

# Needs and Health Problems of Adolescent Female in Rural and Urban; Ismailia Governorate: A Comparative Study

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**Abstract:** Adolescent have been largely ignored as an age group, with special needs and serious health problems. **Aim of the study:** aim of this study was to compare the needs and health problems of female adolescent students in rural and urban areas in Ismailia Governorate. **setting:** The study setting was in governmental secondary school for female in Ismailia Governorate, Ismailia city for urban sample and Abosweer village for rural sample. **Subjects and methods:** **Research design:** Descriptive-correlational design. The sample of the study consisted of (380) secondary female students, 190 in rural and 190 in urban areas. . **Tool of data collection:** Data were collected using a self-administrative questionnaire and general examination record. **Results:** this study revealed that female adolescent students are suffering from many health problems and there were enormous differences between the information needs about body physiological changes in rural than urban students. Also, the ophthalmological and musculoskeletal problems are more frequent in rural than urban female students. **Conclusion,** it was concluded that there were highly significant difference between urban and rural areas, as regard social activities it was higher in urban than in rural areas, sporting activities, and there were enormous differences between the physiological needs and health problem recommendation that the school nurse can offer her teaching services and knowledge to teachers by participating in classes that focus on specific adolescents' problems. and encourage open communication between the parents and adolescent.

**Keywords:** Adolescent, Urban and Rural areas, health needs/ problems, and School Health.

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## 1. INTRODUCTION

Adolescence is the period of life that begins with the appearance of secondary sex characteristics and ends with cessation of growth and achievement of emotional maturity. The terms come from the Latin word “adolescere” meaning “to grow up into maturity”<sup>(1)</sup>.

**WHO** identify adolescence as the period in human growth and development that occurs after childhood and before adulthood, from age 10 to 19. It represents one of the critical transitions in the life span and is characterized by a tremendous pace in growth and change that is second only to that of infancy. Biological processes drive many aspects of this growth and development, with the onset of puberty marking the passage from childhood to adolescence. The biological determinants of adolescence are fairly universal; however, the duration and defining characteristics of this period may vary across time, cultures, and socioeconomic situations. This period has seen many changes over the past century namely the earlier onset of puberty, later age of marriage, urbanization, global communication, and changing sexual attitudes and behaviors<sup>(2)</sup>.

The adolescents constitute a significant, and important sector of the population, young people constitute 85% of the whole population in the developing countries aged (10-24) years<sup>(3)</sup>. In Egypt the demographic pyramid has the largest cohort of adolescents in its history. According to statistical measures at 2007, adolescents constitute more than 13 millions of boys and girls between the ages of 10 and 19, representing 22% of the total Egyptian population and the adolescents between (10 and 15 years old) are about 19% of total population. The total number of students in secondary school in Egypt is 3.7% males, and 3.2% females of total population<sup>(3)</sup>.

### Significant of the study

There are some factors that affect the adolescents, such as physical and glandular growth. They include; heredity, nutritional, family size, illness, physical and emotional environment, as well as, culture<sup>(4)</sup>.

Adolescents in Egypt form around 25% of the country's population, and represent even greater proportion of the country's human potential.

But adolescent in Egypt often face neglect and even marginalization. UNICEF Egypt aims to enhance adolescents' welfare and in this way to inspire greater confidence in them as they enter adulthood.<sup>(5)</sup>

In period of transition, adolescents have very different needs from younger children. They seek means to express themselves and take responsibility. Unfortunately the national education system seldom provides opportunities for participation. Adolescents are often treated as beneficiaries, not active participants in decisions and activities, in setting as crucial to their development as the home, school and public institutions<sup>(5)</sup>.

Adolescents also face a lack of information. Meeting silence in place of answers, adolescents become exposed to risks. Among the potential risks are nutrition-related illness and exposure to many health problems.

Today adolescents are tomorrow's parents, teachers, and community leaders. What they learn they will teach to their own children<sup>(2)</sup>.

School health programs are a vital part of public health service and education. The school health nurse is the first responsible person to teach children and teens about diseases, hygiene, risk reduction, sexuality and decision making. The school nurses must be sensitive to the dynamic nature of this stage, as well as, identified the adolescents' health problems and meeting the needs in order to prevent diseases, protect them from accidents and infectious diseases, also to promote health through health education about nutrition, exercise, and hygienic measures<sup>(6-7)</sup>.

