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RESEARCH ARTICLE

"NUTRITIONAL STATUS IN MINORS OF 5 YEARS".

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Abstract

Objectives: to identify the nutritional status of children under 5 years of age in the urban neighborhoods of the city of hecelchakan, in which the authorities consider to have a high poverty level to these neighborhoods.

Methods: a cross-sectional study was carried out in which 143 children under 5 years of age were housed in hecelchakan city, who attended the consultation on growth and development at hecelchakan rural hospital during the period from january to december. 2016.

Results: of the children studied 143, 55% were female and 45% male, 52% of them were from the age group of 2 to 5 years and 48% from 0 to 23 months. According to the weight / age indicator, 64% were found to be eutrophic, while 16% had some degree of malnutrition, 13% were overweight and finally 7% of the children studied had obesity. Chronic malnutrition was found in 24% and acute malnutrition in 12%. There was a higher prevalence of obesity in the female gender. In the age group of 2 to 5 years some degree of malnutrition was found in 17% while in the group of 0-23 months only 14%.

Conclusions: children under 5 years old who attended the growth and development consultation had a higher prevalence of malnutrition in terms of national results, but a lower prevalence of low stature compared to the national result of 2 years ago.

Introduction:-

The nutritional status of children is often used as a marker of food supply to a population. In developing countries, food shortages seem to reflect how families in the south-east of the country are in poverty, the vast majority of our children are malnourished. It is for this reason that in order to face the increase of poverty and improve the quality of life of the population, different governmental entities have created programs in the area of health, nutrition and basic principles of education as a way to positively influence the family groups of the children who are in this situation. It

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is a sad everyday reality that many households, in a significant number of times scarcely intended to cover the basic requirements with balanced meals or substitutes thereof when the economic level is barely possible, being the most disadvantaged children.

The above, indicates that the problem of adequate nutrition of the child can become a serious problem, but rather, comprehensive care mechanisms are designed whose main goal is to improve the nutritional level of children, especially those from families with few economic resources that are the most affected as a result of low nutrition, which affects their physical development, manifesting in many cases deficits in growth, weight, height, significant frequency of anemia, high incidence of dental caries and more important mental retardation development.

This situation puts at a great disadvantage in optimum integral development of the child, diminishing their abilities and competences to learn significantly, if it does not contribute to raise the nutritional status of the child population. Thus, the present research related to the nutritional diagnosis of children under 5 years old, who visited the Hecelchakan Rural Hospital in the period from January to December 2016 has as main objective, to evaluate the nutritional status of the children in this age, in order to know the situation related to the nutritional status of this population to highlight the need to address this problem as soon as possible, if a low nutritional level is detected in the children of this study.

Material And Methods:-

A cross-sectional, retrospective observational study was carried out in which 143 children under 5 years of age, of both sexes, belonging to the urban districts of the city of Hecelchakan, were included during the period from January to December 2016. The population studied is 10 meters above the surface in which the community still follows habits and customs that put at risk their growth and development in their health, which leads them to continue in a poverty level in a very high percentage.

The sample consisted of 945 children, which were obtained from the registry of the growth and development consultation of four of the 7 clinics of Family Medicine of the Hecelchakan Rural Hospital. In order to obtain the sample, a simple random sampling was performed, so that all the population younger than 5 years old who came to the clinic had the same opportunity to be included in the study. This study excluded any child who during the study period was not within the established age range, the child who did not take control of growth and development at the Hecelchakan Rural Hospital, who did not was a resident of the city of Hecelchakan, whose information was absent or incomplete in the clinical file, which presented some acute pathology that could affect the results obtained from the anthropometric measurements at the time of the consultation. For the last two cases, the previous consultation was used as a registry, carried out the same year, and those children who had chronic conditions that affected their nutritional status were excluded altogether. This study eliminated children whose clinical records are lost or incomplete.

