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Research article

Comparison of the Nutritional Status and Knowledge about Healthy Behaviors in Students of a Private Primary School with a Primary School in a Colony Marginalized in Puerto Vallarta, in the Year 2015

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Abstract

Objective: Compare the nutritional status and knowledges about healthy behaviors in students of a private elementary school with a public elementary school located in a poor colony in Puerto Vallarta, in 2015.

Background: In the last decades, evidence has been accumulated about the importance of a good nutrition, specially in development stages. During the childhood to good nutrition is essential to get a complete physical and intellectual development. It is during this development period when the children stablish consuming patterns that can contribute in the appearance of different diseases in adulthood.

Material and Method: We will realize a quantitative research, observational correlational type, cross-section to 103 students of "College Juana de Asbaje" and "Ma. Enriqueta Sanchez elementaries" Zataray schools. We will evaluate the knowledgement and the behaviors they possess regarding their feeding through a quiz. We will also measure the anthropometric values of all the students.

Results and Conclusions: We found a lot of kids with low weight (41 - 47%) in both schools, but there were more kids with a normal weight (47 - 55%). There were not kids with grade II and III obesity and the percentages of kids with overweight (1 - 3%) and grade I obesity (4%) were really low; this may be due to the little sample we got. The level of basic nutritional Knowledgements had a lot of differences, there were more kids on an inadequate level in the public school (55%) and adequate(42%) in the private school. If we talk about nutrition, both schools had a regular feed level, with 86 per cent in public school and 62% in the private school.

Keywords: Nutritional Status; Healthy Behaviors; Primary School

Introduction

The nutritional status is a fundamental condition that determines the health and influences the disease [1]. It is for this reason that the assessment of nutritional status in the child is an essential component of medical care and a basic element to determine the state of health of each child [2]. The deterioration of nutritional status affects the entire body and raises the child's vulnerability to infections, which increases mortality. Just like in other developing countries, in the Mexican Republic the health problem posed by malnutrition reaches alarming proportions, the millions of Mexican children who survive with some degree of malnutrition, especially in rural areas and marginalized areas have deficiencies of their human potential [2].

Malnutrition predisposes to the presence of diarrheal and respiratory diseases, which arise later as the leading causes of morbidity and mortality, when in reality they are phenomena that have been added to the problem of malnutrition [1]. Malnutrition is a serious problem throughout the world. According to epidemiological data in developing countries, this entity is within the first five causes of morbidity and mortality and is inserted in a context of social, economic and cultural conditions that constitute a set of risk factors that alter the child development and quality of life of the population [2].

On the other hand, obesity is defined as a condition in which suffers from excessive accumulation of energy in the form of fatty tissue in relation to the expected value according to sex, size and age, with potential adverse effects on the health, reducing the quality and expectation of life of the people concerned. Obese children tend to become obese adults. Studies have identified a consistent association between rapid weight gain during the first two years of life and obesity in childhood and adult life, in general, the risk of developing overweight or obesity is two to three times higher in children crossing at least a percentile between birth and the first or second year of life [3]. Physical inactivity allows children

to dedicate a lot of time to television, video games and move away from the practice of sports, hiking and outdoor games; all this predisposes to excessive gain of weight [3]. According to the ENSANUT of 2012 shows that the prevalence of low Size in Jalisco was lower than that found for the national level (13.6%). The prevalence of low height-for-urban localities was 8.5%, and for the rural4 12.6%. On the contrary, the prevalence of overweight and obesity were 23.9 and 15.7%, respectively (sum of overweight and obesity, 39.6%) compared with the national prevalence of overweight and obesity in this age group were 19.8 and 14.6%, respectively. The prevalence of overweight in urban areas increased from 2006 to 2012 from 20.0 to 24.1% and for rural areas rose from 31.0 to 23.1%, respectively [4].

Marc Theoretical

In the last few decades have accumulated evidence on the importance of good nutrition, especially in the stages of development. During childhood an adequate nutrition is essential to achieve the maximum development both physical and intellectual. It is during this period the development where laying down patterns of consumption that can contribute, in adulthood, the emergence of various diseases [4,5]. One of the best indicators of health individual or collective of a population is the nutritional status, and this very especially in children, in which the growth (Increase gradual the size of the body) and development (increase of functions in the body) are, to a large part, conditional by the power supply. The assess the nutritional status, the child or adult may find themselves in a situation of equilibrium, in such a way as to ensure food losses and maintain appropriate. Also the opposite can happen, that the nutritional balance becomes unbalanced by insufficient supply, poor absorption or by a substantial increase of needs: in this case will be malnourished. With this term we refer to any alteration nutrition, both by default (malnutrition) such as overnutrition excess [6].