### Aim of the study

This study aimed to compare the needs and health problems of adolescent females in rural and urban area at Ismailia Governorate through:

1. Assess the needs of adolescent females in both rural and urban area.
2. Assess the health problems of adolescent females (physiological, psychological, social and emotional problems) of the rural and urban area.
3. Compare the health problems & needs of adolescent females in both rural and urban area.

### Research Questions

1. What are the needs of adolescent females in rural area?
2. What are the needs of adolescent females in urban area?
3. What are the health problems of adolescent females in rural area?
4. What are the health problems of adolescent females in urban area?
5. Are the needs of adolescent females in rural and urban area different?
6. Are the health problems of adolescent females in rural and urban area different?

## 2. SUBJECT AND METHODS

### 1 - Technical model:

#### Research design:

A descriptive correlational random design was used in this study, which fit the purpose of this study.

#### Study Sampling:

A total sample of 380 students was included in this study. It was divided to (190 students selected randomly from female secondary school in urban area and 190 students selected randomly from the female secondary school in rural area).

#### Study Setting:

This study was conducted at Ismailia governorate as :

1- Ismailia city which is the urban sector, it was divided into three districts (first, second and third district) chosen second district randomly and it included (Om Elabtal general secondary school), therefore female school was chosen it comprises 19 classes each class consist of around 37 students 10 students were chosen randomly from student's list to collect the needed data.

2- The rural sample was chosen from Abosweer general secondary school which was the only secondary school available at rural area in (Abosweer village) it comprise 20 class, each classes consist of around 32 students, 9 /10 students were chosen randomly from student's list to collect the needed data.

#### Tools of data collection: -

The following tools were prepared and used by the investigator for data collection after being reviewed by the supervisors.

#### Tool (I):

A Self administrative questionnaire sheet covers the following area.

#### Part 1: Demographic characteristics of the female students such as:

Age, address, number of family members, number of house rooms, father`s and mother`s age (Question 1-11)

#### Part2: Questions for assessing student`s life style as: (Question 12-15) .

Personal responsibility for safe and healthy behavior as hygienic measures and sleep patterns, nutritional pattern, physical exercises.

#### Part 3: Questions for assessing students health needs regarding: (Question16-18) .

Physiological needs, peer relation needs , psychological needs.

#### Part 4: Questions for assessing student`s health problems, through last two years regarding: (Question 19-21).

Medical history, social and psychological problems.

#### Tool (II) Physical examination sheet:

It was the general examination for the student from the investigator point of view by using **fullers' tool (2000)** : hair , face, skin, ear, nose, eye, lips, gums, teeth.

Physical examination was carried out in the school clinic, for vision screening, the investigator used visual accuracy maneuver, and light torch measurement of 6/6 vision is an indication of normal eye and optic pathway, and <6/6 in either eye indicates refractive error or other optic disorder and need referral.

#### Validity:

Content validity of tools was determined through an extensive review of literature about adolescent female and their needs and problems. The content of data collection was ascertained by jury who consisted of 5 experts with more five years

experience in Community Health Nursing field (Suez Canal University). Modifications of the tools were done accordingly.

#### **Administrative design:**

Written permission was handed over to the director for each school as to have approval for conducting the study.

#### **Operational design:**

##### **1) Pilot study:-**

**pilot study** was conducted on **10%** female students were randomly chosen (5% from each area) in order to test the applicability and to estimate the average time required to fill questionnaire. Modifications of tools were done according to study supervisors' view on clarity of sentences, appropriateness of content and sequence of items. All students who shared in the pilot study were excluded from the studied sample. Reviewing of relevant literature and getting experts opinions were helpful to assist and processing of the data collection instruments.

##### **2) Procedure:**

The investigator started by introducing herself and briefly explain the study objectives to the participant students. The questionnaire was distributed to all students explained and collected by investigator. Time spent to answer questionnaire was about 30 minutes to be filled while the physical examination was accomplished within 15 minutes for each student by the investigator and school nurse. Sunday and Tuesday from each week were chosen to collect the needed data from 9.00 A.M to 1.00 P.M for urban area, Wednesday and Thursday from each week were chosen to collect the needed data from 10.45 A.M to 1.00 P.M for rural area, three months started from the beginning of October 2012 till the end of December 2012.

