Health Risk Behaviors among Port Said University Students

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Abstract: Aim: The aim of this study is to determine the prevalence of concurrent health risk behaviors among Port Said University students. **Subjects and Methods:** a cross sectional descriptive design was used; the study carried out at all faculties of Port Said University, the sample size was 1222 students. Self administered standardized questionnaire was used to collect data, it includes two parts part one include sociodemographic data, second part include: modified and tested version of National College Health Risk Behavior Surveillance System Questionnaire (YTBSS). **Results:** The results indicated that the majority of the studied students (87.9%) never or rarely wore a seat belt while a passenger, 12.3% of students had participated in physical fights, 8.1% of the students were actually admitted suicide, 2.4% were drug users,1.6% were alcohol consumers, 5.3% were smoker, and 4.7% of the student were sexually active. In addition, 59.7% of the students never or rarely interested to eat a balanced, where 66.4% of them did not practice physical activities regularly. The findings also indicated that male students were more engage to such risk behaviors than female students. **Conclusion:** Unintentional injuries had been the most prevalent health risk behavior followed by physical inactivity, unhealthy dietary habits, intentional injury. Fortunately, the study found that the students were not invulnerable to smoking, alcohol or drug use, and sexual risk behavior. **Recommendations**: Health education programs should be carried in the universities, in summer camps and in public places to raise their awareness about the hazards of these risk behaviors and reinforce competence in adopting healthy behaviors. More researches should be conducted, in the other universities in Egypt, to identify the magnitude of the problem against university students.

[Mona Abd El-Sabour Hassan; Soheir Gouda and Inas Mohamed Abd Allah. **Health Risk Behaviors among Port Said University Students.** *J Am Sci* 2013;9(12s):127-138]. (ISSN: 1545-1003). http://www.jofamericanscience.org. 14

Key words: Health risk behaviors, university students.

1.Introduction:

Health beliefs and behaviors often reflect the values and norms of a particular culture and can have ramifications for health education and care in that culture. Understanding patterns and trends of health risk behaviors among youth is of major importance for the assessment of the burden of these behaviors in the society and efforts to decrease it (**Kamal et al., 2010**).

Health-risk behaviors refer to any activity undertaken by people with a frequency or intensity that increases risk of disease or injury. The health risk behaviors might cluster together into a risky lifestyle. Much of the mortality and morbidity is caused by individual behavioral patterns, polluted environment or poverty. (**Bahan & Craciun, 2009**) Young adulthood, agd18-24 years, represents a time of change. Social roles responsibilities, a prolonged transition to adulthood, and steps toward independence all may influence health behaviors of men and women during these years. For young adults, health-risk behaviors such as physical inactivity, inadequate fruit and vegetable intake, substance abuse, and smoking can lead to immediate and long-term health consequences (**Wu et al., 2007**).

Health risk behaviors are often established during youth; extend into adulthood, interrelated, and preventable. Violent death and injury, teenage pregnancy, and symptom of mental distress, along with a host of high risk social behaviors, such binge drinking and Unprotected sex, have been recognized as a major challenge to our young people's health and wellbeing (**CDC, 2005**). Youth risk behavior, a general term used to describe adverse health behaviors adopted in childhood or adolescence is one indicator of the health of young people that serves as a basis for measuring adolescent health over time as well as a target for health policies and programs. The importance of this measure is based on its association with several mortality and morbidity outcomes. (**Springer et al., 2006**)These risk behaviors contributes markedly to today as major killers. (**Refaat, 2004**)

An estimated 80% of all chronic disease-related deaths occur in low or middle income countries and one of the major causes of these related deaths can be because of adoption of health risk behaviors. However, chronic diseases associated with unhealthy behaviors are now the greatest public health problem in most countries of the world. Without research and prevention efforts to address risk behaviors, global

deaths caused by chronic diseases are expected to rise to 73% by 2020. (**Porter et al, 2009**)

College years represent a developmental transition from adolescence to adulthood during which students develop behaviors that either enhance or hamper their total wellness throughout their lives. Reports indicate that college to be a time when students explore and experiment with risky health behaviors more than any other population **(CDC, 1997).**

College students have consistently been found to be involved inhigher rates of risk behaviors that compromise their quality of life and wellness when compared to the general population **(Sax, 1997 and Hey et al., 2006).** Although findings suggest that college students are movingin the wrong direction with regard to health, many of the issues prevalent in this population canbe prevented with healthier lifestyle choices **(Becker et al., 2008).**

The lack of comprehensive health behavior information for college students, nationwide, led the Center for Disease Control and Prevention (CDC) to build a survey for analyzing the major health risk behaviors among college students. The CDC created the first survey, the "National College Health Risk Behavior Survey" (NCHRBS), to measure the six categories of health risk behaviors among college students. This system measures six categories of behaviors, including behaviors that contribute to violence and unintentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection; unhealthy dietary behaviors; and inadequate physical activity **(Ali et al., 2010).** These behaviors frequently are interrelated and often are established during childhood and adolescence, and extend into adulthood **(Mokdad et al., 2000)**.