The symptoms of an individual who suffers nutritional deficiencies are not specific, but vary with the individual and with the kind of deficiency. Usually appear by tiredness, fatigue, depression, apathy, irritability and general malaise. But the same symptoms can occur in well fed people for reasons not related to the nutrition [6].

Malnutrition is caused mainly by protein-calorie malnutrition or deficiency of vitamins and minerals, or both. Obesity in change is due to excessive caloric intake, insufficient exercise, psychic disturbances or neurological injuries [6].

The mortality increases to the extent that excess weight is far from normal. But, of course, there are difficulties in defining what is "ideal" weight and, therefore, to note if you are overweight or obese. In short, obesity appears when the input of energy (food) exceeds the expenditure, that is, when there is a positive energy balance. Obesity in childhood and adolescence has increased alarmingly in the past few years [7,8]. The results in longitudinal studies indicate that overweight children tend to be obese adults in the future [9]. Numerous epidemiological studies and clinical trials show that dietary changes produced in recent years in most developed countries have led to an alarming increase in the number of Spaniards with problems of overweight and obesity, an increase in the figures of cholesterol to concentrations similar to those of the countries of northern Europe, as well as an increase in blood pressure. Also, the consumption of diets with a high energy density and low nutrient density, can give rise to child malnutrition subclinical infections, which may affect [10] essential nutrients.

The assessment of the nutritional state as an indicator of health status, is an important aspect of the location of risk groups with dietary deficiencies and excesses that may be risk factors in many of the most prevalent chronic diseases in today [11].

Physical activity on a regular basis, improves health and reduces the risk of mortality [12] and if it is developed according to the criteria for the type, duration, intensity, frequency and progression [13], is adapted to the possibilities of the individual, improving the health of the same and helps the treatment of diseases, among which stand out due to their importance, coronary artery disease, hypertension, diabetes mellitus, osteoporosis, colon cancer and depression, not to mention how it affects the development of overweight [3,14,15].

Reference is made to the nutritional status as "the quality of nutrition at a given time". In this way, you get qualitative assessment expressed as excellent, good or bad [16] in varying degrees.

The nutritional status of a person is the result of the balance between food intake and nutrient requirements. In turn, the use of the nutrients ingested depends on various factors such as the combination of food or the conditions of the gastrointestinal system that receives them [17].

Nutrient requirements depend on the physiological state of the person. The times of peak demand correspond to those of greater cell reproduction, that is to say periods of rapid growth as the gestation, the first years of life and adolescence. The demands of nutrients also increase during stages of accelerated metabolism, such as for example during the [17] acute diseases.

Malnutrition is the result of insufficient food intake (in quantity and quality), the lack of proper care and the occurrence of infectious diseases. Behind these immediate causes, there are other underlying causes such as lack of access to food, lack of health care, the use of unsafe water and sanitation, and poor care and feeding. In the origin of all this are the root causes that include social, economic and political factors such as poverty, inequality or a low education of mothers [18].

The continued increase in the number of malnutrition in the school has been associated with the lifestyle that currently this population, characterized as in the sedentary adult, with a large number of hours in front of the television, and appropriate dietary habits, with low consumption of vegetables, fruit and dairy products, and a high consumption of processed foods of high energy density [19].

The multiple causes of malnutrition framework proposed by the UNICEF, shows a perspective of the Problems view from its root causes, showing the poverty reduction as the central axis of the same and the lack of resources is a determinant of the lack of access to education, food, health services and basic sanitation that are part of the underlying causes of malnutrition [17].

As a result of the underlying causes, you get an inadequate intake of food and a state of disease that can establish a vicious cycle and result in a short-term impact as important as are the mortality, morbidity, and disability; and other long-term that have an impact on the adult life of the individual, causing lesser Capacity Intellectual, economic productivity and reproductive performance, in addition to greater propensity to develop cardiovascular and metabolic diseases [13,17].

Most of the global malnutrition in our days is of the type known as protein-calorie malnutrition [12,17].

Up to two decades ago, it was thought that the lack of proteins was the main nutritional problem in the developing world, since protein is necessary for the physical and psychological development.

However, it was later discovered that the majority of children, whose diets were deficient in protein, also suffered from lack of calories, and if the first were administered while the latter remained insufficient, the development of the child improved little since it was still lacking the energy source for [12] break down proteins.

Growth retardation (low height) continues to be a public health problem that primarily affects children who live in the poorest localities. These are the children who have greater experience of hunger, resulting in high levels of malnutrition [13].

If the people do not receive the nutrition required to maintain a given level of weight and activity, it adapts to a lower weight and a lower activity [12].

