumes, vegetables or fruit. They may have strong preferences and tastes, but most corn eaters also eat rice, and almost everyone who eats rice will eat wheat-based products. It is often said that eating habits rarely or never change and that they are difficult to modify <sup>(19-20)</sup>. This is not true; In many countries today's staple foods are not the same as those consumed even a century ago. Food habits and customs change and can be influenced in different ways.

The consumption of varied foods for children composed of proteins, lipids, carbohydrates, fruits, legumes and vegetables will always be important the consumption of this type of food in order to prevent malnutrition.

#### **4. Conclusion**

The action research methodology applied in this study helped us demonstrate the importance of proper nutrition. Within the methodology it was found that the child's diet is not adequate and progressive as it should be, nor do they give importance to exclusive breastfeeding, which leads to the lack of vitamin and mineral intake, which is a big problem.

The approach of a program for the reduction of sociocultural factors involved in malnutrition, contributed in a didactic and educational plane for the understanding and importance of food intake promoting healthy habits in mothers.

The theoretical contributions showed us that the effects of malnutrition in early childhood (0 to 5 years) can be devastating and lasting. They can impede behavioural and cognitive development, school performance and reproductive health, thereby weakening future productivity at work. Since stunting occurs almost exclusively during the intrauterine period and in the first 2 years of life, it is important that prevention interventions in eating disorders occur at an early age.

According to the socio-cultural factors, the age that prevails in this study is children of 2 and 3 years, in relation to gender prevails the male, in terms of nutritional status there is growth retardation, malnutrition, they demonstrate low weight with normal growth likewise another aspect was the level of education, of which 2% of mothers are illiterate, 30% of mothers have completed secondary education, 6% received higher education and 62% have primary education.

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