#### **Statistical Analysis:**

The statistical design involves scoring of tools and statistical analysis. The data was entered into SPSS (statistical package for social science) program, version 18, it was analyzed and then presentation of data was done as appropriate in tabular, graphical and numerical form.

Then comparison of data was done using chi square test and fishers exact for qualitative variables and t-test for quantitative variables.

#### **Ethical considerations:**

All ethical considerations were considered for privacy and confidentiality, so oral approval was obtained from the students before conducting the study, ensuring students that these data will be used for the researcher purpose only, and each one has the opportunity to withdraw at any time.

### **3. RESULTS**

**Table (1)** shows that there was higher mean crowding index in rural areas than in urban areas . There was no statistically significant difference between both regions regarding family number ( $p>0.05$ ). The frequency of more numbers of rooms in the house ( $4\leq$ ) was higher in urban areas than in rural areas (15.8% versus 6.3%, respectively).

Regarding father education, there was higher frequency of can't read & write fathers in rural than in urban regions (11.1% versus 0%, respectively). Regarding mother education, there was higher frequency of can't read & write mothers in rural than in urban regions (21.1% versus 12.1%, respectively), while there was higher frequency of university mothers in urban than in rural regions (20.0% versus 4.7%, respectively).

Regarding father occupation, there was higher frequency of farmers in rural (52.1% ), while there was higher frequency of father employers in urban (69.5%). Regarding mother occupation, there was higher frequency of housewives in rural than in urban regions (93.7% versus 80.5%, respectively), while there was higher frequency of mother employers in urban than in rural regions (19.5% versus 6.3%, respectively), which indicates higher employment rate of the mothers in urban regions .

**Fig(1-2)** shows the socio-demographic characteristics of female adolescent students' and their families in rural and urban areas. There were higher mean age of female adolescent students in rural areas than in urban areas (17.2±0.63 years versus 16.4±0.9 years, respectively). There were higher mean age of both parents in urban areas than in rural areas (47±5.8 years and 41±6 years versus 45.8±6 years and 39.5±4.6 years, respectively) .

**(Fig. 3)** Show that regarding sporting activities, there were significantly higher frequency of running, biking, swimming and other sporting activities in urban than in rural regions. Also in urban regions, there was significantly higher frequency of sharing in school sporting activities than in rural regions (10.5% versus 4.2%, respectively).

**Table (2)** shows that regarding nutritional pattern, there was higher frequency of animal protein in urban than in rural regions (68.9% versus 53.2%, respectively). Also in urban regions, there were significantly higher maintenance of weight/height balance and lower frequency of buying from hawkers than in rural regions. On contrary, there were significantly higher regularity on three meals/day, more reduction in tea/coffee drinking, choose preservative-free food and more reduction in sugary drinks/food in rural than in urban regions.

**Table (3)** shows that there were enormous differences between the physiological needs of rural and urban girls. In rural region, the adolescent students' needs to know their body physiology, body physiological changes, blood pressure, optimal weight, acne management, causes of continuous fatigue and causes of chronic diseases significantly more than the adolescent students' in urban regions.

**Table (4)** shows that regarding energetic problems, there were significantly higher frequency of quick feeling of irritability or angeriness, feeling of tiredness without any apparent reason in rural regions than in urban regions.

Regarding anxiety and nervousness problems, there were significantly higher frequency of imagining the worst will happens, suffering from a lot of pressure and stress in rural regions than in urban regions .

There were no statistically significant differences between both groups regarding tiredness all the time, not active after waking from sleep, suffering from insomnia.

**Table (5 )** showed that more than one tenth of the students (14.7%) in urban , compared to (35.3%) in rural areas were have weak school achievement. More than one tenth of the students (11.1%) in urban, compared to (3.2%) in rural areas have high school achievement.