At the national level, the majority of households living in food insecurity can be found in the classification of mild insecurity (41.6%). That is to say, these households experience concern about access to food and can even be sacrificing the quality of the family diet. A finding even more serious is that 28.2% of all households who experience moderate to severe insecurity (about 8,486,322 households throughout the country, applying expansion factors) faces to the consumption of a diet insufficient in quantity and, in extreme cases, have experienced hunger due to lack of money or other resources.

Taking as an antecedent the national percentage of individuals lacking access to food (percentage of population in moderate and severe food insecurity), reported in 2010 by the National Council on the Evaluation of the Social Development Policy (CONEVAL), within a period of two years, there seems to be a slight trend toward the increase in the prevalence of moderate and severe food insecurity.9 According to surveys, in the last ten years, in addition to the problems of malnutrition, there has been an increase in the prevalence of overweight and obesity in children older than five years of age.

Overweight and obesity are two of the main risk factors facing the Mexican population and the health system.

Its prevalence in adults was increased from 34.5 per cent in 1988 to 69.3% in 2006. The overweight and obesity are associated with several of the leading causes of death in the country, such as diabetes, cardiovascular diseases and brain vascular, and breast cancer, among others. It is estimated that these risk factors are responsible for about 50 thousand direct deaths per year [20].

According to the National Health and Nutrition Survey 2006 (ENSANUT 2006), 39% of the adult population suffers from overweight and another 30% of obesity. The prevalence of overweight is higher in men (42.5%) than in women (37.4%), while the prevalence of obesity is higher in women (34.5%) than in men (24.2%).

If you are added, these prevalence figures of 71.9% of overweight and obesity in women older than 20 years (24.9 million women) and 66.7% in men older than 20 years (16.2 million men).

To this must be added the problems in other age groups. The prevalence of overweight and obesity in children from 5 to 11 years and in adolescents in Mexico amounting to 26 (4.1 million schoolchildren) and 31% (5.7 million adolescents), respectively.

In 2012 the combined prevalence of overweight and obesity was 34.4% in both sexes, 1.1% less than in 2006 [20,21].

These figures speak of an epidemic that affects all age groups and all social classes that requires immediate actions, which include the promotion of physical activity and the control of the consumption of foods of low nutritional quality [2].

We analyzed data from 356 children under the age of five, when implementing the expansion factors, represented a population of 715,649 children. The size of the sample was of 262 children in urban areas, which accounted for 100 to 600 children and 94 in rural areas that accounted for 549 to 115 children. Table shows the prevalence of the different types of malnutrition in the population under five years of age of Jalisco, disaggregated by urban and rural localities and for the information obtained in 2006 and 2012.

There was not sufficient statistical power to establish whether the differences between 2006 and 2012 and between urban and rural localities were statistically significant [22].

Of the total number of children under the age of five years evaluated in 2012 in Jalisco, 9.1% presented low height, low birth weight, 1.6% and 1.4% were wasted. The prevalence of stunting in Jalisco was lower than that found for the national level (13.6%). The prevalence of low height-for-urban localities was 8.5%, and for rural areas [22] of 12.6%.

Overweight and obesity

We analyzed data from 536 school-age children, in the implementation of the expansion factors, represented a population of 1,497,035 individuals.

The sample size was 389 in urban areas, which amounted to 854,509,147 children, and in rural areas, which accounted for 989 to 180 children.

For the male sex were analyzed 259 observations, representing 501,298 children, and for the feminine 277 observations, representing 534,199 girls. Table shows the prevalence of overweight and obesity, and the sum of these two conditions for the state, by type of locality (urban and rural) and by sex [22].

In 2012 the prevalence of overweight and obesity were 23.9 and 15.7%, respectively (sum of overweight and obesity, 39.6%). The national prevalence of overweight and obesity in this age group were 19.8 and 14.6%, respectively. The prevalence of overweight in urban areas increased from 2006 to 2012 from 20.0 to 24.1% and for rural areas increased from 31.0 to 23.1%, respectively. The sum of both conditions of nutritional status of most obesity (overweight) in 2012 was greater for children (44.7%) compared with girls (34.9%) [22].

Objective

General Objective

Compare the nutritional state and knowledge about healthy behaviors in students of a private primary school with a primary school in a colony marginalized in Puerto Vallarta, in the year 2015.

Specific Objectives

1. To assess the nutritional status and knowledge about healthy behaviors in children of primary education in a public school.
2. To assess the nutritional status and knowledge about healthy behaviors in children of primary education in a private school.
3. Compare the nutritional status of children in the two schools studied.

Statement of the Problem

The state of nutrition and knowledge of healthy life styles in primary-school depends on a number of direct and indirect factors that influence them, one of them is the socio-economic factor, which tells us a lot about the child's education and how it is supplied.

