Promoting Life Style among Sheltered School Children in Banha City, Qualiobia Governorate

[1*]Sahar A. Sh. Mahmoud and [2]Magda A. Ahmad

[1]Community Health Nursing, Faculty of Nursing, Helwan University, Cairo, Egypt
[2]Community Health Nursing, Faculty of Nursing, Ain Shams University**,** Cairo, Egypt
[*]dsahar100@yahoo.com

Abstract: Shelter is a place affording protection against danger, or it is a structure that provides privacy and protection for children who have no fixed night time residence. This study aims to evaluate the effect of nursing intervention on promoting life style of school children's shelters in Banha City, Qualiobia Governorate. Design: A quasi experimental design was used to conduct the study. Setting: This study was carried out at two shelters, affiliated to social welfare institutions for boys and girls in Banha City in the academic years 2009 /2010. Sample: All children 55: 36 boys &19 girls in primary, preparatory and secondary school ages (6-18 years). Tool: Three Tools were used for data collection : 1) An interviewing questionnaire for the children concerning socio-demographic characteristics,2) Assessment of health problems: physical, social, psychological and emotional problems: (a)Psychological tests as Fear and Anxiety Test, Poor Relationships, Depression Test, and Emotional Test),(b) Social problems: violence Test, Withdrawal Test and Sexual Abuse Test, 3): Life Style Assessment Sheet. Results: Revealed that the majority of the studied subjects were males, more than two thirds had basic education, according to their health problems, there were statistically significant improvements after the intervention .Concerning self health responsibilities, the mean was 31.222, 32.053 pre program which improved to 50.456, 50.150 after program, the nutritional awareness mean was 28.139, 29.158 pre program, improved to 34.540, 35.150 with a significant difference at p= <0.001. Statistically, there were improvements after the intervention program in physical activity, stress management and environmental safety. Coclusion: The results revealed a significant effect of the intervention program in promoting life-style and providing favorable impact on the health condition of children's shelters. The finding of this study recommended the need for integration between Ministry of Health and Ministry of Society Affairs and Solidarity to develop health care services such as providing periodic check up under supervision of the Ministry of Health and providing shelters with nurses working for 24 hrs/day.

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1. Introduction

Homeless children are linked to poverty, changes in the housing market, changes in rendering mental health services, persons suffering from mental illnesses, increase of birth rate and personal crisis (**WHO, 2005**).

The number of homeless children around the world has reached more than 150 million. Around 40 million are in Latin America, about 25 to 30 million in Asia, and more than 10 million in Africa. It has been reported that there are 75 million of homeless children in developing countries only, and 5 million in developed countries (**Abd-Elhaleem, 2004)**.

In Egypt, the phenomenon of homeless children is widespread and the absolute number has increased lately. The number of homeless children was estimated to be two million, with 250,000 in Cairo only, and 2172 in Alexandria, homelessness has been officially acknowledged as a social problem, and has been put into consideration by local and international development planners and makers, to be one of their most critical challenges. Accordingly, organizations and associations are working to confront this problem (**Ministry of Society Solidarity, 2006).**

There are numerous factors that contribute to homelessness, common poverty, eroding work opportunities and housing, decline in public assistance, lack of affordable health care, domestic violence, mental illness, addiction disorders, increase incidence of infection, higher infant mortality and morbidity, increased growth of retardation and developmental delay (**Nancy, 2008).**.

Homeless children are more likely to suffer from acute health problems, other than from chronic conditions; the most common illnesses in children are upper respiratory infection, minor skin infection, ear infection, gastrointestinal problems, trauma, eye disorders, and lice infections as might be expected in families that are moving frequently .Homeless children are often at the rear their immunizations, without easy access to health care services (**Judith, 2005).**

Shelters managers should try to improve life style of homeless children, promoting multi service programs in services, and provide health education to all individuals about the importance of adequate housing, good nutrition socioeconomic, effect of drugs, importance of bringing mental health care, and control of birth rate (**Judith, 2005**).The community nurse plays an important role in preventive interventions for children's shelters. Because of the wide range of problems presented by children's shelters, nurses are required to be able to identify factors contributing to or exacerbating homelessness among children and adopt problem solving techniques to face these problems **(WHO, 2004).**

The community nurse plays an important role in such preventive interventions by homeless children , because of the wide range of problems presented by homeless children, nurses are required to be able to identify factors contributing to or exacerbating homelessness among children, and adopt problem solving techniques to face these problems (**WHO, 2004**).

Magnitude of the problem:

The number of homeless children around the world has reached more than 150 million. More than 10 million in Africa. It has been reported that there are 75 million of homeless children in developing countries only. The shelter children number in Arab world is 15 million child and 2, 5 million in Egypt **(Ministry of Social Affairs & Solidarity, 2006).** 50% of the deaths, throughout the world each year, are due to wide range of problems and unhealthy life style presented by homeless children, so, those children need for more information and counseling for health promoting behaviors **(Salem, 2004).**

Aim of the study:

The study aimed to evaluate the effect of nursing intervention on promoting life style of school children's shelters in Banha City Qualiobia Governorate through:

1-Assessing health status among sheltered school children.
2-Assessing healthy life style of sheltered school children regarding promoting healthy and unhealthy behaviors.
3-Identifying health resources and community health services directed to sheltered school children.
4-Developing a nursing intervention program to promote their life style
5-Evaluating the effect of the nursing intervention.

