

## SUMMARY

The most environmental health hazards as contaminated water, poor sanitation, indoor smoke, rampant disease vector such as mosquitoes, deficient food hygiene and unsafe waste disposal are usually associated with poverty and social exclusion, Urbanization must consider the issues related to the daily existence of such a vast number of people such as provision of basic services (housing, clean drinking water and sanitation), migration, urban economy and livelihoods, microfinance for urban poor, education and health, unorganized sector and livelihoods. (Urbanization,2009).

**The aim of the present study was** to assess effect of slums environment on health status among school age children at Kalubia Governorate. To fulfill the aim of the present study: **the following research question were formulated:**

1. Is there relationship between physical health status children and the school environment?
2. Is there relationship between socioeconomic status of children and there health status?

### **Setting:**

This descriptive study was carried out in the governmental primary schools in Shoubra Elkhama city in Kalubia Governorate. That this place is including large number of slums area.

**Sampling:** A stratified multi stage cluster random sample was used for selection of school children in slums area.

**The first stage:** the total numbers of governmental primary schools in shoubra elkahema is 35 schools , 10 were chosen randomly from the conduction of the study.

**Second stage:** two class from fifth grade and two from sixth grade were selected randomly from each school.

**Third stage:** 10 school children in selected class rooms were taken from each grade , the total numbers of students for the 10 schools were 200( both sexes) according to the certain criteria .

The sample chosen during the period from October 2010 to March 2011. They chosen under these criteria: school children from 10- 13 years in slums area.

### **Tools of data collection:**

**Three tools were used for data collection:**

***The first tool: An interview questionnaire:*** consisted of two parts:

**Part 1:** Socio-demographic data of the children and parents. It included data about (age, sex, gender, family income, marital status of parents, child lives with who, father's and mother's job).

**Part 2:** Included questionnaire to assess children's practice about preventing infectious disease such as (time of washing hands, washing hands with soap or not, drying hands, time of shower/weak, and sharing personal tools).

***The Second tool:*** Observation questionnaire check list: consisted of four parts:

**Part 1:** Included observation to assess physical health status children in slums, it consist of six parts (growth measurement, general appearance, health problems of body system, injuries, smoking problems, and unhealthy habits).

**Part 2:** Included questionnaire to assess psychological health status such as (anxiety test, self esteem, and aggressive behavior).

**Part 3:** Included questionnaire to assess slums environmental condition.

**Part4:** It included questionnaire to assess school environmental condition.

**The third tool:** Included questionnaire to assess the children's school services.

### **The current study revealed the following results:**

- Children in schools of slums mean age was ( $11.76 \pm 0.973$ ), (53.5%) were females,. (51%) of them were grade five, (35.5%) of them first order child in their family.
- Regarding to marital status of parents (88%) of them parents live together, and (88.5%) of them were living with family.
- Regarding to family income (67.5) of them hadn't enough income, (89%) of them father were working, and (71%) of them mother's were housewife.
- Regarding to time hand washing (46%) of them did not wash hands, (88%) of them dry hands with peace of clothes.
- Regarding to sharing personal tool and time of shower (49%) of them used tooth brush, and (45%) showered once/week.
- Regarding to general appearance (59%) of them had unclean general appearance, (61%) of them had unclean hair,(62.5%) of them had unclean eyes, (57%) of them had unclean nose, (66.5%) of them had unclean ear, regarding to oral and dental care, (84.5%) of them had unclean mouth and teeth, and (57 %) of them had unclean hands and feet nails.

- Regarding to growth measurement (58.5%) and (50.5%) of them had abnormal height & weight respectively, while (41.5%) and (49.5%) of them had normal height & weight.
- Regarding to smoking and unhealthy habit (69.5%) of them weren't smoking cigarette, (21.5%) of them were smoking cigarette, (37.5%) of them had bite nails, and (27.5%) of them had finger-sucking habit, (27.5%) of them had enuresis, and (70.5%) of them were alert at night.
- Regarding to health problems related to slums area the main problems were digestive system followed by respiratory, their dermatology, according to digestive system, (67%) complained from colic, followed by diarrhea (44%), and gastritis (35%), according to respiratory systems (63%) had pneumonia& (32%) chest asthma. Also, dermatology (37.5%) of them had itched.
- On other hand, (22.5%) of them had eye bleeding,(44%) of them had wound in face, while (36.5%) of them had cut lips, (44%) of them had fractured of teeth, (20.5%) of them had neck wound, (13.5%) of them had thighs fractures, while (10.5%) of them had head injured, (10.5%) of them had nose bleeding, (25.5%) of them had arm fractured, and (15.5%) of them had legs fractured
- Regarding to psychological health status (89.5%) of them had low anxiety, (80.5%) of them had low self esteem, and (70.5%) of them had low aggressive behavior.
- Regarding to home environmental condition (64.5%) of them had poor securing source of fire, ventilation, sewage sanitation, colleting garbage, kitchen facilities, drugs cupboard ,securing source of electricity and child's room , source of drinking water and securing windows, child's rooms and (41%) of them had average of

lighting. with highly statistically significant difference ( $P < 0.001^*$ ).

- Regarding to school environment (80%) of studied sample had unsafe site, (70%) of them had unsafe ventilation, while (60.%) of them had unsafe lighting, (80%) of them had unsafe sources of drinking water, (70%) of them had unsafe sewage sanitation and collecting garbage, (40 %) of them had unsafe source of electricity, and windows.
- Regarding to health services offered by children's schools (100%) of studied sample were go to the school nurse if felt illness, (90%) of them were go to the health unit for follow up, (75%) of studied sample referred to the health unit, (80%) of them were not offer first aid in the school, and (100%) of them were take first aid the health unit and had taken vaccination in the school.
- There was a highly statistically significant relation between school environment and physical health status of children ( $p < 0.05$ ).
- There was a highly statistically significant relation between children and physical health status in child lives with and marital status of parents ( $p < 0.05$ ).
- There was no statistically significant relation between socio-demographic characteristic and psychological health status of children.

**Based on the study finding, it is recommended that:**

- Increased community awareness about slums children's health needs from:
  - Immunization.
  - Nutrition.
  - Infectious diseases.

- Water quality, sanitation and diarrhea.
- -Exposure to pollution and toxic waste.
- Hazards and injuries.
- Health education for children about safety measures to protect them from health hazards through, increasing awareness of people about school children physical, psychological and social needs through conferences, meetings, mass media, programs, book lets, educational media programs containing simple information about needs and problems of children in school.
- Continues education programs to all children in school to up gather knowledge and practice.
- Conduct services training for children about personal hygienic measures.
- Inspection of all children in school by veneering to evaluation their environment condition such as, ventilation, sanitation, safety water, waste disposal, and safety measures in the school.