As a family with the necessary resources, can support a complete diet with all of the features that are appropriate for a child's diet of this age, in addition to being able to provide them with the tools to build healthy life styles, giving them the opportunity to practice sports or extracurricular physical activities, on the other hand in a family where lack of resources is a complex that the child can if you want to have a diet where can include all the necessary nutrients that your child needs for proper growth and development, for which these families choose to replace the quality of a healthy food of a high price to food affordable but with very few nutrients. But this is not said, because the fact that a child with more resources get a daily spending for their recess, may allow you to have more susceptibility to acquire products scrap. We need to compare the nutritional status and knowledge about healthy behaviors in students of a private primary school with a primary school in a colony marginalized in Puerto Vallarta, and thus to be able to get a clearer picture, how true it is, and how much is the relationship of the socio-economic factor with the nutritional status of the correct and healthy.

Material and Methods

Type of Study

Study of quantitative approach, an observational, cross-sectional correlational study.

Sample size

Universe

The universe of our study is made up of 327 students, which are the total number of students who study between 1° and 6° degree in both primary.

The Primary School Juana de Asbaje has a total student population of 176 Students. The primary school Ma. Zataray Enriqueta Sánchez, of the Los Llanitos colony has a total student population of 151 students.

Study Population

Our specific study population are children of 4° and 5° degree of both primary, between the ages of 8 and 11 years. With a total of 103 students who make up these grades.

School	4° Degree	5° Degree	Total
College Juana of Asbaje	36	22	58
School Ma. Enriqueta Sanchez	20	25	45
Total	56	47	103

Problem	Study Population	Unit of study
The nutritional status of children of primary. The School Juana of Asbaje.	All children between the ages of 8 and 11 years of age of 4° and 5° degree of the Primary the School Juana de Asbaje.	A child between the ages of 8 and 11 years of age of 4° and 5° grade of primary school. The School Juana de Asbaje.
The nutritional status of children of the primary school Ma. Zataray Enriqueta Sanchez.	All children between the ages of 8 and 11 years of age of 4° and 5° degree of the School Primary Ma. Enriqueta Sanchez Zataray.	A child between the ages of 8 and 11 years of age of 4° and 5° degree of the Primary School Ma. Zataray Enriqueta Sanchez.

Displays

To select our sample was not necessary to use a formula to obtain it, by the following aspects:

1. Our universe consists exclusively with 307 individuals, is small.
2. Our sample population has a total of 103 individuals, therefore, all can be included in the same.

3. We selected the degrees of 4° and 5° of primary for our convenience, since they are old enough to be able to answer our questionnaires without any difficulty.

Selection criteria

Exclusion criteria

1. Primary school students not belonging to School Juana de Asbaje.
2. Primary school students not belonging to the school Ma. Zataray Enriqueta Sanchez.
3. Students of 1°, 2°, 3° and 6° of Primary School Juana de Asbaje
4. Students of 1°, 2°, 3° and 6° of the school Ma. Zataray Enriqueta Sanchez.
5. Students under the age of 9 years and older than 12 years of both institutions.

Inclusion Criteria

1. Students of 4° and 5° at the Colegio Juana de Asbaje.
2. Students of 4° and 5° Primary the School Ma. Zataray Enriqueta Sanchez.
3. Students of the Colegio Juana de Asbaje 9 to 12 years of age.
4. Students of Primary School Ma. Enriqueta Sánchez Zataray of 9 to 12 years of age.

Source of information

1. Direct survey on type of food to students from Colegio Juana de Asbaje and Primary School Ma. Zataray Enriqueta Sanchez.
2. Direct survey on knowledge of healthy behaviors to students of Colegio Juana de Asbaje and primary school Ma. Zataray Enriqueta Sanchez.

Technical Information

To gather information and to obtain the data necessary to fulfill our objectives, two multiple-choice questionnaires to evaluate different nutritional aspects in children of the private school and public school.

For type of feeding and nutritional knowledge

The first survey consists of 29 multiple-choice reagents, where you can only select one answer from the 6 to 7 options to select. This has the objective of evaluating the nutritional status of children who are interviewed.

Is divided into 2 sections, which are divided in the following way

- The first paragraph: power 21 This section consists with reagents, where you ask the child different aspects about their habits or eating behaviors, such as the number of meals in the day, the most consumed food groups or if you eat foods out of the house.
- The second section: physical activity or exercise. Consists of 8 reagents, it asked the child different aspects of habits and behaviors that involve physical activity.

How are the be involved in extracurricular sports teams or, on the contrary, the amount of time spent watching television.

The second survey assesses the nutritional knowledge with which the child account.