Data on prevalence of health risk behaviors among university students in Port Said are lacking. It is necessary to collect baseline information about the magnitude of the problem, prevalence rates, patterns of use, risk factors, and consequences from these health risk behaviors among those students and accordingly, more detailed information about them and their health risk behaviors will be available to universities that may help the decision makers for the development of future prevention and interventions programs for this particularly at risk college students. So this study carried out to determine the prevalence of concurrent health risk behaviors among university students in Port Said University.

Aim of the study:

The aim of this study is to determine the prevalence of concurrent health risk behaviors among Port Said University students.

Research Question:

What are the risk behaviors among the university students in the Port Said University?

2. Subjects and Methods:

Research design:

A cross sectional descriptive study design was used in this study.

Setting: The study was conducted at all ten faculties affiliated to Port Said University in Port Said governorate; these include the faculties of Commerce, Engineering, Physical education, kinder garden, Computer science, Nursing, Science, Arts, Education, and Specific education.

Subjects:

The study subjects were students attending Port Said University,

Inclusion Criteria:

The students selected according to the following criteria:

Students aged from 18-24 years, both sex, full time registered students, undergraduate and single students.

Sample size:

The number of studied students (n) was estimated using the following equation: $n=(Z^2 \times P \times q) / D^2$. Since the actual prevalence of health risk behaviors is unknown, the probability of its occurrence was estimated to be equal to that of its non occurrence (p=q=0.50) and value of 0.03 was chosen as the acceptable limit of precision(D) at 95% confidence intervals where (Z=1.96). Based on this assumption, a sample size was 1100students. To compensate the drop out and non responses, a sample size of 1222 students was chosen.

Sample size from each college was estimated by using the following equation (p=n1/Nxn) where p=proportional sample, n1=total population for the faculty, N= total of all sampled faculties, n=estimated sample, Based on this equation, sample size for each faculty was as follow:

Faculty of Commerce	211students
Faculty of Specific education	209students
Faculty of Engineering	190students
Computer science	158students
Faculty of Nursing	53 students
Faculty of Science	117students
Faculty of Education	111students
Faculty of Physical education	93 students
Faculty of Arts Faculty of kinder garden	45 students 35 students

A quota sample of respectively, 211, 209, 190, 158, 53, 117, 111, 93, 45, and 53 from these ten faculties was used for recruitment of students from each faculty.

Tool of Data Collection:

A self-administered questionnaire had been used collect data from the students. It divided into two parts:

First part*:* include health and sociodemographic characteristics: as age, religion, residence…etc.

Second part: include a modified and tested version of National College Health Risk Behavior Surveillance system Questionnaire (YTBSS) developed by the Centers for Disease Control and Prevention (CDC): It is designed to examine six health risk behaviors: as behaviors leading to unintentional injuries such as physical fights carrying weapon, wearing seat belts, smoking behaviors, alcohol and other drug use, sexual behaviors, unhealthy dietary behaviors and physical inactivity.

Validity test:

The tool of data collection was modified according to the subjects' culture and then final modified version was revised by five experts from the staff of Faculty of Nursing, Port Said University to ensure validity. The questionnaire was modified based on their recommendations.

Reliability test:

Evaluation of the reliability was done by the Cronbach's Alpha coefficient method, it was α =0.86, indicating strong reliability.

Pilot study:

A pilot study was carried among 122 students from the prementioned faculties to test clarity and feasibility of the tool.The internal consistency of the tool was done. Needed modification were done in the form of re-phrasing of some items, the pilot subjects were not included in the study.

Administrative process:

The researchers fulfilled the official steps required to get the approval for carrying out the study from of the president of the university. Another approval to conduct the study has been taken from the deans of the ten faculties based on the approval of the university president.

Ethical consideration:

The aim of the study was explained to every student before participation, and voluntary participation was emphasized and an oral consent was obtained. Data collection was anonymous, and confidentiality of the data was secured.