Hypothesis

Nursing intervention will improve life style of sheltered school children.

2. Subjects and Methods

Design:

A quasi experimental design was utilized to conduct the study.

Setting:

The study was conducted in two shelters, affiliated to social welfare institutions for boys and girls, in Banha City Qualiobia Governorate. These shelters were selected because their children's age ranged between 6-18 years old, and they were in different educational levels of primary, preparatory and secondary schools.

Sample:

There are two governmental shelters in Banha City. They accept children aged between 6 to 18 years. The actual number of children in these shelters is 55 (36 males &19 females). All children of both sexes were in primary, preparatory and secondary schools. Their ages ranged between 6-18 years, in these shelters were selected as study sample.

Tools of data collection:

Three Tools were used for collecting data based on literature review and experts' opinion:

Tool (1) An Interviewing schedule to assess: **Socio demographic characteristics of:** shelter's homeless children as age, sex, education and family members including educational level of mother and father, if found and job of father or mother .

Tool (2): Assessment of health problems Homeless children:

Physical problems:

This part include105 close- ended questions (questions 1-80) about physical complaints through medical history as: gastrointestinal, respiratory, renal problems, chronic diseases, communicable diseases, nutritional problems and surgical diseases, as well the same physical problems for acute problems.

Social, psychological and emotional problems: This part is composed of the following tests:

Psychological test as: Fear and Anxiety Test. This part is composed of 27 close- ended questions (questions 1-27) scored according **to Castaneda, et al. (2006**) as: 1-9 free, 10-18 average, 19-27 high rates of fear and anxiety.

Poor relationships with others: this part composed of 12 items, scored according to **Elrakhawy (2000**) as follows: from 1-16 low, 17-32 average, 33-4 high rate of relation.

Depression test:
This part composed of 27 multiple choice of 3 levels, scored according to **Maria (2000**) as follows: from 1-23 free, 24-47 average, 48-71 high rate of depression.
Emotional test:
It contains 4 close and open questions (questions 1-4) scored yes (1) and no (0) marks.

Social problems:
This part composed of more than one test is covering:

Violence test: was composed of 29 statements using variable scale of 3 levels, scored according to psychology today, (**Elrakhawy, 2000)**, from 1-20 free, 21-40 average, 41-58 high level. Theft: this part is composed of 11 questions scored as follows :1-7 free, 8-14 average, 15-22 high level.
Withdrawal test: This part was composed of 23 statements using variable scale of 3 levels, scored according to **Chess. (2000)** from 1-7 free, 8-14 average, 15-23 high rate of grasping.

Sexual abuse test:
This part was composed of 11 statements using variable scale of 3 levels, scored according to Psychology today, (**Chen, etal, 2006)** from 1-7 free, 8-14 average and 15-22 high.

Tools (3):
Life style assessment sheet **(Cookfire, 1991):** to assess children knowledge and practices about healthy life style .It covers five major areas: Self health responsibility including (18) questions, with total scores(36); eating habits and nutrition awareness including (13) question, with total scores(26); environmental safety (12) questions, with total scores(24); physical activity including (7) questions with total scores(14); and stress management including (14) questions, with total score(28). Students responses were scored as follows; always=2, Sometimes=1, and never=0.The researchers categorized student perception as satisfactory when the score is 75% or more, and unsatisfactory when the score is less than 75%.

*Validity test was done through experts from faculty members of Community Health nursing.
4) Operational design:

Pilot study:
The pilot study was carried out on 20 children, who were excluded from the main study sample. They were chosen to test practicability, clarity and simplicity of the tools used, after detection of difficulties that might arise. Some questions were added (e.g, rest & activity), others were clarified (tobacco) or omitted (e.g, general appearance). It took about one month from January to February 2009

Field work:
The process of data collection was carried out in the period from March to April 2009, three days weekly for three hours/daily. Implementation of the educational program from May to September 2009, three days weekly for three hours/daily. An official permission was obtained from Ministry of Social Affairs and Solidarity to the directors of the selected shelters .The aim of the study was explained to them.

Intervention program construction:
It consisted of three phases:
First, preparatory phase and assessment phase:
A review of recent, current, national and international related literature in various aspects of the problem was done at this phase. The aim was to design the study tools and to be acquainted with various aspects of the problem.

Second, planning and implementing phase:
General objective:
The objective of nursing intervention program was to promote life style of children's shelters**.**
The program was designed by the researchers including knowledge related to: personal hygiene, prevention of infection, practicing physical exercise, proper nutrition, sleeping and rest, safe use of medication, environmental sanitation and safety, stress management, control of psychological problems, and smoking cessation**.**
The program was implemented over a period of 4 months; it was carried out in 7 sessions (time allowed 8 hours distributed on 7 sessions : 5 hours for theory and 3 hours for practice. The duration of each session ranged from 30 - 90 minutes.
At the beginning of each session, the investigators started by a summary about what was given through the previous sessions and objectives of the new one, taking into consideration using simple and clear language to suit the level of understanding **.**
Different teaching methods were used including lectures, group discussion, demonstration and re-demonstration, and role-play to implement the program.
The educational media were brochures, colored posters, laptop screen show and real objects.
At the end of each session, the children were informed about the content of the next session and its time.