By reason teaching materials and due to the fact that this assessment is more appropriate for children, it was decided to divide it into 3 sections:

- The first paragraph: basic knowledge. (6 reagents from multiple choice to select correct answers)
- The second section: BASIC QUESTIONS. (2 Reagents 6 multiple-choice with options to choose the correct answer.
- The third paragraph: RELATE BASIC CONCEPTS. (12 column relationship reagents with other 12 response options)

To obtain the anthropometric values

- **Material:** Scale, tape measure, leaves.
- **Technical and procedure:** The height of the student and subsequently will get your weight is measured waist circumference, the data will be emptied on a table of data collection, to subsequently obtain BMI.

Location

This research was conducted in the town of Puerto Vallarta municipality of the state of Jalisco. The study groups selected for this research were two educational institutions, one private and one public, both with different addresses.

The private institution School Joan of Asbaje with Lucerne No.215 in the Colonia Diaz Ordaz in the city of Puerto Vallarta.

The public institution Elementary School Ma. Zataray Enriqueta Sanchez with Paseo de los cocoteros No. 661 in the Los Llanitos Colony in the community of Ixtapa in Puerto Vallarta.

Ethical Aspects

To carry out this research in both schools, with informed consent primarily directed to the Director of the institution, where he requested to be able to work within the institution of his command, explaining the type of research, as well as what would be done and on what dates and times would take place. Subsequent to the authorization on the part of both authorities, will be given an informed consent to the parents of each student research participant, i.e. students subject to study, informing them that their son is part of an investigation, what procedures will be carried out, the day and the reason why is performed.

Results

We evaluated the degree of nutritional knowledge, type of diet and nutritional status on the basis of anthropometric values; a selected sample of 103 school children were evaluated only 91 (88%) of the total students, this for reasons unrelated to the project, such as absence of children to the institution on the day on which the implementation of the survey, belonging to the 5° and 4 primary level in the city of Puerto Vallarta, 55 (60.4%) belonging to the Private School Juana de Asbaje of which were evaluated.

34 students of 4° and 5° 21 students, together with the rural elementary school Zataray María Enriqueta Sanchez which evaluated a total of 36 students (39.5%) 12 4° degree students and 24 students of 5°degree.

The age and sex of the children are represented in table 1 and table 2.

Private School			Public School		
Sex	**No. of Children**	**Percentage %**	**Sex**	**No. of Children**	**Percentage (%)**
Children	26	47.27%	Children	16	44.55
Girls	29	52.73%	Girls	20	55.55
Total	55	100%	Total	36	100%

Table 1: Sex.

Private School			Public School		
Age	**No. of Children**	**Percentage (%)**	**Age**	**No. of Children**	**Percentage (%)**
9 years ago	22	40%	9 years ago	5	13.88
10 years	24	43.63%	10 years	23	63.88
11 years	8	1454	11 years	5	13.88
12 years	1	1.81	12 years	3	8.33
Total	55	100%	Total	36	100%

Table 2: Age.

With respect to the index of body mass index, the level of nutrition of the private school maintains a similar percentage between normal-weight and, taking isolated cases of overweight and obesity; there were no cases of obesity grade II or grade III 2 The school holds a higher rate of normal weight, followed by a better rate of children with low birth weight and a case of obesity in grade I; there were no cases of overweight, obesity, grade II and grade III (See table 3 and 4).

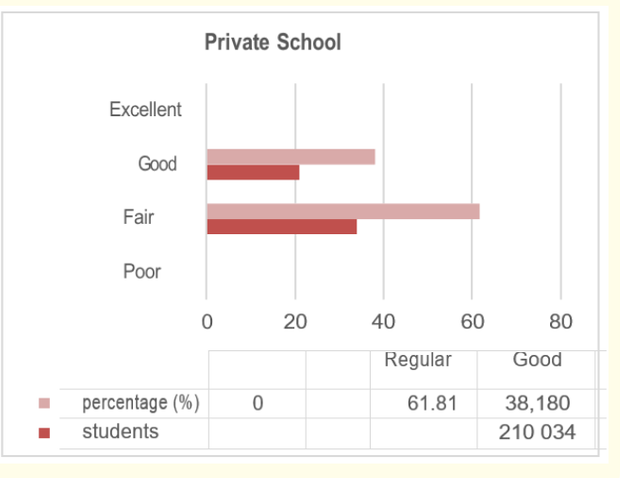
In terms of the level of quality of the power, the private school was 61.81% of the population in a regular level and 38.19% of children indicated sustain good food; being zero cases of excellent or bad power supply. In the public school it is seen that 86.11% of the population has a regular supply and 5 students have a good, presenting the same pattern of exclusion that the private school.