Field work:

The researchers collected data during the period from February until May 2012. The heads of departments were approached before distribution the questionnaire to obtain the approval agreement to conduct the study. The questionnaire was administered to students when they presented in a class room. Firstly the researchers made sure that all students in the classroom were meeting the inclusion criteria. Before filling the questionnaire the purpose of the study was explained to the students in the classroom, and simple explanation about the components of the questionnaire was done by the researchers. Students were asked to complete the questionnaire. Clarifications needed about any questions were done immediately by the researchers. The tool took from 25 to 30 minute to be filled by each student,

Data analysis:

Data entry and statistical analysis were done using SPSS version 16.0 software package,the following statistical measures were used: descriptive statistics as portages and average, statistical analysis test: as Chi square test, the level of significance used was P value equal to or less than 0.05.

3. Results:

Table (1) showed that, the mean of age of the studied students was 21.370.54 with minimum of 18 and maximum of 24 years, the female students were more than male students (57.7% and 42.3% respectively). Most of the students (96.8%) were Muslim, 81.9% of them were resided in urban areas and 57.9% live with their families, while 41.2% live in student`s accommodation.

Table (2) revealed that, the majority of the studied students (87.9%) never or rarely wore a seat belt while a passenger comported to 19.1% of them never or rarely wore seat belt while a driver. With statistically significant difference between male and female students (p =0.001).Regarding Physical fights, 12.3% of students had participated in physical fights during the past 6 months preceding the survey. Statistically significant difference was observedbetween male and female students.(p=0.000). 5% mentioned they always carried a weapon. Concerning suicidal attempts, 8.1% of the students were actually attempted suicide during the past 6 months preceding the survey. No statistically significant difference was found between male and female students (p=0.270).The reason for attempts suicide were, psychological problems, family conflicts, emotional problem, health problem and, academic problems (60.6%, 50.5%, 46.5% 29.3%, 27.3%respectively) as mentioned by the students who attempt suicide.

Table (3) represented that, the prevalence of drug used among the studied students was 2.4%, the majority (82.7%) of the drug users were males, and 69% of those who use drugs initiated drug use between the ages of 16 to less than 20 years. The most used drugs were Hashish and Bango, (79.3%. 10.3% respectively), 31.0% of the users have used drugs in 1-10 days during the 30 days preceding the survey. A statistically significant differences between male and

female students were observed in relation to drug use (p <0.001).

Table (4) showed that, among the studied students 1.6% were alcohol consumers, 52.6% of those consuming alcohol initiated their first use of alcohol between the ages of 16 to less than 20 years. 15.8% of the users have used alcohol on1-10 days during the 30 days preceding the survey. A statistically significant differences between male and female students were observed in relation to alcohol use (p <0.001).

Table (5) revealed that, the prevalence of smoking among the studied students was 5.3%.,90.7% of smokers were males. 56.9% of smokers have initiated smoking between the ages of 16 to less than 20.67.7% of the smokers mentioned that cigarettes were the most type of smoking used by them. More than half (55.4%) of the smokers reported smoking for more than 20 days of 30 days preceding the survey. Heavy smoking was reported by 23.1% of the smokers' students. A statistically significant differences were observed between male and female students in relation to smoking behavior (p <0.05).

Table (6): demonstrated that, 0.7% of the studied students reported that they exposed to sexual harassment during their life. 4.7%of the student were sexually active, 59.6% of the sexual active students had their first sex relation when they were between the ages of 16 to less than 20 years. Regarding the number of sex partners during the last 3 months preceding the survey, 66.7% of sexually active students have had sexual relations with only one. Nearly three quarters of sexual active students reported that they never having had an HIV test or using condoms ((73.7%, 80.7% respectively) in the last sexual relation. A statistically significant differences were not observed between male and female students in relation to sexual behavior parameters except in items of sexually active and initial age of first sexual relation(p <0.001), (p <0.026).

Table (7): revealed that 59.7% of the students never or rarely interested to eat a balanced diet and 54.5% of them never or rarely taken breakfast. Male students (46.7%) were more likely interested to eat balanced diet. Nearly two thirds (62.1%) of the students haven't consumed 5 servings of fruit during the past two days preceding the survey. Another risk dietary behaviors reported by students as they always do, were eat sweets, eat fried food (60.2%, 61.2% respectively).

