# Assessment of Nursing College Students' Health Protective Behaviors 

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#### Abstract

Objective: to assess the Nursing College students' health-protective behaviors (HPBs) and their association with some sociodemograghic characteristics. Methodology: A sample of 100 Students (males and females) was selected through a systematic random sample that were at the third and fourth year of Nursing College in Baghdad University for the period of April $1^{\text {st }}$ through April 30 ${ }^{\text {th }}$ 2007. Data were collected through the use of a self-report instrument that used for Americans as HPBs assessment that contains 23 items. Reliability and validity of the tool were determined through a pilot study. A descriptive statistical approach (frequencies and percentages) and inferential statistical approach (chi-square) were used for data analysis. Results: the study indicated that health protective behaviors (HPBs) of the students were bad and there is a significant relationship between HPBs of the students and their sociodemograghic characteristics. Recommendations: the study recommended that an education program can be designed, conducted, and implemented to the universities' students as well as further and nation-wide studies can be on a large sample size of colleges of nursing students. Key Words: health-protective behaviors, nursing college students.

\section*{Introduction}

Health-protective Behaviors (HPBs) are individual actions which are taken to protect, promote, or maintain health. These actions are both prescriptive in nature (e.g. eat nutritious diet, wear a seat belt when in car, get adequate exercises) and proscriptive (e.g. avoid unsafe driving, smoking, and excess alcohol consumption) ${ }^{1}$.

Evidence exists that some of the leading causes of death and disability, such as heart disease, cancer, stroke, some respiratory diseases, unintentional injuries, and HIV and acquired immunodeficiency syndrome (AIDS) ,can often be prevented by making lifestyle changes (staying physically active ,eating right, and avoid smoking are the three most important strategies to better health) ${ }^{(2)}$.

Monitoring risk behaviors for chronic diseases and participation in preventive practices are important for developing effective primary prevention strategies throughout health education and intervention programs to prevent morbidity and mortality. Therefore, continual monitoring of these behaviors and the practices at the state, city, and county levels can assist public health programs in evaluating and monitoring progress toward improving their community's health ${ }^{(3)}$.


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Priority health-risk behaviors, which contribute to the leading causes morbidity and mortality among youth and adults, often are established during yo extend into adulthood are interrelated and are preventable \}.

It is well established in the literature that most of college students have poo adherence to the health-protective behaviors has urged the researcher to conduct thq study in this field.

## Methodology

A descriptive study was conducted through April 2007. A systematic randc: sample of 100 students was selected. These students were at the third and fourth ya of Nursing College in the University of Baghdad who had completed the healri education course. Data were collected through the use of 18 items adopted 2 le $\backslash=$. (Yes/No) questionnaire which was used for Americans as Health-Protect!'. Behaviors (HPBs) Index ${ }^{(5)}$. Self-assessed health status scale was (very good/good/bad) ${ }^{(6)}$. A panel of 4 experts has reviewed the tool for its validb Correlation coefficient of the instrument is 0.86 . Subjects' responses were collected through the use of the self-report instrument in which all the items were transla* into Arabic language and presented to respondents with an explanatory introduction. A descriptive statistical approach (frequencies and percentages) and inferentii statistical approach (Chi-square) which were used for the data analysis.

## Results

Table (1): Demographic characteristics of the sample

| Age(year) | F. | \% |
| :--- | :---: | :---: |
| $21-23$ | 85 | 85 |
| $24-26$ | 15 | 15 |
| Total | 100 | 100 |
| Grade | F. | $\boldsymbol{\%}$ |
| Third Year | £A | A |
| Fourth Year | $\mathbf{o Y}$ | $\mathbf{o} \backslash$ |
| Total | 100 | 100 |
| Gender | F. | $\%$ |
| Male | 74 | 74 |
| Female | 26 | 26 |
| Total | 100 | 100 |
| Economic status | F. | $\boldsymbol{\%}$ |
| Sufficient | 16 | 16 |
| Barely Sufficient | 54 | 54 |
| Insufficient | 30 | 30 |
| Total | 100 | 100 |
| Self-assessed health status | F. | $\boldsymbol{\%}$ |
| Very good | 76 | 76 |
| Good | 14 | 14 |
| Bad | 10 | 10 |
| Total | 100 | 100 |

Concerning the students' grade; age; gender; economic status; and self-assesse, health status, the findings indicated that highest proportions of the students are fourth year grade (52\%), 21-23 years old ( $85 \%$ ), males ( $74 \%$ ), having barely sufficient

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economic status (54\%), and having very good self-assessed health status (76\%), respectively (Table 1).