With these 945 children, a sample of 143 records was obtained. Each individual was identified by their file number. Data collection was done with a precoded sheet, which included the variables, age, weight and height, the results were applied in somatic growth charts, based on anthropometric indicators weight / age, height / age and weight / height the NCHS accepted by WHO, to characterize each individual according to their nutritional status, taking as normal plus, minus two standard deviations.

Results:-

The population subject to study that met the selection criteria was 143 individuals under 5 years of age, of both sexes. Finding that 78 individuals (55%) are female and 65 (45%) male, within the age groups a division of two age groups was made, with 68 children (48%) being 0-23 months and 75 individuals (52%) from 2 to 5 years.

According to the WEIGHT / AGE indicator, 92 (64%) of the individuals in the study had an adequate weight for their age, 18 (13%) were overweight and 10 (7%) were obese and some 16% of which 13% corresponds to mild malnutrition without finding individuals with severe malnutrition. GRAPHIC 1

For the SIZE / AGE indicator, we found that only 9 (6%) had a low height and 26 (18%) had a slightly lower height, while 97 (68%) were found to be of adequate size for their age, height was identified, 9 (6%) and 2 (2%) respectively. GRAPH 2

It was identified that 94 (66%) of the children under 5 years of age were found to be eutrophic, 16 (11%) with mild malnutrition and 1% of moderate malnutrition, according to the WEIGHT / TALLA indicator. As for overweight 17 (12%) and obesity 14 (10%). GRAPH 3

The results revealed that 43 (66%) of the total male patients were found to be eutrophic according to the weight / age indicator, 12 (19%) presented some degree of malnutrition, 88 (12%) were overweight and 2 3%) obesity. Of the total female patients, 10 (13%) were overweight and 8 (10%) were obese. Only 10 (15%) found any degree of malnutrition. GRAPHIC 4

Regarding the size / age indicator, 4 (8%) were identified as having a small size and a slightly lower size (17%) of the male patients studied. Of the total female patients studied, 4 (5% slightly reduced size 15 (19%). GRAPHIC 5
According to the weight / height indicator, 12 (15%) of the total female subjects studied presented data on acute malnutrition and 6 (10%) of the male subjects. GRAPH 6

In the individuals included in the study, the total of 0-23 months, we identified 13 (19%) overweight, 6 (9%) with obesity, unlike the group of 2 to 5 years 5 (7%) overweight and 4 (5%) of obesity, in terms of degrees of malnutrition 10 (14%) and 13 (17%) for children studied 0-23 months and 2 to 5 years respectively. GRAPH 7

Discussion:-

The present study was carried out in the Rural Hospital of Hecelchakan taking only individuals living in the urban districts of the city of Hecelchakan, in which the community still continues with habits and customs that jeopardize their growth and development in their health, which leads them to continue in a level of poverty in a very high percentage.

The information obtained in the present study can be used to design intervention programs in the population and subsequently to evaluate the actions undertaken.

The population has been observed according to the order at level are more housewives, followed by students, another percentage of peasants and a very low percentage of professionals. Its basic food is deficient and unbalanced being the maize of the region and sometimes other foods such as milk, cheeses, cold meats, this type of food affect the undernourishment of children in the community, as well as some cases of obesity with greater prevalence in women.

A part of the community continues to practice bowel defecation and most of them have septic baths. The practice of fecalism often leads to gastrointestinal diseases, leading to poor personal hygiene.

Based on the weight / age indicator, the predominant degree of malnutrition was mild malnutrition in the studied population, being 13% higher than the last national survey carried out in 2006, where only 5% of the population were malnourished . Malnutrition with the highest prevalence was chronic with 18% based on a slightly lower size and 6% with a low size. This reflects that in this region health personnel take as normal the genetic characteristics, giving less importance to factors external. When comparing with the national survey carried out in 2006, where the percentage of low height is 12.7%, we find that the nutritional status of the population studied is worse than the national one when finding a higher prevalence of low size .