Table (8): illustrated that, more than two third of students(66.4%) did not practice physical activities regularly. None participating in physical activities for more than 20 minutes and daily walking were reported by 62.5% and 39.7% of the students respectively. Statistically significant differences were found between males and females regarding physical activity.

Table (1): Distribution of the studied students according to their socio- demographic characteristics

Socio- demographic Characteristics	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Age(in years)							
18<20	257	49.8	461	65.3	718	58.5	
20 – <22	227	44.0	255	31.9	452	37.3	32.743*
22 - <24	28	5.4	19	2.7	47	3.8	(<0.001)
24	4	0.8	1	0.1	5	0.4	
Mean ± SD	21.37 ± 0.54						
Religion							
Muslim	505	97.9	679	96.2	1184	96.9	4.184
Christian	11	2.1	27	3.8	38	3.1	(0.081)
Current residence							
Home	245	47.5	463	65.6	708	57.9	40.108*
University hostel	266	51.6	238	33.7	504	41.2	(<0.001)
With relatives	5	1.0	5	0.7	10	0.8	
Residency							
Urban	378	73.3	623	88.2	1001	81.9	47.037*
Rural	138	26.8	83	11.7	221	18.1	(<0.001)

χ^2: Chi square test *: Statistically significant at p ≤ 0.05

Table (2): Sex distribution of the studied students according to behaviors that leading to unintentional of intentional injuries

Behavior	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Wearing seatbelt while a passenger							
Never or rarely	436	84.5	638	90.4	1074	87.9	9.657*
Always	80	15.5	68	9.6	148	12.1	(<0.001)*
Wearing seatbelt while driving							
Never or rarely	146	28.3	87	12.3	233	19.1	76.38*
Always	68	13.2	45	6.4	113	9.2	(<0.001)
Not driving	302	58.5	574	81.3	876	71.7	
Carried a weapon							
Never or rarely	481	93.2	680	96.3	1161	95.0	6.042*
Always	35	6.8	26	3.7	61	5.0	(0.016)*
Participated in physical fights in the last 6 months							
Yes	105	20.3	45	6.4	150	12.3	54.068*
No	411	79.7	661	93.6	1072	87.7	(<0.001)*
Actually attempted suicide in the last 6 months							
Yes	47	9.1	52	7.4	99	8.1	1.217 (0.270)
No	**469**	**90.9**	**654**	**92.6**	**1123**	**91.9**	
****Suicidal attempts reasons**							
Psychological problems	25	53.2	35	67.3	60	60.6	2.060 (0.151)
Financial problems							
Yes	15	31.9	8	15.4	23	23.2	3.782 (0.052)
Emotional problems	25	53.2	21	40.4	46	46.5	1.628 (0.202)
Family conflicts	24	51.1	26	50.0	50	50.5	0.011 (0.916)
Health problems	18	38.3	11	21.2	29	29.3	3.503 (0.061)
Academic problems	14	29.8	13	25.0	27	27.3	0.285 (0.593)

χ^2: Chi square test *: Statistically significant at $p \leq 0.05$ **Multiple answers

Table (3): Sex distribution of the studied students according to drug use parameters

Drug parameter	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Taken narcotic/sedative drugs without a doctor`s permission							
Yes	78	15.1	100	14.2	178	14.6	0.217 (0.641)
No	438	84.9	606	85.8	1044	85.4	
Drug user							
Yes	24	4.7	5	0.7	29	2.4	20.00* (<0.001)
No	**492**	**95.3**	**701**	**99.3**	**1193**	**97.6**	
Initial age of drug use							
<12	5	20.8	0	0.0	5	17.2	2.719 (0.437)
12- <16	3	12.5	0	0.0	3	10.3	
16-<20	15	62.5	5	100.0	20	69.0	
20-24	1	4.2	0	0.0	1	3.4	
Types of drugs							
Marijuana	1	4.2	0	0.0	1	3.4	1.576 (0.813)
Bango	3	12.5	0	0.0	3	10.3	
Hallucinogens	1	4.2	0	0.0	1	3.4	
Amphetamines	0	0.0	0	0.0	0	0.0	
Morphine	1	4.2	0	0.0	1	3.4	
Hashish	18	75.0	5	100.0	23	79.3	
Frequency of drug use in last 30 day							
0 times	8	33.3	1	20.0	9	31.0	2.524 (0.471)
1-10 times	7	29.2	2	40.0	9	31.0	
11-20 times	4	16.7	2	40.0	6	20.7	
21-30 times	5	20.8	0	0.0	5	17.2	