Table (2) Distribution of the sample according to their health-protective behaviors by frequencies and percentages
No. Health-protective Behaviors

| Yes |  | NO |  |
| :---: | :---: | :---: | :---: |
|  | $\%$ |  | $\%$ |
| 72 | vY | 28 | YA |

1. I do not smoke.
2. 

20
I avoid smoking in bed.
<U 1 A
3. I do not drink alcohol.
4. I live in accidents-free home.
$54 \quad 54 \quad 46 \quad 46$
5. I wear seat belt when I drive*.
6. My blood pressure is checked once at least

My teeth are checked once at least annually.
U $\underset{\mathrm{a}}{\boldsymbol{A}} \quad \mathrm{AY} \quad \mathrm{A} \mathbf{Y}$
nnually.
7.

I use to take fiber in my diet.
I use to take low-sodium diet. 9 .
10.

I use cholesterol-free diet. 11 .
I use light-sugar diet.
I sleep 7 to 8 hours per day. 12 . 13.

1 use to exercise > 3 times weekly.
I use to maintain a proper weight. 14.

| on | ol | $a$ | $a$ |
| :---: | :---: | :---: | :---: |
| YY | YY | A. | YA |
| 11 | U | AY | AY |
| n | r | 1A | 1A |
| -u | TY | Y-A | VA |

I use to obey speed-limits when I drive.

| io | to |  |  |
| :--- | :--- | :--- | :--- |
| 60 | 60 | 40 | $\mathbf{4 0}$ |

$\begin{array}{lll}10 & 10 \\ & 15 .\end{array}$
I use to have diet with adequate amount of $t r$ tr ov ov vitamins and minerals.
16.

I socialize regularly.

* Only $20 \%$ of the sample driving a car.

17. 

n $\quad \mathrm{n} \quad \boldsymbol{M}$
Table $t$ shows that the highest proportion of the sample $(98 \%>)$ which is accounted for those who do not drink alcohol. Seventy two of the respondents do not smoke. Only $10 \%$ of them checked their blood pressure at least once annually. Only $18 \%$ of the students are checking their teeth for at least once annually. Concerning the diet intake (low-fat diet, low-sodium diet, cholesterol-free diet light-sugar diet, and adequate intake of vitamins and minerals). The finding is indicated that only $22 \%$, $20 \%, 18 \%, 32 \%$ and $43 \%$, respectively. In addition, only $45 \%$ have exercises > 3 times weekly.

Table (3) The relationship between HPBs of the sample and the college grade

| HPBs | Yes |  | NO |  |
| :--- | :---: | :---: | :---: | :---: |
|  | F. | $\%$ | F. | $\%$ |
| Third Year | 290 | 37.2 | 490 | 62.8 |


| Fourth Year | 382 | 48.5 | 406 | 51.5 |
| :--- | :--- | :--- | :--- | :--- |
| Obs. $\mathrm{X}^{2}=15.7$ <br> p $<0.05$ Crit. $\mathrm{X}^{2}=3.841$ |  |  |  |  |

The findings of this table had shown that significant association between HPBs of the sample and the college grade was depicted.

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Table (4) The association between HPBs of the sample and their gender

| HPBs | Yes |  | NO |  |
| :--- | :---: | :---: | :---: | :---: |
|  | F. | $\%$ | F. | $\%$ |
| Male | 390 | 48.75 | 410 | 51.25 |
| Female | 282 | 36.7 | 486 | 63.3 |
| On |  |  |  |  |

Obs. $X^{\prime}=22.4$
df $=1$ Crit. $X^{2}=3.841$
Results of this table indicated that significant association between gender of the subjects and their HPBs.

Table (5) The association between HPBs of the sample and their economic status

| $\wedge \wedge \wedge$ <br> Economic. <br> ^. Status <br> $\wedge$ | Yes |  | NO |  |
| :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F. | Yes |
| Sufficient | 150 | 38 | 245 | F. |
| Barely sufficient | 280 | 59.8 | 190 | 40.2 |
| Insufficient | 242 | 35.5 | 461 | 67.5 |
| Obs. $X^{2}=76.8$ <br> Crit. $\mathrm{X}^{2}=5.991$ | $\mathrm{df}=2 \mathrm{P}<$ |  |  |  |

Findings revealed that a significant relationship between the sample economic status and the student' HPBs as shown in this table.