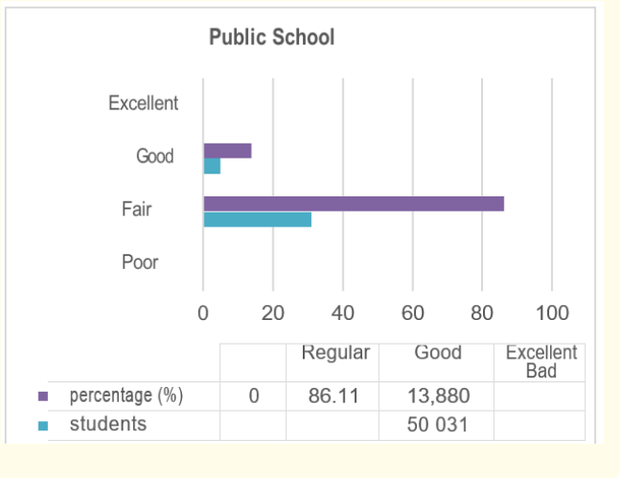
Nutritional status	No. of Children	Percentage %
Low weight (BMI < 18.5)	26	47.28%
Normal weight (BMI 18.5 - 24.9)	26	47.28%
Overweight (BMI 25 - 29.9)	2	3.64%
Class I Obesity BMI (30 - 34.9)	1	1.80%
Class II Obesity (BMI 35 - 39.9)	0	0%
Grade III obesity (BMI > 40)	0	0%
Total	55	100.00%

Table 3: Level of nutrition (Private School).

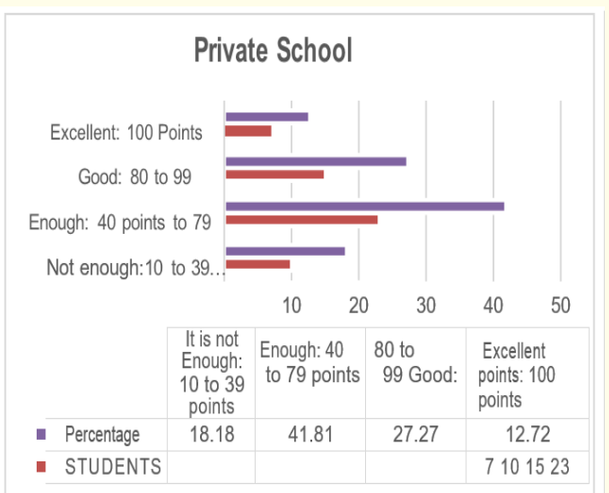
Nutritional status	No. of Children	Precentage %
Low weight (BMI < 18.5)	15	41.67%
Normal weight (BMI 18.5 - 24.9)	20	55.55%
Overweight (BMI 25 - 29.9)	0	0.00%
Class I Obesity BMI (30 - 34.9)	1	2.78%
Class II Obesity (BMI 35 - 39.9)	0	0%
Obesity grade III (BMI > 40)	0	0%
Total	36	100.00%

Table 4: Level of nutrition (School marginalized).

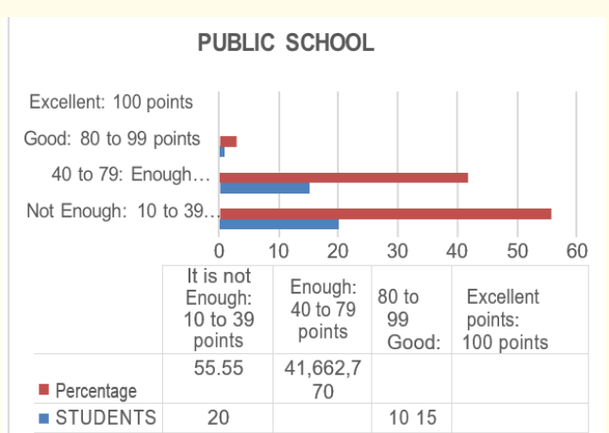




The results of nutritional knowledge that was obtained was that at the private school the majority of the students a 41.81% had sufficient knowledge while a 12.72% had the excellent knowledge in comparison with the public school that do not have any student who will obtain a score excellent, but everything else n 55.55% did not have sufficient knowledge a 41.66% only sufficient knowledge and only a 2.77% good knowledge.