χ^2: Chi square test *: Statistically significant at $p \leq 0.05$

Table (4): Sex distribution of the studied students according to alcohol consumption parameters

Alcohol parameter	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Alcohol consumer							
Yes	16	3.1	3	0.4	19	1.6	13.945
No	**500**	**96.9**	**703**	**99.6**	**1203**	**98.4**	(<0.001)*
Initial age of alcohol consumption							
<12	5	31.3	0	0.0	5	26.3	
12- <16	2	12.5	0	0.0	2	10.5	3.206
16- <20	8	50.0	2	66.7	10	52.6	(0.361)
20-<24	1	6.3	1	33.3	2	10.5	
Frequency of one drink in last 30 days							
0 days	9	56.3	1	33.3	10	52.6	
1-10 days	3	18.8	0	0.0	3	15.8	4.710
11-20 days	2	12.5	0	0.0	2	10.5	(0.194)
21-30 days	2	12.5	2	66.7	4	21.1	
Frequency of five drinks in last 30 days							
0 days	5	31.3	1	33.3	6	31.6	
1-10 days	6	37.5	0	0.0	6	31.6	3.708
11-20 days	2	12.5	0	0.0	2	10.5	(0.295)
21-30 days	3	18.8	2	66.7	5	26.3	

χ^2: Chi square test
*: Statistically significant at $p \leq 0.05$

Table (5): Sex distribution of the studied students according to smoking behavior parameters among

Smoking behavior parameter	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Smoker							
Yes	59	11.4	6	0.8	65	5.3	66.313 (<0.001)*
No	**457**	**88.6**	**700**	**99.2**	**1157**	**94.7**	
Initial age of first cigarette							
<12	7	11.9	0	0.0	7	10.8	
12- <16	17	28.8	3	50.0	20	30.8	1.664
16-<20	34	57.6	3	50.0	37	56.9	(0.645)
20-<24	1	1.7	0	0.0	1	1.5	
Type of smoking							
Cigarettes	43	72.9	1	16.7	44	67.7	12.416*
Shisha	4	6.8	3	50.0	7	10.8	(0.002)
Cigarettes with shisha	12	20.3	2	33.3	14	21.5	
Smoking frequency during past 30 days							
<10 days	20	33.9	1	16.7	21	32.3	2.909
10-20 days	6	10.2	2	33.3	8	12.3	(0.233)
>20 days	33	55.9	3	50.0	36	55.4	
Cigarattes consumption per day							
<10 cigarattess	34	57.6	2	33.3	36	55.4	3.184
10-20 cigarattess	11	18.6	3	50.0	14	21.5	(0.204)
>20 cigarattess	14	23.7	1	16.7	15	23.1	
Smoking patterns in last year							
Constant	18	30.5	1	16.7	19	29.2	2.840
Increased	19	32.2	4	66.7	23	35.4	(0.242)
Decreased	22	37.3	1	16.7	23	35.4	

χ^2: Chi square test<
*: Statistically significant at $p \leq 0.05$

Table (6): Sex distribution of the studied students according to selected parameter of sexual behavior

Sexual parameter	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Exposed to sexual harassment during life							
Yes	6	1.1	3	0.4	9	0.7	1.352 (0.245)
No	510	98.9	99.6	99.6	1213	99.3	
Sexually active							
Yes	46	8.9	11	1.6	57	4.7	36.28*
No	**470**	**91.1**	**695**	**98.4**	**1165**	**95.3**	(<0.001)
Initial age of first sexual relation							
<12	3	6.5	0	0.0	3	5.3	
12-< 16	10	21.7	0	0.0	10	17.5	9.211* (0.026)
16-< 20	28	60.9	6	54.5	34	59.6	
20-< 24	5	10.9	5	45.5	10	17.5	
Number of partners during last 3 months							
1 partner	28	60.9	10	90.9	38	66.7	3.605 (0.058)
≥ 1 partner	18	39.1	1	9.1	19	33.3	
Using condom during last sexual relation							
Yes	11	23.9	0	0.0	11	19.3	3.259 (0.071)
No	35	76.1	11	100.0	46	80.7	
HIV testing							
Yes	12	26.1	3	27.3	15	26.3	0.006 (0.936)
No	**34**	**73.9**	**8**	**72.7**	**42**	**73.7**	