**Table (1): Distribution of female adolescent students' and family's socio-demographic characteristics in rural and urban areas**

Variables	Rural areas (n=190)		Urban areas (n=190)	
	No.	%	No.	%
<b>Family number</b>				
≤5	118	62.1	124	65.3
6-10	67	35.3	64	33.7
11-15	4	2.1	1	0.5
>15	1	0.5	1	0.5
Mean (SD)	5.38 (SD) 1.89		5.4 (SD) 1.6	
<b>Room number</b>				
2-3	178	93.7	160	84.2
4≤	12	6.3	30	15.8
Mean (SD)	2.55 (SD) 0.65		2.84 (SD) 0.91	
<b>Crowding index</b>	2.13	0.59	1.99	0.51
<b>Father education</b>				
read & write/can't	21	11.1	0	0.0
Primary education	31	16.3	19	10.0
Secondary/ medium	103	54.2	120	63.2
University	35	18.4	51	26.8

Father occupation				
Farmer	99	52.1	12	6.3
Employer	66	34.7	132	69.5
Other	25	13.2	46	24.2
Mother education				
read & write/can't	40	21.1	23	12.1
Primary education	48	25.3	32	16.8
Secondary/ medium	93	48.9	97	51.1
University	9	4.7	34	20
Mother occupation				
Housewife	178	93.7	153	80.5
Employer	12	6.3	37	19.5

\*Significant p-value at <0.05, \*\*highly significant p-value at <0.01.

t = Student (paired) t-test,  $\chi^{2y}$ =chi-square with Yates correction test,  $\chi^{2p}$ = Pearson chi-square test,  $\chi^2$ =chi-square test, FE=Fisher exact test.

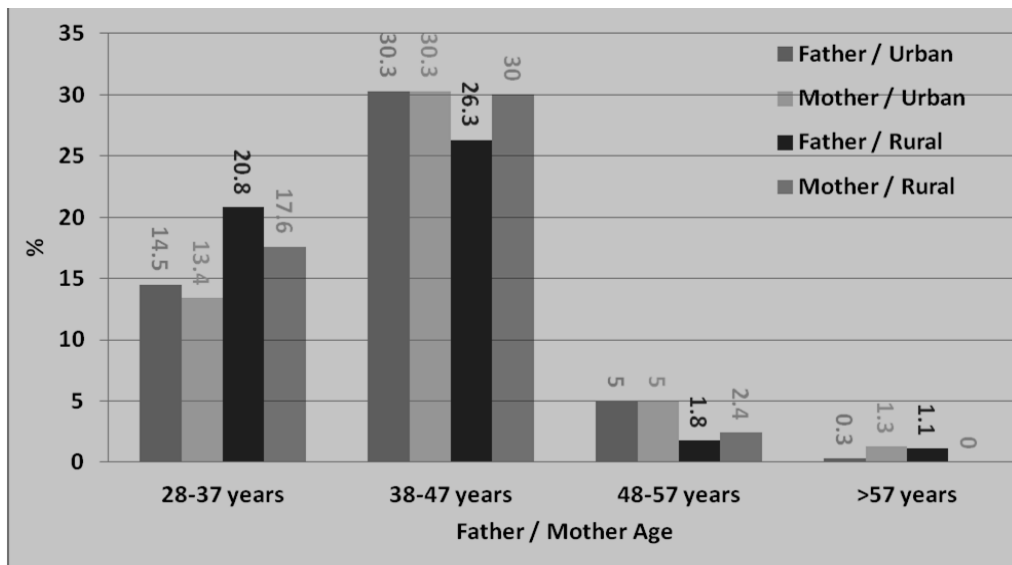


Fig. (1): Comparison of father/mother age between urban and rural groups.