Third, the evaluation phase:

Evaluation was based on scores of acquired knowledge and practices in pre-test and immediate post-test.

Appropriate statistical methods and tests were used for analysis of the results.

Effects of nursing intervention program for promoting life style of school children's shelter's were identified.

Ethical considerations:

Informed consents were taken from the directors of shelters, after explaining the objectives of the study, they were assured that they will not have any harmful effect on children, and that the information will be confidential and they can withdraw from the study at any time without giving any reason.

5) Administrative Design:

The study was carried out with the co-operation of the different levels of authority in the local office of the Ministry of Social Affairs and Solidarity, and directors of school children's shelters in Benha City where the study was conducted. Written permissions for data collection was obtained from the administrative personnel shelters upon submission of formal letters from the Deans of the Faculty of Nursing, Ain Shams and Helwan Universities to different shelters, requesting their approval for conducting this study at these shelters.

6) Statistical Design:

Data were analyzed using the statistical Package for Social Sciences (SPSS) version 10. Qualitative data was presented as number and percent. Comparison between groups was done by Chi-square test. $P < 0.05$ was considered to be statistically significant of results.

3. Results

Table (1): Illustrates that the majority of the studied subjects were males (36) and only (19) were females, 65.45% had basic education, while 29.09% were secondary education, and only 5.45% could read and write.

Concerning father's education, 96.36% were illiterates while 3.64% could not read and write. Regarding fathers work 78.18% were

Peddlers, while 5.45% had technical work and only 3.64% retried. Regarding mother's work 70.91% were housewives, 50.91% considering with whom the child was living in the past live with mothers and step fathers; 27.27% with fathers and step mothers, and only 16.4% were living with friends before being in the shelters. However all of them 100% were in the shelters for 4 years or more.

Table (2): Shows that the most common health problems, among male and female children pre program applications were upper respiratory disorders such as; recurrent tonsillitis (91.67%, & 78.95% respectively), followed by urinary problems such as; enuresis(38.89 % & 89.47% respectively), while skin diseases such as dermatitis allergy represented (52.78%, & 94.74% respectively) . As regards gastrointestinal problems, the same table shows that 41.67% of the male children complained of diarrhea constipation, while 84.21% of the female children complained of anorexia dyspepsia; 55.56% & 78.95% respectively of headache; (55.56% and 63.16% respectively)for extremities pain; (44.44% and 36.84 % respectively) for back aches (41.67% & 68.42% respectively) of joints pain; and 11.11% and 73.68 for numbers of limbs/ muscle cramp .

In relation to sensory system problems, eye inflammation discharge had the highest percent among male and female children (55.56% & 68.42% respectively) followed by ear discharge (36.11% & 42.11% respectively).

Amoeba was found among 75% and 68.42% of male and female children.

Table (3): Shows that, 69.4 % of male children and 89.47% of the female shad severe fear and anxiety pre program, which improved to be 16.67% and 100.00% post program respectively. As regards depression, 72.2% of male children and all of female children had moderate level of depression, which improved to be 27, 78 % and 42.11% post program respectively. The some table shows also that, 55.6% of male children and 78.95% of the females had moderate emotion disturbance, which improved to be 22.2% and 26.32% post program respectively.

As regards violence, 41.67% of male children and 68.42% of female children had moderate violence; which improved to be 27. 78% and 15.79 % post program respectively.

In relation to sexual abuse, the same table shows that 75% of male children and 68.42% of female children suffered from moderate sexual abuse, improved to be 16.67 % and 26.3% post program respectively. Meanwhile, socio psycho sexual problems among sheltered children showed statistically significant differences pre / post program application.

Figure (1): reveals that there were improvements after implementation of the nursing intervention program in all aspects of sheltered students' life style in relation to self health responsibilities, eating habits, environmental safety, nutritional awareness, physical activity, and stress management.

4. Discussion:

Homelessness has been depicted as an adventure, escaping from oppressive conditions as poverty, domestic violence, child abandonment, school dropout, migration and changing family structures. These are considered the most obvious causes for the existence of homelessness among children (Wahdan, 2005).

The socio- demographic characteristics of the present study sample indicates that the children's age ranged between 6-18 years old. This age group is that of late childhood and adolescence, those aged of 6- < 12 years represented almost one quarter of total sample, while more than half o sample aged 12- 15 years with males slightly more than the of females in the same age, (Table 1).The present study results were congruent with Abo- Elnasser., (2003), who reported that, in his study in Cairo Egypt the age of children inside shelters was 6-18 years. However these funding disagreed with Fahmy (2004), who found that age of children inside shelters was only 6-12 years, and Sedik (2000), who reported that half of the sample aged 11-14 years, and that males were more than the females in children's shelters.

Concerning child's education, findings of this study shows that, the majority of the sheltered children were in schools at different levels of education. More than one third of males were in basic education, while slightly more than half of females were in secondary education, and a minority of the of males were in secondary education, as well the minority of total sample could just read and write (Table1). This study finding was in agreement with Abd-Elhaleem (2004), who reported that two thirds of the sample were in different levels of education, especially primary schools, while 8% could just read and write and less than one third did not go to school. The study result revealed statistically significant difference among children's educational levels.