As for overweight and obesity, we found a slight increase in prevalence compared to the last survey, with 20% of the population being overweight and obese, while the last survey was 19.5%. Given that, as in the 2006 survey, we found a higher incidence of obesity in the male gender.

Conclusions:-

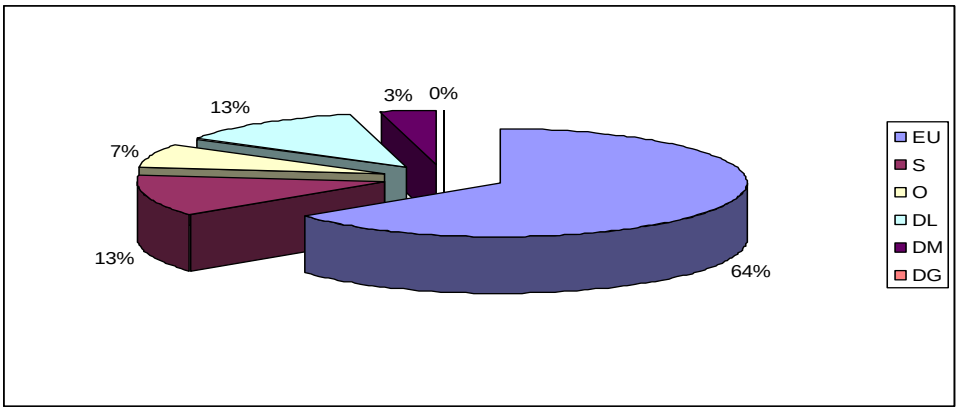
According to the weight / age indicator, we found a high percentage of overweight in 13% of the population studied as well as 7% presented obesity, due to the diet rich in carbohydrates that exists in this location already mentioned above.

The study carried out that from the anthropometric indicator height / age reported that there is a prevalence of low stature of 6% and a slightly lower stature of 18%.

On the other hand, it was found a higher prevalence of obesity in the studied women with 10% and 3% in men. Thus, it is also detected a higher prevalence of some degree of malnutrition in the male gender being 19% against 15% in the female gender.

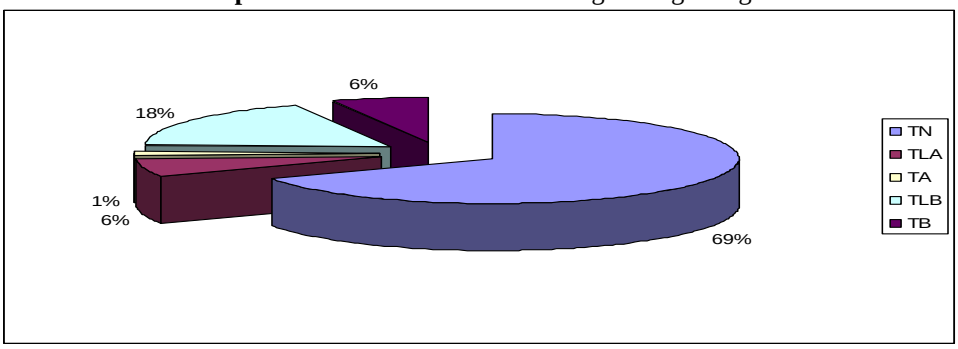
It is possible to detect with the weight / height indicator a higher prevalence of overweight and obesity in the age group from 0 to 23 months being 19% and 9% respectively, as well as a slight increase in malnutrition in children 2 to 5 years, which may be due to the greater attachment to nutritional care during the first year of life and due to being a poor population, mothers continue to feed their children with maternal breast and no longer providing the nutritional requirement for their age after six months of life reflected in the nutritional status in the elderly of sa 5 years.