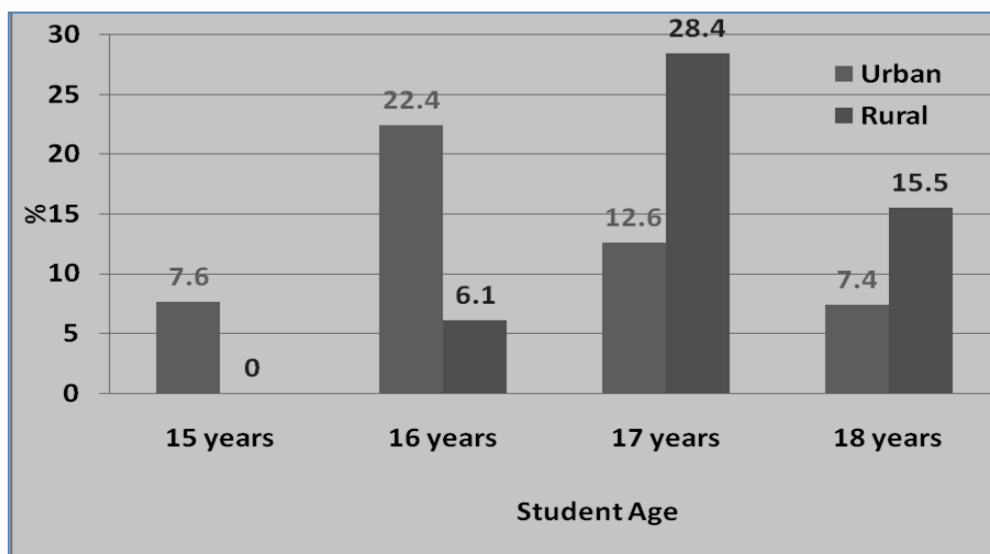


Fig. (2): Comparison of student age between urban and rural groups.

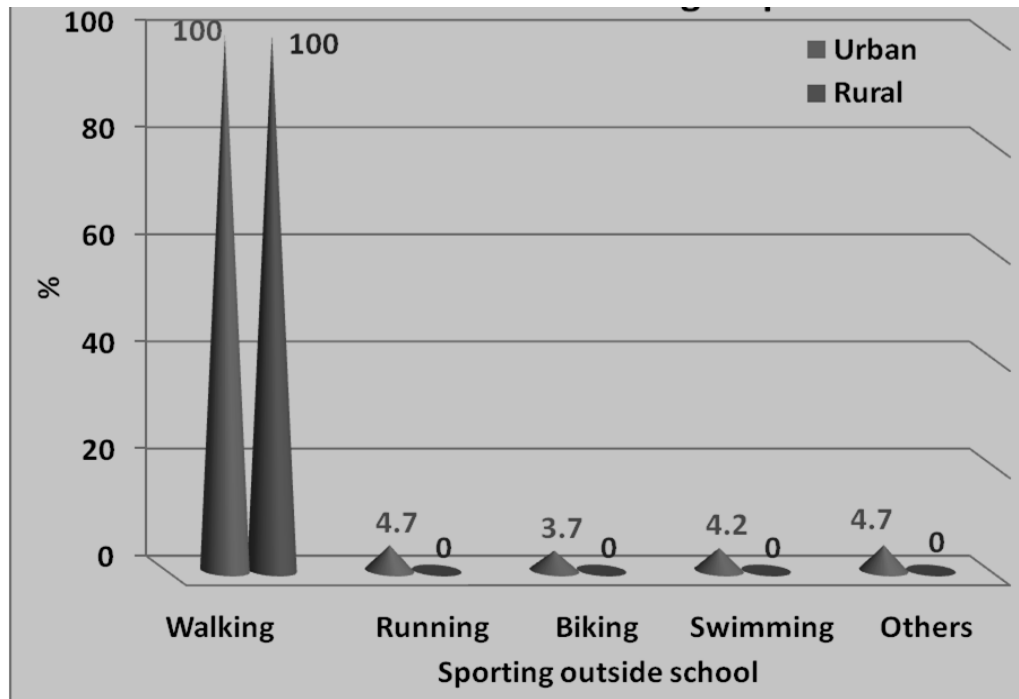


Fig. (3): Comparison of Sporting outside school between urban and rural groups.

Table (2): Distribution of female adolescent students' according to nutritional pattern in rural and urban areas: (as reported).

Variables	Rural areas (n=190)		Urban areas (n=190)	
	No.	%	No.	%
<b>Animal protein</b>				
No	6	3.2	1	0.5
Sometimes	83	43.7	58	30.5
Yes	101	53.1	131	69
<b>Plant protein</b>				
No	9	4.7	5	2.6
Sometimes	50	26.3	36	19
Yes	131	69	149	78.4
<b>Vegetables and fruits</b>				
No	10	5.3	13	6.8
Sometimes	88	46.3	72	37.9
Yes	92	48.4	105	55.3
<b>Three regular meals</b>				
No	43	22.6	29	15.3
Sometimes	30	15.8	62	32.6
Yes	117	61.6	99	51.1
<b>Weight/height balance</b>				
No	100	52.6	56	29.5
Sometimes	49	25.8	56	29.5
Yes	41	21.6	78	41
<b>Reduce tea/coffee drinking</b>				
No	9	4.7	31	16.3
Sometimes	30	15.8	33	17.4
Yes	151	79.5	126	66.3