The present study finding showed the distribution of the studied children according to their parent's education, all the males of mothers and fathers were illiterates and the majority of the females parents can just read and write. (Table 1): Concerning fathers` and mothers occupation, more than three quarters of fathers are peddlers, and minority of them are either technical workers or in pension, and the majority of their mothers were housewives (Table 1). The present study finding was in agreement with Elsamaloty (2000), who reported in his study in Cairo that the percent of illiteracy between families of sheltered children increased due to poverty that pushes children to leave family home and go to street. This may be due to many causes such as illiteracy, poverty, divorce, domestic violence; illegal pregnancy and low social income of parents push them to put their children in shelters. Community can support parent to provide care for their child at home.

This result was in accordance with Abd-Elhaleem (2004), who reported in her study in Cairo that , three quarters of their children original residence was in urban areas, while for one quarter, it was in rural areas and most of them were males. Investigating reasons for not living with both parents, it is apparent from (Table 1) that minority of male children said that the main cause was death of one or both parents, another minority reported that mother or father was in prison, while one tenth of female children said that the main cause was death of one or both parents and few mentioned that divorce was the main reason. This result was in disagreement with Kalil (2000), who reported in his study in Cairo that the majority of sheltered children were living with father and mother before. This is in agreement with the present study result about reason for leaving family and living in shelters.

Considering to children health problems, the present study finding before intervention showed that relatively high percentage of the study sample suffered from gastrointestinal problem's which were significantly higher among female children, as around one third of males suffered from, constipation, diarrhea, nausea, vomiting, and abdominal colic. However more than there quarters of females suffered from nausea / vomiting, the majority of them were suffering from anorexia /dyspepsia, the least percentages of both males and females were suffering from bleeding by mouth, (Table 2). The present study finding was in agreement with Mursy (2004) and Mosa (2005), who reported in their studies in Cairo that a group of health problems that faced homeless children were related to respiratory infections, gastrointestinal and skin disorders.

Regarding urinary problems, relatively high percentages of study sample suffered from various urinary problems. More than one third of males suffered from enuresis and had pain during urination, compared with the majority of females who were suffering from enuresis, polyurea and more than half of them suffered from hematurea. Considering cardiovascular problems, more than on quarter of males versus more than two thirds of females suffered from palpation and none of the males versus almost one fifty of the females suffered from varicose veins. There was a significant difference among children (Table 2). This study finding was in agreement with Mosa (2005), who reported in his study entitled among homelessness Social merge of homeless children, the death rate that cardiovascular complaints were most prevalent among homeless children and sometimes urinary problems as involuntary urination.

The present study showed that the majority of sample suffered from upper respiratory problems representing most of the male sample were suffering from tonsillitis, green nasal discharge and the majority from epitasis .Almost two thirds suffered from sores in mouth, nasal obstruction and rhinitis. Most of the female sample suffered green nasal discharge, sores in mouth and epistaxis and more than three quarters were suffering from tonsillitis, nasal obstructive and rhinitis. More than half of males and females suffered from cough and dyspnea. One third of males suffered from chest pain, more than quarter from bronchitis bronchial asthma, while approximately three quarters of females were suffering from chest pain and chronic bronchitis (Table 2).The present study was in agreement with Mursy (2004), and Mosa (2005) who reported that a group of health problems faced homeless children, these were respiratory infections, gastrointestinal and skin disorders. The study revealed that in relation to upper respiratory problems, there were statistically significantly differences among children. This may be due to absence of medical staff, and absence of nurse's role, especially health teaching, and treatment was neglected, which caused spread of respiratory diseases among children.

Regarding children other physical health complaints, their medical reports, revealed that the majority of sample suffered from central nervous problems, as more than half of males and more than three quarters of the females suffered headache. More than two fifths of males suffered from back aches, joints and extremities' pain , and slightly more than tenth complained muscle cramps, while almost two thirds of females suffered from Bach pain and extremities (Table 2). This study result was in agreement with Mursy (2004), who reported in his study on homelessness problems in Cairo that homeless children suffered from central nervous system. The study result revealed that in relation to the central nervous problems there were statistically significant differences among children under study. Children complaints of central nervous problems were due to standing a lot of time during their work, without considering their ages. Sometimes they sleep on the floor without mattress that had main effect on extremities, back and head especially in female shelters.

Regarding skin diseases the majority of children's shelters complained of different skin diseases, as around half of male children suffered from allergy, and abrasions and fissures and more than two fifths suffered from warts, Tenia ,partial alopecia and scabies while only less than fifth complained from increased thickness, and all of female children suffered from abrasions and fissures and most of them from allergy, warts, Tenia and partial alopecia, and more than half complained from scabies and increased thickness (Table 2). The present study results were in agreement with Mursy (2004), who reported that skin problems were the most common problems among sheltered children; however, they were in disagreement with Kareem (2000), who reported that scabies was the most common skin problem related to poor hygiene. The study showed also that skin problems were statistically significantly different among children. This may be due to poor hygiene and carelessness in shelters on the part of social instructors and medical cares, especially in boy's shelters, adding to the ignorance of children concerning healthy habits.