	It is not Enough: 10 to 39 points	Enough: 40 to 79 points	80 to 99 Good:	Excellent points: 100 points
Percentage	18.18	41.81	27.27	12.72
STUDENTS				7 10 15 23

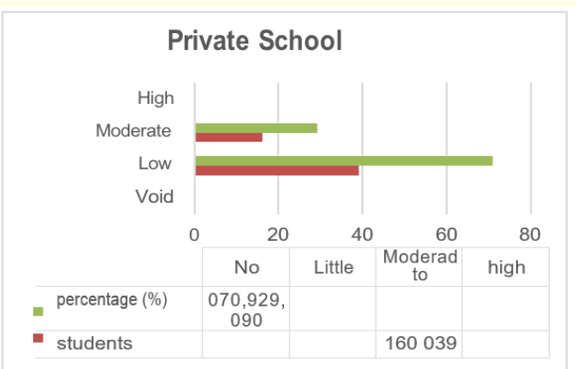


	It is not Enough: 10 to 39 points	Enough: 40 to 79 points	80 to 99 Good:	Excellent points: 100 points
Percentage	55.55	41,662,770		
STUDENTS	20		10 15	

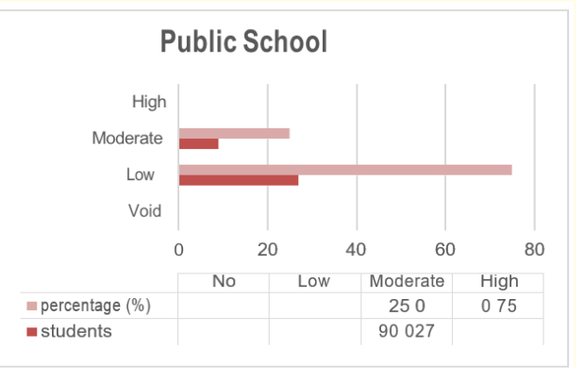
Physical activity data at the private school had a higher percentage of children who were little physical activity, and 29.09% carried out moderate physical activity; there were no children with null or high level of exercise. In the School 2 there was a higher percentage in children who do little physical activity, 9 children were moderately activity and no cases of null or high physical activity.

Analysis of results

The level of malnutrition measured in children yielded results that did not expect to get. First, none of the two selected schools had students with class II obesity or obesity grade III. We had hoped that at least in the public school had children staying in this category, because I went there where the same indicated a greater exposure and frequency of intake of junk food, something that has not happened in the private school. Each of the institutions has only one student with class I obesity, but differed in students with overweight, because the public school did not have any child that will be found in this measure of BMI, in comparison to the private school, which had 2 children. This may be due to the fact that in the private school, children have access to larger volumes of food and perform all their meals per day, this allows them to meet their nutritional needs without reach serious levels of obesity, as it does not consume significant amounts of junk food, compared to the public school, where the number of meals being made per day, and the amount of food was more limited. Based on the above, the percentage of children with normal weight compared with the percentage of children with low birth weight was higher in the public school. A comparison of the private school, where the percentage of children with normal weight and low weight was exactly the same.



	No	Little	Moderad to	high
percentage (%)	070,929,090			
students			160 039	



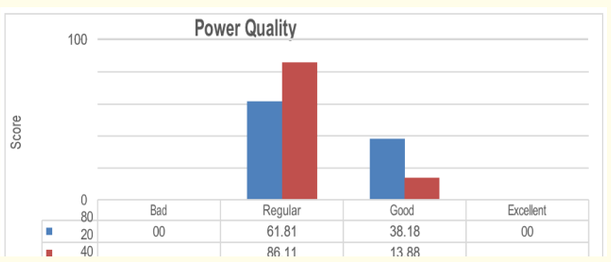
	No	Low	Moderate	High
percentage (%)			25 0	0 75
students			90 027	

The level of quality of the power indicated that there is a greater number of children with regular feeding, being predominant in the public school that in the private school; in terms of the type of power good (60 - 89 points of the survey), it was noted that in the private school there are a greater number of infants with a good, this could be due to the fact that the majority of these performed at least 3 meals a day, integrating all the food in the dish of the okay to eat; what differs with the public school, since the children had less access to food, increased consumption of soft drinks and sugary drinks like junk food.

The children of the private school they restricted the free consumption of food away from home, carrying mostly lunch; in this aspect in the public school had similar figures, but this was due to the lack of resources for families, since many of these children were one or two meals a day, which is not enough to cover the basic requirements for maintaining a good.

In our sample there was a terrible, however, we could not see excellent results. We measure the level of knowledge of the child's nutritional, assigning in four categories of possible outcomes.