<b>Choose preservative-free food</b>				
No	112	59	74	38.9
Sometimes	47	24.7	60	31.6
Yes	31	16.3	56	29.5
<b>Reduce sugary drinks/food</b>				
No	21	11.1	39	20.5
Sometimes	74	38.9	83	43.7
Yes	95	50.0	68	35.8
<b>Bring food from home</b>				
No	7	3.7	47	24.7
Sometimes	23	12.1	37	19.5
yes	160	84.2	106	55.8

**Table (3):**Distribution of female adolescent students' according to their needs for knowledge about human physiology in rural and urban areas.

Information regarding	Rural areas (n=190)		Urban areas (n=190)	
	No.	%	No.	%
<b>Need more information about</b>				
Body physiology	189	99.5	153	80.5
Body changes	189	99.5	148	77.9
Blood pressure	189	99.5	147	77.4
Optimal weight	188	98.9	176	92.6
Acne management	185	97.4	166	87.4
Causes of fatigue	186	97.9	174	91.6
Causes of chronic diseases	190	100.0	138	72.6

**Table (4):** Distribution of female adolescent students' according to their energetic, anxiety and nervousness problems in rural and urban areas.

Information regarding	Rural areas (n=190)		Urban areas (n=190)	
	No.	%	No.	%
<b>Loss of activity problems</b>				
<b>I feel tired all the time:</b>				
No	5	2.6	7	3.7
Sometimes	72	37.9	82	43.1
Always	113	59.5	101	53.2
<b>Quick feeling of irritability or angeriness:</b>				
No	24	12.6	51	26.8
Sometimes	77	40.5	91	47.9
Always	89	46.9	48	25.3
<b>Not active after waking from sleep:</b>				
No	48	25.3	44	23.2
Sometimes	76	40.0	81	42.6
Always	66	34.7	65	34.2
<b>I feel tired without any apparent reason:</b>				
No	6	3.2	16	8.4
Sometimes	49	25.8	88	46.3
Always	135	71	86	45.3
<b>ANXIETY AND NERVOUSNESS PROBLEMS</b>				
<b>I imagine the worst will happens:</b>				
No	6	3.2	34	17.9
Sometimes	42	22.1	59	31.1



Always	142	74.7	97	51
<b>Suffer from insomnia:</b>				
No	26	13.7	25	13.2
Sometimes	74	38.9	88	46.3
Always	90	47.4	77	40.5
<b>Suffer from a lot of pressure and stress:</b>				
No	10	5.3	31	16.3
Sometimes	45	23.7	89	46.8
Always	135	71	70	36.9

Table (5): Distribution of female adolescent students' for school achievement in rural and urban areas.

Title	Urban		Rural		P-value#	
	No.	%	No.	%		
School achievement	Weak	56	29.5	134	70.5	0.00*
	Moderate	92	48.4	44	23.2	
	High	42	22.1	12	6.3	
	Total	190	100	190	100	

#### 4. DISCUSSION

The adolescence is a period of great opportunity for directing youth for energy and idealism and preparing girls and boys to become productive and confident adults. Adolescence is characterized by several drastic personal developmental changes, including physical, psychological, social, cognitive, moral, and spiritual maturation (Leifer,2014<sup>(8)</sup>; and Cookfair.2011)<sup>(4)</sup>. Adolescent health problems and needs could be identified through health status, past history, and current disease, health habits such as, hygiene, and nutritional status,(McQuaid, Parken and huband,2010)<sup>(9)</sup>.

The aim of the present study was to compare the needs and health problems of the adolescent female students in rural and urban areas.

The study revealed higher mean age of adolescent students in rural areas than in urban areas which indicate delayed entrance to the school in rural regions. There was higher mean age of both parents in urban areas than in rural areas, which indicates delayed marriage in urban regions. Dyck DV, Cardon G., De Bourdeaudhuij (2011)<sup>(10)</sup> reported that due to the higher prevalence of urbanization, the average years of education increases and marriage is delayed.

Regarding parents education, there was higher frequency of illiterately and/or read &write for fathers and mothers in rural than in urban regions higher education of the father and mother in urban areas. From the investigator point of view, the rural community is mostly agricultural and not interested in education.