Graphic 1:- Nutritional status according to weight / age



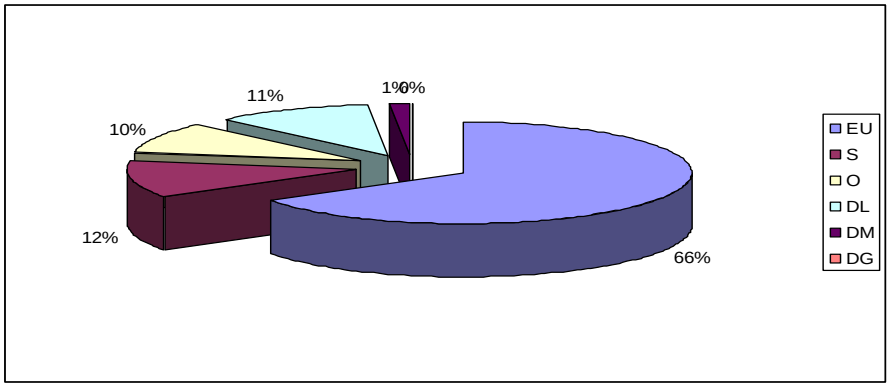
Source: Data collection Rural Hospital of Hecelchakan

Graph 2:- Nutritional status according to height / age.



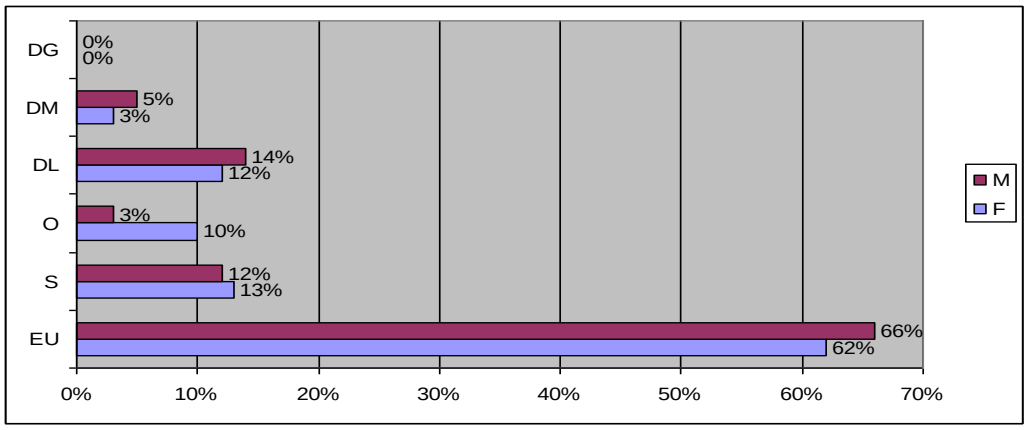
Source: Data collection Rural Hospital of Hecelchakan

Graph 3:- Nutritional status according to weight / height



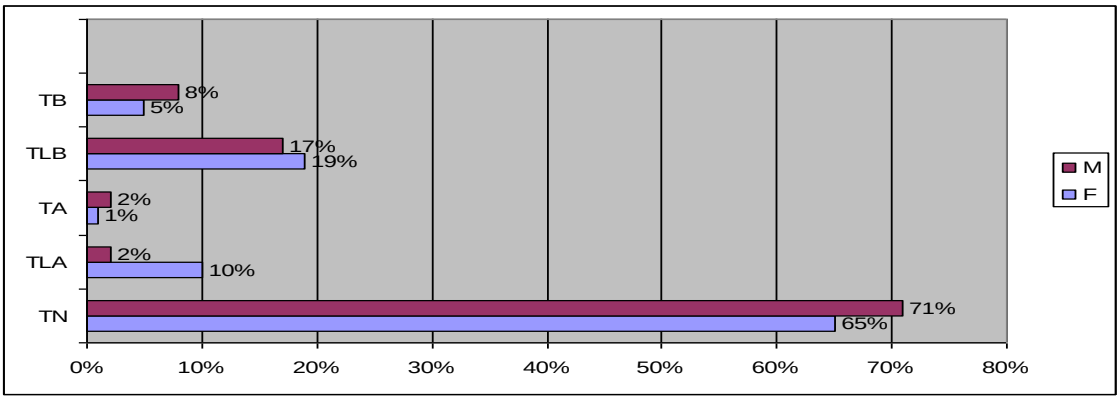
Source: Data collection Rural Hospital of Hecelchakan