Considering eye problems more than half of the total sample complained of eye problems. More than half of male children suffered from eye discharge/inflammation and around one third suffered from eye squint, ear discharge and ear ache, and less than fifth of them were wearing glasses and had decrease hearing partial and deafness. While more than two thirds of females suffered from eye inflammation and more than half suffered from eye squint, and ear ache more than two fifths suffered from ear discharge, and the minority of them were wearing glasses and had decrease hearing (Table 2). The present study was in accordance with Abd-Elhaleem (2004) and Mosa (2005)), who reported that the most common problems prevailing among homeless children were in sensory system as eye, and auditory complaints. The study shows that skin problems were statistically significantly different among children. This is due to the absence of medical care from doctors and nurses in shelters during child's illness. They also did not follow social supervision. This was specially happened in Elbaneen shelter that lead children to become deaf and miss one eye or two, as a result of ignorance of their state and the required treatment especially when children were young. This led to spread of disease faster among children.

The present study finding showed that parasitic diseases revealed highly statistically significantly difference among children as three quarters of male children suffered from Amoeba, more than half from worm ascaris and few suffered from bilharziasis , while for females more then two thirds of them suffered from Amoeba and worm ascaris and the minority of them suffered from bilharziasis, (Table 2). These results were supported by Mosa (2005), who reported in his study in Cairo that parasitic disease was most common especially bilharziasis disease as a result of bathing in contaminated canals and rivers. This study result was also in agreement with Mursy (2004) who reported that parasitic

diseases were most common among homeless children. This is due to the absence of the nurse health teaching role about hygienic care and healthy habits in children's shelters and schools and medical treatment among children.

In relation to nutritional problems, the present study showed that there was highly statistically significantly difference among children. Relatively high percentages of study sample complained of anemia, the majority of males and more than half of females suffered from thinness and minorities of both males and females suffered from obesity, (Table 2). This study was in agreement with Abd-Elhaleem (2004), who reported that the most common nutritional problem in shelters was anemia as a result of not eating all types of food, leading to thinness. This is due to the children nutritional condition. Shelters where they are offered quantities and qualities less than body requirements and are not supervised under special nutritionist which helps to provide balanced diet to children, in addition to the nutritional bad habits prevailing among homeless children.

The present study showed that in relation to social problems among homeless children in Qualiobia Governorate shelters, highly statistically significant differences were found between male and females children as the majority of males suffered from either mild or moderate violence, with equally percentages and more than two thirds of females had moderate degree of it. In addition more than half of males complained of moderate emotion disturbance, and more than three quarters of females had moderate degree of it. All of males were suffering from moderate withdrawal; as well most of females had high degree of it. While three quarters of males had moderate sexual disturbance, more than two thirds of females had moderate degree, as well (Table 3).This study results were was in agreement with Mursy (2004) and Mosa (2005), who found in their studies in Cairo, Egypt that violence, theft, withdrawal and hyper sexuality are mostly prevalent among children in shelters. Prevalence of social problems among homeless children was due to community disapproval and refusal of them, adding to loss of love from parents and people. Some of them had sense of shame due to their illegality, and without separation between ages inside shelters, which lead to appearance of homosexuality or heterosexuality among children

The present study showed that psychological problems among homeless children in Qualiobia shelters were significantly higher among them. The majority of males suffered from moderate depression, and all of the females had as well moderate of it. All of the females had different degrees of depression, and more than one quarter of males had severe depression leading to poor relations with others, while more than two thirds of males and the majority of the of females suffered from sever fear and anxiety, (Table3). This study was in agreement with Abd-Elhaleem (2004) and Ataka (2005), who reported that depression, poor relations and anxiety were the most, prevailing among homeless children. Which were due to community's refusal of them, in addition to their fear of people's look at them. Some of them had sense of shame due to their illegality.

The present study revealed that there were unhealthy life style among male & female children sheltered pre nursing intervention which improved post nursing intervention in both groups .As regards self health responsibility, the children sheltered expressed unsatisfied self health responsibility pre nursing intervention .This could be due to that child's healthy habits are usually established by parents at home in the early years. It needed reinforcement and repetition throughout their life, that's why they missed it in shelters due to insufficient role of shelter's managers and their team while post intervention it improved (Figure 1). Investigating eating habits/ nutritional awareness, it improved among both males and females after program intervention. (Figure 1). In a study carried out by Morgan (2005) on the role of breakfast in nutrient intake, he reported that 39% of children didn't eat breakfast meal especially if both parents work. In Margan study, this could be due to life style of children before being in the shelters, where the step mother or step father who don't care, or they neglect or don't recognize the importance of taking breakfast for children similarly ,in accordance with the previous studies Bartkien (2007) proper nutrition is essential for health and well-being of children. A properly nourished child is less susceptible to acute illness and is better able to develop physical, intellectual, emotional and social competencies .In relation to physical activity, the study revealed also unsatisfied responses of sheltered children pre nursing intervention, there were significant mean improvements in both male and female children, this could be attributed to nursing intervention in developing and encouraging attitude toward physical exercise teaching the benefits of exercises. This finding was in accordance with Gailahue (2007), who emphasized on the development and maintenance of exercise throughout life.