Regarding nutritional habit, the present study reveled that more than half of female adolescents in urban and rural area receive animal protein. Also in urban regions, there were significantly higher maintenance of weight/height balance and lower frequency of buying from hawkers than in rural regions On contrary, there were significantly higher regularity on three meals/day, more reduction in tea/coffee drinking, choose preservative-free food and more reduction in sugary drinks/food in rural than in urban regions "as the sample reported", but overall, there was high prevalence of preservative-food and sugary drinks/food in both groups of adolescents. About two fifths of the studied adolescents have low vegetables and fruits in their diets.

Adolescents' students in New Yourk are highly exposed to unhealthy eating habits leading to body weight gain Stankov, I., Olds, T. and Cargo,M. (2012)<sup>(11)</sup>. Based on the Center of Disease Control and Prevention recommendations, it is recommended to consume enough daily fruits(approximately2 cups) and vegetables(2.5 cups) (CDCP, 2012)<sup>(12)</sup>.

Low intake of vegetables and fruits observed among the studied students this could be attributed to the low content of vegetables in most of the traditional Egyptian meals (for example, Koshary, and Fata) (*Al-Rethaiaa, Fahmy, A. and Al-Shwaiyat . 2010*)<sup>(13)</sup>.

Other causes are the increasing consumption of animal products and refined foods (Foods that have been cooked and then canning) in Egyptian diet at the expense of vegetables and fruits, and the uncommon intake of raw vegetables and fruits in the course of meals among population (*Al-Rethaiaa, Fahmy, A. and Al-Shwaiyat . 2010*)<sup>(13)</sup>. Egyptian study.

In this study, there was higher frequency of animal protein in urban than in rural regions. Similarly, (*Judy Mor., 2013*)<sup>(14)</sup> found that about half of the studied students (reported using saturated fatty acids in animal cooking).

This observed dietary habit could be attributed to the rapid improvement in the economy which makes people to consume diets high in saturated fat, cholesterol, salt, and refined carbohydrates, and low in polyunsaturated fats and fiber (*Galal, Harrison, and Qureshi 2013*)<sup>(15)</sup> in Egyptian girls.

Regarding sport activities, there were significantly higher frequency of running, biking, swimming and other sporting activities in urban than in rural regions, this indicates more interest in sporting habits in urban areas. Also in urban regions, there was significantly higher frequency of sharing in school sporting activities than in rural regions, but overall the activities were low in both groups of adolescents.

From the opinion of researcher the high level of physical inactivity observed in this study could be attributed to the limited opportunities of females to engage in physical activity due to the absence of physical education programs for girls, lack of sporting clubs, in addition to cultural reasons where families may not encourage females to engage in physical activity.

Physical inactivity is considered an independent risk factor of a number of chronic diseases such as coronary heart disease, diabetes and hypertension (**Center for Disease Control and Prevention CDCP, 2012**)<sup>(12)</sup>. Studies also proved that participation in regular physical activity over time is associated with a decrease in all causes of mortality (**Lollgen, D., 2011**)<sup>(16)</sup>. In Hong Kong, the published reports on physical activity profile of population indicated that the majority of them are physically inactive (**Lee, R. and Loke, 2010**)<sup>(17)</sup>.

These results are in agreement with a previous study revealing high prevalence of physical inactivity among all Arab females generally, and among university students particularly (**Lollgen, D. 2011**)<sup>(16)</sup>.

Regarding the adolescents' needs the study showed that the majority of adolescents need help in understanding of physical changes that happen to their body related to puberty. According to (*Carven and Hirnie(2010)*)<sup>(18)</sup> in Philadelphia, New York meeting the physiological needs is a dynamic process. Some of the human needs may be modified by cultural influence. Culture refers to the beliefs, values and behavior that are shared by members of a society and provide a design or "map" for living. It is the culture that tells people what is acceptable or unacceptable in a given situation or what to do, say or believe. If a need goes unmet, physical illness, psychological disequilibrium or death can occur.

Also the study revealed that nearly all of the samples need to know about ideal weight. According to an Egyptian study on adolescent schools conducted by *Mitwally; Abd-Elrahman; Mohamed. (2010)*<sup>(19)</sup> adolescents who are self-conscious about their weight and their body image are greatly influenced by the cultural definitions of beauty. Additionally, they are fascinated by media images of slim beautiful women.