χ^2: Chi square test *: Statistically significant at $p \leq 0.05$

Table (7): Sex distribution of the studied students according to dietary habit

Dietary habit	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Interested to eat balanced diet							
Never or rarely	275	53.3	454	64.3	729	59.7	15.01* (<0001)
Always	241	46.7	252	35.7	493	40.3	
Eat breakfast							
Never or rarely	263	51.0	403	57.1	666	54.5	4.49*
Always	253	49.0	303	42.9	556	45.5	(0.036)
Eat fruits during two days preceding the survey							
Yes	355	68.8	512	72.5	867	70.9	2.005
No	161	31.2	194	27.5	355	29.1	(0.157)
Eat vegetables during two days preceding the survey							
Yes	340	65.9	460	65.2	800	65.5	0.071
No	176	34.1	246	34.8	422	34.5	(0.789)
Eat sweets							
Never or rarely	254	49.2	232	32.9	486	39.8	33.32* (<0.001)
Always	262	50.8	474	67.1	736	60.2	
Eat fried food							
Never or rarely	206	39.9	268	38.0	474	38.8	1.895
Always	310	60.1	438	62.1	748	61.2	(0.434)

χ^2: Chi square test
*: Statistically significant at $p \leq 0.05$

Table (8): Sex distribution of the studied students according to physical activity

Physical activity	Male (n = 516)		Female (n = 706)		Total (n = 1222)		χ^2 (p)
	No	%	No	%	No	%	
Practice physical activity regularly							
Yes	253	49.0	157	22.2	410	33.6	95.991*
No	263	51.0	549	77.8	812	66.4	(<0.001)
Practice physical activity for more than 20 min							
0 days	258	50.0	506	71.7	764	62.5	69.231*
1 – 4 day	187	36.2	169	23.9	356	29.1	(<0.001)
>5 days	71	13.8	31	4.4	102	8.3	
Daily walking for 30 min.							
0 days	188	36.4	297	42.1	485	39.7	5.937
1 – 4 day	149	28.9	207	29.3	356	29.1	(0.051)
>5 days	179	34.7	202	28.6	381	31.2	
Practice stretching exercise							
0 days	278	53.9	508	72.0	786	64.3	46.909*
1 – 4 day	176	34.1	163	23.1	339	27.7	(<0.001)
>5 days	62	12.0	35	5.0	97	7.9	

χ^2: Chi square test
*: Statistically significant at $p \leq 0.05$

4. Discussion:

The college years offer an opportunity for new experiences, personal freedom, and identity development; however, this period is also noted for the emergence of risky health behaviors that place college students at risk for health problems (**Bernat & Resnick 2006).** The aim of the current study is to determine the prevalence of concurrent health risk behaviors among Port Said university students based on the Youth Risk Behavior Surveillance System (YRBSS).

The present study findings indicated that many students in Port Said University engage in many health risk behaviors that place them at risk for different health problems.One of the most common behaviors leading to unintentional injuries is neglecting wear seat belt which is an important public health problem among college students. The current study indicated that majority of the students never or rarely wear seat belt this results is consistent with the Seat Belt Safety Statistics which show that mostly the younger population between the age groups 16-35 are hardly found wearing seat belts (**Ferrer, et al., 2009**).

Moreover, **Centers for Disease Control and prevention(CDC, 2008)** reported that adults age 18-34 are less likely to wear seat belts than adults 35 or older. Additionally, the non-compliance of wearing seat belts regularly and continuously while the students passengers or while drivers may be attributed that, Egypt is not applying effectively the mandatory seatbelt wearing laws and rules which reduce the compliance behavior of seat belt use among the students which is very alarming. Risk behaviors for youth violence including participating in physical fights, and carrying weapons can lead to serious injury or even death.

The current study showed that the vast majority of students had reported that they were either never or rarely carrying weapons or guns. This result is consistent with **Kamal et al., 2010**who carried out their study about health risk behaviors among students of the private Egyptian university, where they found that only 2.9% of the surveyed students carried a weaponduring 6 months before the survey, this could be attributed to that Egyptian people did not like violence. In addition, the Egypt legislation regarding carrying weapons indicates: "possession or carrying gun is not permitted without license".

Results of the current study also revealed that a small proportion of students had participated in physical fights during the past 6 months preceding the survey,our results is consistent with **Porter et al., (2009)** who studied the priority of health behaviors in South African undergraduate students who enrolled in a large metropolitan university. He had reported that 12.0% of the students had been involved in at least one physical fight during the prior months Furthermore**, Kamal et al., (2010)** found that only4.9% of the studied students in two private university in Egypt engaged in a physical fight during 6 months before the survey.,the results of the present study is disagreement with **Eatonet al., (2010)**,who carried a Youth risk behavior surveillance in United States, 2009, as they found that 31.5% of students had been participate in a physical fight during the 12 months before the survey.