Table (6) The association between HPBs of the sample and personal assessment of their health status

| $\wedge " \backslash$ <br> HPBs <br> Self-assessed^^ <br> status $\wedge \backslash$ | Yes |  | NO |  |
| :---: | :---: | :---: | :---: | :---: |
|  | F. | \% | F. | \% |
| Very good | 238 | 33.8 | 466 | 66.2 |
| Good | 227 | 51 | 218 | 49 |
| Bad | 207 | 49.4 | 212 | 50.6 |

Obs. $\mathrm{X}^{2}=42.5$
df=2 Crit. $\mathrm{X}^{2}=5.991$
This table indicated that a significant relationship between self-assessed health status of the sample and their HPBs.

## Discussion

Fortunately, the highest proportion of the subjects (98\%) does not drink alcohol (Table 2). In contrast, a researcher found in the study among 225 college students to assess heart disease risk factors that half or more of them engaged in binge drinking.'" Based on the researcher point of view, these results may be related to the Islam prohibition of alcohol.

Seventy two percent of the sample does not smoke (Table 2). Contrary to these findings.

A study to identify brand preferences and related factors among 5688 University students in Japan, smoking prevalence was $67.2 \%{ }^{(8)}$ The researcher expected that most of subjects do not smoke because they have awareness about smoking risks upon health.

Unfortunately, only $10 \%$ of the respondents checked their blood pressure once at least annually (Table 2), while the results of The Prevention Index among a random sample of American adults found that $84 \%$ of the subjects had annual checking at least one time of their blood pressure. ${ }^{(5)}$ Based on the researcher point of view, this result may be related to the sample who does not know the importance of health-protective behaviors.

Results showed that only $18 \%$ of the students checking their teeth once at least annually. This finding consistent with the study on 195 Tanzanian and 225 Ugandan teacher trainees to identify their knowledge, beliefs, and behavior related to oral health. They found that Tanzanians students less diligent than Ugandan in annual visiting of dentists. ${ }^{(9)}$

Concerning the diet (low-fat diet, low-sodium diet, cholesterol-free diet, light-sugar diet and adequate amounts of vitamins and minerals). The findings revealed that only $22 \%$ o, $20 \%, 18 \%, 32 \%$, and $43 \%$, respectively and only $45 \%$ have exercises > 3 times weekly (Table 2 ). Blaxter's national study of individual lifestyle reports findings in USA was consistent with these results. She found that only $15 \%$ of the subjects had healthy habits related to diet and exercises. ${ }^{(10)}$

Poor diet (especially those high in sugar and fat) and inadequate exercises combine to lead to obesity, the second most dangerous lifestyle. ${ }^{(1)}$ Together dietary factors and inadequate exercises are estimated to account for about $14 \%$ of death annually in the USA.

Findings of the study indicated that a significant relationship between HPBs of the sample and their grade (Table 3). Lower level of education is strongly associated with unhealthy patterns. ${ }^{(12)}$

The results showed that a significant relationship between HPBs of the respondents and their gender (Table 4). Male are more likely than females to participate in HPBs. In contrast, a study found that women, especially young ones are most likely to lead a healthy lifestyle. The researcher expected that these results to relate to most of the sample ( $74 \%$ ) who are males.

Table (5) presents that a significant association between the sample HPBs and their economic status, in which barely sufficient economic status are more likely to engage in HPBs than others. This finding is inconsistent with Blaxter's study who found that lower income is associated with unhealthy habits. ${ }^{01)}$ The economic status played a distinct role in presenting this finding since the majority of the subjects were those who had barely sufficient economic status, based on the researcher's point of view.

Analysis of the data showed that a significant association between HPBs of the subjects and their self-assessed health status (Table 6). This finding is consistent with a study which aimed to identify the association between health behaviors and self-reported health in Estonia, Finland, Latvia, and Lithuania. Results indicated that Finland subjects had rated their health better than all the Baltic countries and self-assessment of health is significantly associated with most health behaviors, as well as in many other stable countries and can be used as an indicator of health behaviors.'

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## Recommendations

The study recommended that:

1. An education program can be designed, conducted, and implemented to population regarding health protective behaviors (HPBs).
2. Mass media should be played a significant role in presenting the HPBs amc the population.
3. Health education courses should contain topics of HPBs which can presented to these students.
4. Nation-wide studies can be conducted on a large sample size of college> nursing students.

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