Regarding energetic problems, there were significantly higher frequency of quick feeling of irritability or angeriness, feeling of tiredness without any apparent reason and taking a lot of tea, coffee and sugar in rural regions than in urban regions. Regarding anxiety and nervousness problems, there were significantly higher frequency of imagining the worst will happens, suffering from a lot of pressure and stress and daily consumption of large amounts of caffeine- and carbonated-drinks in rural regions than in urban regions.

From the investigator point of view this may be due to changing the habits and the beliefs that were inherited from old grandparents about sleep early and waking-up early, patience and tolerance and about good behaviors.

In the same line, (*Joshi, BN, Chauhan S.L; Donde; et al 2015*)<sup>(20)</sup> performed in the India a study about the correlation between anxiety and rural and urban residence. Rural subjects reported more mood and anxiety changes than urban

subjects, without gender differences in these changes. Rural mood and anxiety changes may be a function of diminishing resources or increasing financial strains.

As regard scholastic achievement, the study revealed that the sample in urban area was with average level of scholastic achievement as the sample in rural area. Similar to survey done in Egyptian, 2013 conducted on adolescents in upper and Lower Egypt **NSEA 2014** <sup>(21)</sup>. Regarding the scholastic achievement as indicated by school examination results in urban and rural areas found that more than one third of the sample in urban area received good grades but in rural area it was less than one fifth of the sample. At the same time, lower than one third of the sample in urban area received poor grades however in rural area it was more than three fifths.

This could be contributed to parent education has a great effect on their children's school achievement.

*As for the research questions:*

*The first question:*

***What are the needs of adolescent females in rural and urban areas?***

The female adolescent students in rural and urban areas need to adequate information about physiological changes, how to deal with stress and how to improve communication with other.

***What are the health problems of adolescent females in rural and urban areas?***

The female adolescent student in rural and urban areas had higher frequency of quick feeling of irritability and tiredness without any apparent reason.

***Is the needs of adolescent females in rural and urban area are different?***

The needs of adolescent females in rural and urban areas are not highly different that may be due to the both group in the same rang of age group.

*The second question:*

***Is the health problems of adolescent females in rural and urban area are different?***

The health problems of adolescent are different in rural area than urban area. This different in social activities it was higher in urban than in rural areas, sporting activities, and there were enormous differences between health problem.

This is generally due to

- Intake of un healthy diet and lower levels of physical activity in adolescent and children.

Changing the habits and the beliefs that were in heredity from old grandparents about sleep early and waking-up early, patience and tolerance and about good behaviors.

## 5. CONCLUSION

The result of this study proved conclusively that there were highly significant difference between urban and rural areas, as :

The female adolescent students in rural and urban areas need to adequate information about physiological changes, how to deal with stress and how to improve communication with other.

The female adolescent student in rural and urban areas had higher frequency of quick feeling of irritability and tiredness without any apparent reason.

The needs of adolescent females in rural and urban areas are not highly different that may be due to the both group in the same rang of age group.

The health problems of adolescent are different in rural area than urban area. This different in social activities it was higher in urban than in rural areas, sporting activities, and there were enormous differences between health problem.

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### 6. RECOMMENDATIONS

**In the light of the findings of current study the following recommendations were suggested:**

- 1- The school nurse must support the majority of adolescents who are coping well and work with other health professional to provide specialized services to assist the adolescent in difficulties.
- 2- If student express difficulty with the teacher, the nurse should help him for resolving the conflict with teacher.
- 3- The school nurse can offer her teaching services and knowledge to teachers by participating in classes that focus on specific adolescents' problems.
- 4- The school nurse should stress the need for open communication between the parents and adolescent.
- 5- Parent counseling in school should be established to help parents handling problems of their adolescent children .
- 6- A series of guidance books should be published and the school nurse should participate in order to be addressed to Egyptian adolescents and their parents for example
  - a) A book addressed to Egyptian adolescents explaining facts of life mixed with moral and religious values.
  - b) Guideline books for adolescents' introduction ideas about different sports and hobbies that could be interest to adolescents.
  - c) Guideline books for parents related to the psychological and physiological needs of their adolescents and how to communicate with them.

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