Another behavior that leading to intentional injury is attempting suicide, the present study showed that a small percentage of the students had actually attempted suicide during the past 6 months, the present study result is compatible with **Huey et al., (2004)** study in the

United States. He revealed that attempted suicide is a significant mental health problem that affects nearly 9.0% of adolescents in the United States each year. The result is also supported by **Kamal et al., (2010)** who reported that 8.7% of the university students had seriously considered attempting suicide.

Lifetime prevalence of abuse is higher between the ages of 18 and 29 than other cohorts for both men and women. Social pressures exerted by peer groups and group norms may increase drug abuse risks **(Cirakog& Ism 2005).** The current study found that the prevalence rate of lifetime drug uses among the students was low and more than two third of the drug users used drugs between the ages of 16 to less than 20 years. This finding come in the line with results of Youth risk behavior surveillance that carried out in United States, 2009 by **Eaton et al., (2010)** where they found that 2.1% of students had ever injected an illegal drug. Another consistent with study carried in Jordan by **(Qatamish&Jaradat 2008)**where he reported that students in Jordan are not invulnerable to drug use, with 3.0% responding in a positive manner. The result is contradicted with **Eaton, et al., (2012)**,as they found that 23.1% of the studied students had used drugs mainly marijuana.

Alcohol is another health risk behavior among the studied students. In the present study the majority of the students reported that they had never had a drink of alcohol; while only a small proportionof them have reported this behavior. The prevalence of the current study is mainly near to the prevalence reported in the study carried to assess the awareness and practice of health risk behavior among 687 Egyptian students from Suez Canal University, where 4.1% reported current drinking alcohol **(Raafat, 2004).** The finding is contradicted with data reported from Youth Risk Behavior Surveillance — United States, 2011 which indicated that 38.7% of the studied students had drunk alcohol during the 30 days before the survey **(Kinchen et al., 2011)**. This might be related to that Egypt is a Muslim country and Islamic legislations prohibit Muslims from drinking alcohol and all Muslims must not consume alcohol at all. The differences between the prevalence of the present study and other studies might be due to the social, religious and cultural differences between Egypt and USA.

Cigarette smoking among college students is a critical public health problem (**Patterson et al., 2004).**Although many researches expressed that college students ages 18- 24 show the highest rates of cigarette smoking today**.(Singh & Basannar,2003, & Males, 2006),**the present study revealed that the majority of the studied students (94.7%) did not smoking, only a Small proportion practice such behavior. This finding is contradicted with a study conducted by **Hashim (2000),** in the College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia. He reported that 29.0% of the undergraduate were current smokers. Of those that indicated that they were currently smokers, 20.0% were male and 9.0%were female The finding also disagreement withthe study carried in USA where it indicated that more than a quarter (28%) of college students smoke cigarettes and despite intentions to quit before graduation most will continue to smoke during their college years**(CDC, 2007)**.The current study also revealed that prevalence of smoking in men was more than in women,this may be explained by, that, the Arab society consider smoker women as strange and unacceptable bad behavior, as it harms the image of the women and her family.

Sexual harassment has been described as any unwelcome sexual advances, requests for sexual favours or other physical and expressive behavior of a sexual nature**.**

The current study showed that only a small proportion of the studied students reported that they had exposed for sexual harassment. The finding is contradicted with **Ayman et al., (2007)** in their study of health concern and risk behaviors among university students in Jordan; found that 11% of the students have sexual abuse.

Furthermore, the current study illustrated that only a small proportion of the studied students were sexually active,and more than one half of the sexually active students had their first sexual relation when they were between the ages of 16 to less than 20 years and the majority of those who sexually active did not using condom during their last sexual relation. The result is inconsistent with the study conducted by **Eaton et al., (2010)** who found that 34.2% of the studied students were currently sexually active, 38.9% of currently sexually active students had not used a condom during their last sexual intercourse, The low prevalence in sexual risk behavior detected in the present study may be attributed to that as we are a part of Arab society and being an Islamic country this behavior is prohibited and not accepted at all in our society.

Also, the present study indicated that the majority of the sexually active students reported that they never having had an HIV test. This result is contradict with the study conducted by **Payne et al.,(2006)**, aimed to investigate the acceptability of rapid HV testing among African-American college students aged 18-24 at a historically black university in the south. He revealed that nearly one half (48.0%) of the participants reported that they previously received HIV testing., This might due to lack of information about local HIV testing locations, fear from the result of HIV testing that may be positive.