Graph 4:- Nutritional status according to weight / age by Gender



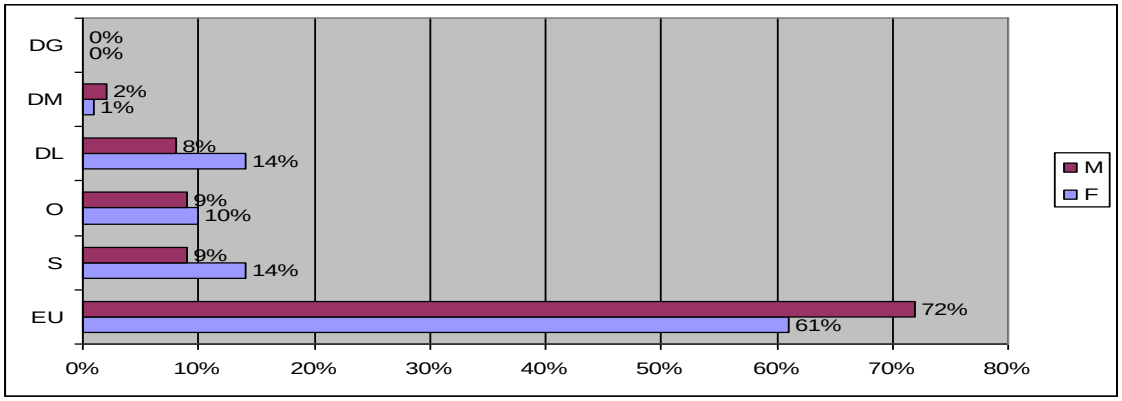
Source: Data collection Rural Hospital of Hecelchakan

Graph 5:- Nutritional status according to size / age by Gender



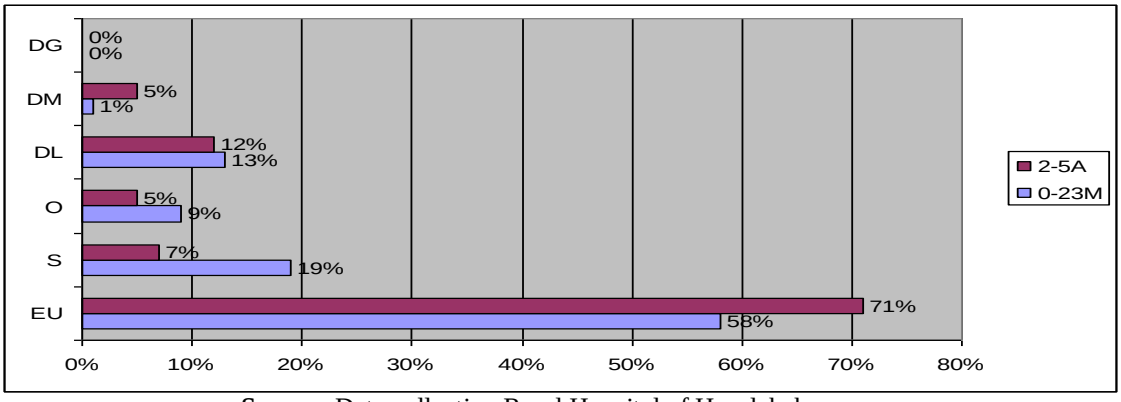
Source: Data collection Rural Hospital of Hecelchakan

Graph 6:- Nutritional status according to weight / size by Gender



Source: Data collection Rural Hospital of Hecelchakan

Graph 7:- Nutritional status according to weight / age by etereo group



Source: Data collection Rural Hospital of Hecelchakan