Considering environmental safety, the means of males and females pre program were unsatisfactory. However, after program implementation, they improved with statistically highly significant differences (Figure 1). In accordance, Mosa (2005) who found that many of the shelters were crowded and were not suitable for shelter safety environment.

As for stress management , sheltered children scores for both males and females were unsatisfactory, while after nursing intervention, they improved considerably with statistically highly significant differences (Figure1). In agreement with the previous finding, Abd-Elhaleem (2004) and Mosa (2005), who reported that stress management, poor relations and anxiety were most, prevailing among sheltered children. was due to community's refusal of them, in addition to their fear of people's look at them. Some of them had sense of shame due to their illegality.

To summarize, there were unhealthy life style among sheltered children as regards healthy life style: Self health responsibility, Eating habits/ nutritional awareness, Environmental safety, Physical activity, and Stress management.

Conclusion

According to the findings and research hypothesis, the current study concluded that; majority of the studied subjects were males (36) and only 19 were females. In relation to their educational level, almost two thirds of the studied subjects had basic education, while more than one quarter of them were secondary education, and a minority only could read and write. Spreading of diseases was prevalent among children's homeless shelters with highly statistically difference between children's pre/post program intervention as regards , many diseases such as in sensory system: sensitive eye ,ear, ache/discharge; in respiratory tract infections (recurrent tonsillitis); in gastrointestinal (abdominal colic's) ;urinary tract infections (burning /pain during urination &enuresis); in central nervous diseases (back aches); and in nutritional diseases (anemia),in addition to environmental problems, where all children suffered from many diseases and bad hygiene. In addition; the building was not suitable, to meet the needs of children.

The nursing intervention program had positive effect on life style of school children shelters, where there were improvements after implementation of the intervention program in all aspects of their life style

Table (1): Socio- demographic characteristics of sheltered children & their parents. (n=55)

Variable	Male (n=36)		Female (n=19)		Total	
	No	%	N0	%	N0	%
Age						
6-	9	25.0	5	26.4	14	25. 4
12-	20	55. 6	10	52.6	30	54.6
15-18	7	19.4	4	21.o	11	20.0
Children education:						
Read and write	3	8.3	0	0.00	3	5. 45
Basic education	27	35	9	47.4	36	65. 45
Secondary education	6	16. 7	10	52.6	16	29.10
Father education:						
Illiterate.	36	100	17	89.5	53	96.36
Read and write.	0	0.00	2	10.5	2	3.64
Father occupation:						
Technical workers	3	8.3	0	0.00	3	5. 5
Peddlers	28	77. 8	15	79.0	43	78.2
Pension	2	5. 6	-	-	2	3.6
Dead	3	8.3	4	21.1	7	12.7
Mothers education :						
Illiterate.	36	100	17	89.5	53	96.36
Read and write	0	0.00	2	10.5	2	3.64
Mother occupation:						
Workers	2	5. 6	12	63.2	14	25. 5
Housewives	32	88. 9	7	36.8	39	70.9
Dead	2	5. 6	0	0.00	2	3.6
With whom you were living in the past:						
Live with mother	2	5. 6	1	5.3	3	5. 45
Live with mother and step father	16	44.4	12	63.2	28	50.91
Live with fathers and step mother	11	30. 6	4	21.1	15	27.24
Live with friends	7	19.5	2	10.5	9	16.40
Duration of living in shelters(in years) :						
1- 4	0	0.00	0	0.00	0	0.00
+ 4	36	100	19	100	55	100

Table (2): Distribution of sheltered children according to their physical health problems pre/ post program application (n=55).