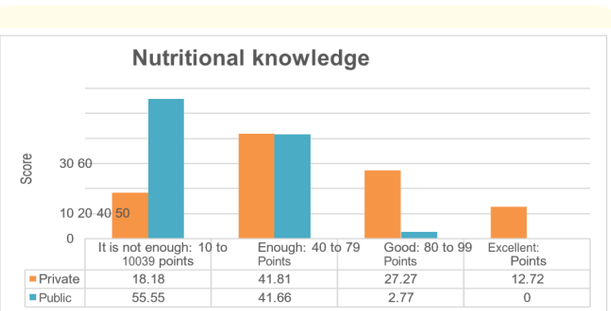
Comparison Chart



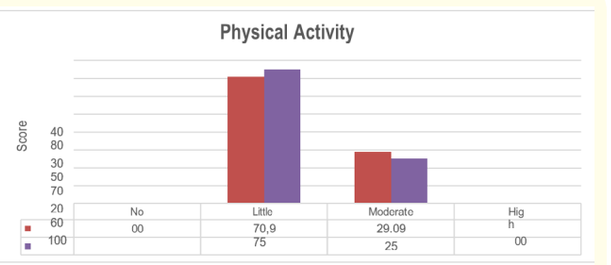
In this case, the results were expected. There was a small percentage of students in the private school who answered correctly to all the questions in the questionnaire, thus obtaining the level of excellence. For its part, the public school had dismal results, with no student in grade of excellence.

The level of knowledge is predominant in the private school was enough, while in the public school was insufficient. Children in the public school could not concentrate on follow the correct indications and lacked basic knowledge of how to relate the food belonging to the same group or the elements that make up the dish of good eating, in addition to the fact that it took them a long time to answer the questions; all this can go hand in hand with a poor nutritional intake, which limits their ability to concentrate. Thing that did not occur in the private school, where the children were more agile when answering and obtained better grades, which we can associate with an intake more rich in nutrients.

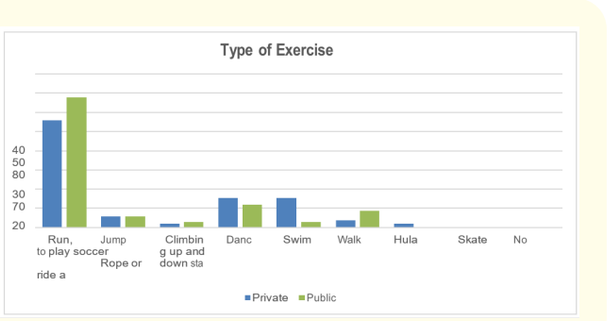
Comparison Chart



We know the importance of the activity has for the healthy development of children in school, it is for this reason that the evaluation of your physical activity is an essential value in our research project, this study sought to assess the level of exercise and physical activity carried out by children from both schools (Public School and College), curiously happens that, based on the results, we found that both schools are an intimate relationship in terms of the level of physical activity they do children of each institution, taking both dominate the realization of little physical activity, it is difficult to think of because of these results, since in both schools are areas Where children can perform a variety of physical activities and that in spite of everything it is necessary the realization of physical activity for the ideal healthy development of children.



With regard to physical activity the children from both schools are performing the same amount of exercise, differing in the variety of these, public school children have a greater willingness to play soccer or go out to play in the streets, while the private school children perform more variety of activities such as ballet, swimming, football, basketball, gymnastics and athletics.



Discussion

We believe that the influential factor in the poor knowledge of children in public schools is the same malnutrition, such as the "World Food Program", the children cannot concentrate if they are hungry and this leads to a waste of school. It is more likely that infants malnourished children come from families with malnutrition, as well as those who are overweight belong to families who are obese. It educates the child, but not educated or oriented to parents.

The malnourished children are more prone to infections and these in turn can trigger anorexia, a decrease in the absorption of nutrients, an increase in urinary losses of nitrogen and electrolytes, as well as an increase in the basal energy expenditure.

What we were able to note is that there is fear of not complying with the "requirements" to keep a figure well before the society, there is a greater concern for these factors in the public school as well as more teasing and discrimination in relation to the weight of

the children. Are more unsafe, unstable emotionally, irritable, difficult to manage and maintain dietary practices of restrictive type.

"What is happening at a certain stage of life affects the later stages and what happens to a generation affects the next" (WFP 2006) [23-25].

Conclusions

In the study we were able to observe some similarities with what the bibliographies, such as a higher rate of malnutrition in the public school, lower knowledge about healthy behaviors; with the exception with respect to obesity, since the percentage was much less than the above, this may be due to the sample chosen.

Malnutrition data found in a greater proportion in the public school, deducing that the economic and socio-cultural factor that is seen in the comparison of each school is of great weight to keep a good supply.

With regard to the level of knowledge, it is important to note that the private school children were able to understand and carry out the survey in a way faster than those of the school.

With regard to physical activity the children from both schools are performing the same amount of exercise, differing in the variety of these, public school children have a greater willingness to play soccer or go out to play in the streets, while the private school children perform more variety of activities such as ballet, swimming, football, basketball, rhythmic gymnastics and athletics.

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