Unhealthy dietary behavior is one of the six top health risk behaviors identified in college students

When college students leave home **(Lowry et al., 2000),** and adjust to independent living, good dietary habits decline (and poor dietary habits often tend to get worse. Nevertheless, during these transitional years of 18–24 years of age, the establishment of healthful lifestyle behaviors can have a long-lasting impact on the students' health and the health of their future families **(Harris et al.,2006)**

The current study revealed that more than half of the students never or rarely either interested to eat a balanced diet or taken breakfast,about two third of them reported 5 servings of fruit and vegetables during the past two days preceding the survey. These findings are consistent with **Terry et al., (2003),**as they reported in their study on the American college students, that more than 69% of the participants reported < 5 servings of fruits and vegetables per day and more than 67% reported < 20 g of fiber per day.
The result of the present study is contradicted with the result of study conducted in the College of Health Sciences at Rass, Qassim University, Kingdom of Saudi Arabia (KSA) in 2009 by **Al-Rethaiaa et al., (2010)** among male students aged 18-24 years. He indicated that about half of Saudi students have breakfast daily and vegetables & fruits consumption was uncommon habit among Saudi students. Also the result is disagreement with **Eaton, et al (2008),** who found that 78.6% of students had not eaten fruits and vegetables five or more times per day, 33.8% had drunk soda or pop at least one time per day during the 7 days before the survey.

Physical activity patterns during college are important influences on habitual physical activity during the full span of the adult life and, consequently, have significant implications for short- and long- term health outcomes. Research indicates that during the transition to college, exercise and fitness levels usually decrease and are unlikely to improve as students get older **(Driskell et al., 2005).**

The current study showed that about two third of the students had not exercised or participated in physical activities for at least 20 minutes that made them sweat and breathe hard. In addition nearly two fifth did not walking regularly at all for 30 minutes during the seven days preceding the survey. This finding is disagreement with **Miller et al., (2005)**who reported that Nearly half of the respondents (57.3%) indicated they "exercised or participated in sports activities for at least 20 minutes that made you sweat or breathe hard" on three or more of the preceding 7 days (VIG). Nearly three-fifths reported they "walked or biked for at least 30 minutes at a time" on 3 or more of the preceding 7 days (MOD).Another study that contradict with our finding is the study carried by **Quadros et al., (2009)** in their study of the prevalence of physical inactivity amongst Brazilian university students: its association with sociodemographic variables., found that the prevalence of physical inactivity amongst the students studied was 13.8 %.

WHO (2001), reported that the prevalence of insufficient physical activity was highest in the WHO Region of the Americas and the Eastern Mediterranean Region, and this current levels of physical inactivity are partly due insufficient participation in physical activity during leisure time and an increase sedentary behavior during occupational and activities. Likewise, an increase the use of 'a passive" mode of transport has also been associated with declining physical activity levels. Increased urbanization has resulted in several environmental factors which may discourage participation in physical activity such as: violence, high-density traffic low air quality, pollution, lack of parks, sidewalks and sports /recreation facilities Population based, multi-sectoral, multi-disciplinary, and culturally relevant policies need to be implemented to increase physical activity levels globally.

Conclusion & Recommendations:

Based on the finding of the study it will be concluded that, many of the studied students were engaged in many health risk behaviors that increasingly put their health at risk and lives in danger. Male students were more likely than female students to engage in most of these health risk behaviors. Besides, the majority of the risk taker students had initiated all of these health risk behaviors when they were aged 16 to less than 20 years. Unfortunately behaviors leading to unintentional injuries had been the most prevalent health risk behavior followed by physical inactivity, unhealthy dietary habits, intentional injury and smoking. Fortunately, the study found that the students were not invulnerable to alcohol or drug use, or sexual risk behavior.Based on the finding of the study: The following recommendations are suggested: Health education programs should be carried in the universities and in summer camps to promote healthy behaviors among university students, to raise their awareness about the hazards of these risk behaviors and reinforce competence in adopting healthy behaviors. A variety of education campaigns implemented in public places as clubs, coffee shops and malls could be employed to promote healthy behaviors among university students. The campaign should highlight the health hazards of un-healthy lifestyles. Conducting Conducting more researches in the other universities in Egypt to identify the magnitude of the problem against university students.

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12/11/2013