	Male (n = 36)				Female (n =19)					
	Pre		Post		Pre		Post		Chi-square	
Physical Health Problems	No	%	No	%	No	%	No	%	P1	P2
Gastrointestinal :										
Abdominal colic	12	33.33	3	8.33	12	63.16	7	36.84	0.009	0.097
Nausea /vomiting	10	27.78	1	2.78	15	78.95	1	5.26	0.003	0.000
Constipation / diarrhea	15	41.67	5	13.89	13	68.42	1	5.26	0.008	0.000
Anorexia /dyspepsia	10	27.78	4	11.11	16	84.21	3	15.79	0.067	0.000
Bleeding by mouth	4	11.11	1	2.78	6	31.58	1	5.26	0.179	0.045
Urinary problems :										
Burning / difficulty / pain during urination/ dysurea	8	22.22	2	5.56	11	57.89	8	42.11	0.042	0.259
Enuresis	14	38.89	8	22.22	17	89.47	2	10.53	0.100	0.000
Polyurea	11	30.56	6	16.67	16	84.21	3	15.79	0.133	0.000
Hematurea	7	19.44	2	5.56	11	57.89	8	42.11	0.076	0.259
Cardio vascular disorders :										
Palpitation	10	27.78	2	5.56	13	68.42	6	31.58	0.012	0.025
Varicose veins	0	0	0	0	4	21.05	2	10.53		0.330
Upper respiratory disorders nasal cavity and throat :										
Nasal obstruction	24	66.67	12	33.33	15	78.95	4	21.05	0.005	0.000
Rhinitis	24	66.67	12	33.33	14	73.68	5	26.32	0.005	0.004
Black/ green nasal discharge	33	91.67	3	8.33	18	94.74	1	5.26	0.000	0.000
Epistaxis	29	80.56	7	19.44	16	84.21	3	15.79	0.000	0.000
Sores in mouth/bad odor	25	69.44	11	30.56	18	94.74	1	5.26	0.001	0.000
Recurrent tonsillitis	33	91.67	3	8.33	15	78.95	4	21.05	0.000	0.000
Lower respiratory disorders :										
Cough/ dry or productive	19	52.78	10	27.78	11	57.89	8	42.11	0.027	0.259
Dyspnea	18	50	9	25	11	57.89	8	42.11	0.025	0.259
Chest pain/wheeziness	12	33.33	3	8.33	14	73.68	5	26.32	0.009	0.004
Chronic bronchitis /bronchial asthma	10	27.78	4	11.11	15	78.95	2	10.53	0.067	0.000
Central nervous system :										
Back aches	16	44.44	5	13.89	12	63.16	7	36.84	0.004	0.097
Joints pain	15	41.67	5	13.89	13	68.42	6	31.58	0.008	0.025
Extremities pain	20	55.56	6	16.67	12	63.16	7	36.84	0.001	0.097
Numbness of limbs/ muscle cramp	4	11.11	2	5.56	14	73.68	5	26.32	0.337	0.004
Headache	20	55.56	2	5.56	15	78.95	4	21.05		0.000
Skin diseases :										
Dermatitis / allergy	19	52.78	5	13.89	18	94.74	1	5.26	0.000	0.000
Warts	16	44.44	1	2.78	17	89.47	2	10.53	0.000	0.000
Abrasions& fissures /wound	18	50	5	13.89	19	100	4	21.05	0.001	0.000
Tenia / Tenia capitals	16	44.44	5	13.89	16	84.21	3	15.79	0.004	0.000
Partial alopecia	17	47.22	5	13.89	16	84.21	3	15.79	0.002	0.000
Scabies	16	44.44	6	16.67	10	52.63	1	5.26	0.010	0.002
Increased thickness/ roughness	7	19.44	2	5.56	11	57.89	3	15.79	0.076	0.009
Sensory system :										
Eye squint /blurred vision	12	33.33	3	8.33	10	52.63	3	15.79	0.009	0.019
Eye inflammation / discharge	20	55.56	3	8.33	13	68.42	3	15.79	0.000	0.001
Wearing glasses	7	19.44	0	0	3	15.79	0	0	0.006	0.115
Auditory complaints										
Decrease hearing (deaf / partial	4	11.11	0	0	3	15.79	0	0	0.057	0.115
Ear discharge / wax, blood	13	36.11	3	8.33	8	42.11	1	5.26	0.005	0.009
Ear ache	12	33.33	5	13.89	11	57.89	8	42.11	0.047	0.259
Parasites :										
Bilharzias	5	13.89	0	0	4	21.05	0	0	0.027	0.053
Amoeba	27	75.00	9	25	13	68.42	6	31.58	0.000	0.025
Worm ascaris	20	55.56	16	44.44	13	68.42	6	31.58	0.240	0.025
Nutritional diseases:										
Anemia	22	61.11	12	33.33	10	52.63	4	21.05	0.016	0.046
Thinness	30	83.33	5	13.89	10	52.63	8	42.11	0.000	0.373
Obesity	6	16.67	0	0	3	15.79	0	0	0.012	0.115

Table (3) Distribution of sheltered children according to their social, psychological and sexual problems pre /post program application(n= 55).

Socio-psycho sexual Problems	Male (n = 36)				Female (n =19)				Chi-square	
	pre		post		pre		Post			
	No	%	No	%	No	%	N0	%	P1	P2
Fear and anxiety :										
Mild	0	0.00	20	55.56	0	0.00	18	94.74	0.096	0.011
Moderate	11	30.56	10	27.78	2	10.53	1	5.26		
Severe	25	69.44	6	16.67	17	89.47	0	0.00		
X^2(P-value)	31.693(0.000)				35.333(0.000)					
Depression:										
Mild	0	0.00	21	58.33	0	0.00	11	57.89	0.011	0.181
Moderate	26	72.22	10	27.78	19	100.00	8	42.11		
Severe	10	27.78	5	13.89	0	0.00	0	0.00		
X^2(P-value)	29.778(0.000)				15.481(0.000)					
Emotion disturbance :										
Mild	0	0.00	23	63.89	0	0.00	12	63.16	0.086	0.905
Moderate	20	55.56	8	22.22	15	78.95	5	26.32		
Severe	16	44.44	5	13.89	4	21.05	2	10.53		
X^2(P-value)	33.905(0.000)				17.667(0.000)					
Violence:										
Mild	15	41.67	25	69.44	3	15.79	15	78.95	0.117	0.571
Moderate	15	41.67	10	27.78	13	68.42	3	15.79		
Severe	6	16.67	1	2.78	3	15.79	1	5.26		
X^2(P-value)	7.071(0.000)				15.250(0.000)					
Withdrawal :										
Mild	0	0.00	18	50.00	1	5.26	14	73.68	0.165	0.090
Moderate	36	100.00	18	50.00	18	94.74	5	26.32		
Severe	0	0.00	0	0.00	0	0.00	0	0.00		
X^2(P-value)	24.000(0.000)				18.614(0.000)					
Sexual abuse :										
Mild	9	25.00	30	83.33	6	31.58	14	73.68	0.602	0.395
Moderate	27	75.00	6	16.67	13	68.42	5	26.32		
Severe	0	0.00	0	0.00	0	0.00	0	0.00		
X^2(P-value)	24.671(0.000)				6.756(0.009)					

Table (4): Distribution of sheltered children according to their healthy life style pre / post program application(n=55).

Healthy Life style	Male (n=36)						Female (n=19)						T-test	
	Pre			Post			Pre			Post				
	Mean	±	SD	Mean	±	SD	Mean	±	SD	Mean	±	SD	P1	P2
Self health responsibility	31.222	±	3.490	50.456	±	1.450	32.053	±	2.549	50.150	±	1.120	0.364	0.427
Paired t-test(P)	<0.001*						<0.001*							
Eating habits /nutritional awareness	28.139	±	5.083	34.540	±	2.112	29.158	±	1.675	35.150	±	1.751	0.401	0.286
Paired t- Test (p)	<0.001*						<0.001*							
Environmental safety.	28.646	±	1.211	33.150	±	2.354	26.213	±	2.330	35.123	±	2.025	0.000	0.003
Paired t-test(P)	<0.001*						<0.001*							
Physical activity	22.560	±	2.310	32.213	±	3.213	25.330	±	2.321	34.000	±	1.231	0.000	0.024
Paired t-test(P)	<0.001*						<0.001*							
Stress management	22.130	±	2.354	38.654	±	2.133	26.133	±	3.513	36.554	±	4.250	0.000	0.018
Paired t-test(P)	<0.001*						<0.001*							

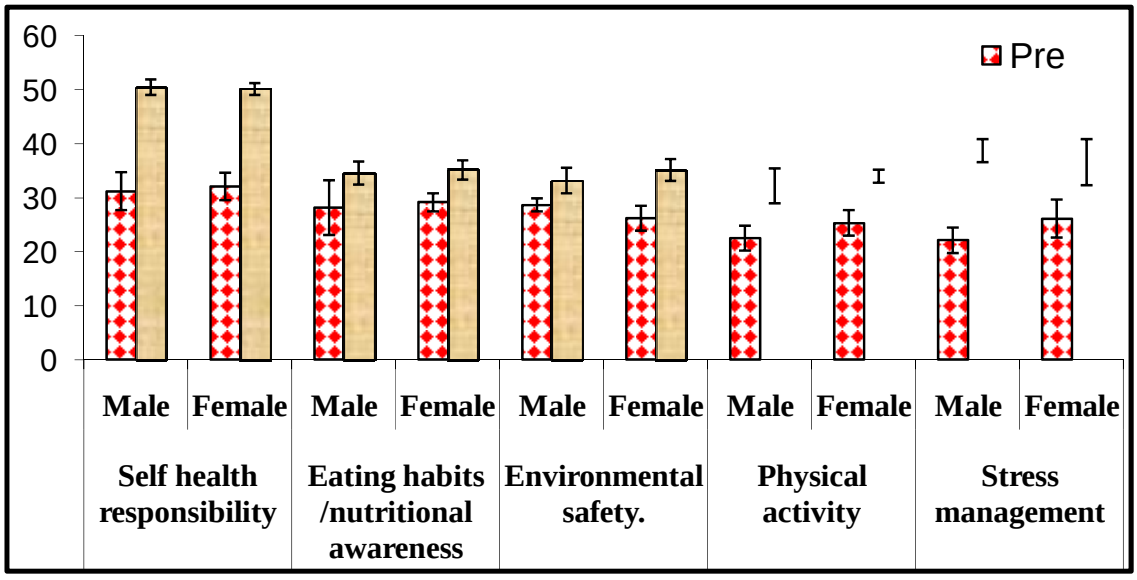

Figure 1. Considering environmental safety, the means of males and females pre-program were unsatisfactory. However, after program implementation, they improved with statistically highly significant differences.

Recommendation

Based on the findings of this study, the following suggestions can be recommended for health and policy considerations:

- Cooperation between the Ministry of Health and Ministry of Society Solidarity to develop health care services such as; providing periodic check up under supervision of the Ministry of health and providing nurses inside shelters for 24hrs/day not as health visitors.
- The Ministry of Social Affairs and Solidarity has to separate between children aged 6 -<15 years in shelters and 15-18 years in other shelters. The necessary of separation is to facilitate their supervision and provide them with suitable care according to health needs in those two age group categories
- Providing health education for sheltered children about safety measures to protect them from health hazards and injuries.
- Increasing people's awareness about sheltered children and their needs, and how to control them inside community through conferences, meeting, mass media and programs.
- More researches are needed to identify common health problems among children in shelters and resources that meet needs of those children

Corresponding author
Sahar A. Sh. Mahmoud
Community Health Nursing, Faculty of Nursing, Helwan University, Cairo, Egypt
Dsahar100@yahoo.com

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