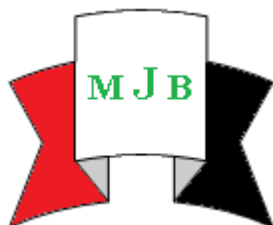


Assessment of Stress' Level among Students and its Coping Strategies

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Abstract

A descriptive - analytical study which used an assessment tool on probability sample of 120 students from schools of (Intermediate , Secondary , Institute , College) to determine stress' level among students, its sources and coping strategies for health promotion of students and school health services . The period of the study from 2/10/2011 to 2/12/2012 in Baghdad City.

A questionnaire was designed throughout review of literature of the study which consisted of four parts, First part related to demographic data of the sample (4 items).

Second part related to sources of stress (8 items), Third part related to assessment of stress' level (10 items) and Fourth related to coping strategies to relief stress (16 items). Validity of the questionnaire was determined through the panel of 4 experts in different specialties. Data was collected by personal interview with the researcher, and analyzed by application of statistical of frequencies, percentages and chi-square.

The results of the study revealed that the high scores were counted among males who ages of 20-25 years, while the most of the their sources of stress was reported as a family problems and school problems, then, there was no significant association between sources of stress among students and their gender and ages. Also, more than half of the sample were selected of the problems –solving approaches, exercises and reading holly book as a coping strategies for dealing with stress.

Based on these results, the researcher recommended that the health education programs should be conducted on how treated with stress and selected of the effective coping strategies for prevent mistake approaches when dealing with stress, as well as problems solving approaches, techniques of auscultation and teaching staff of schools about how provide social support to their students when stressful event occur.

Key words: Stress' Level, Students, Coping strategies

تقييم مستوى الضغط النفسي بين الطلبة واستراتيجيات التعامل معه

الخلاصة

دراسة وصفية- تحليلية استخدم فيها أداة التقييم على عينة عشوائية من ١٢٠ طالب من مدارس (المتوسطة، الإعدادية، المعهد، الكلية) لتحديد مستوى الضغط النفسي لديهم ومصادره واستراتيجيات التعامل معه وذلك من أجل الارتقاء بصحة الطلبة وخدمات الصحة المدرسية. فترة الدراسة من ٢/١٠/٢٠١١ إلى ٢/١٢/٢٠١٢ في مدينة بغداد.

تم تصميم استمارة استبيان من خلال مراجعة مصادر الدراسة حيث تكونت من أربعة أجزاء: الجزء الأول منها يتعلق بالمعلومات الديموغرافية للعينة (٤ فقرات) , والجزء الثاني يتعلق بمصادر الضغط النفسي لديهم (٨ فقرات) , والجزء الثالث يتعلق بتقييم مستوى الضغط النفسي (١٠ فقرات) , والجزء الرابع يتعلق باستراتيجيات التعامل معه لتخفيفه (١٦ فقرة). مصداقية الاستمارة حددت من قبل ٤ خبراء من مختلف التخصصات. جمعت المعلومات عن طريق المقابلة الشخصية للباحث. كما تم تحليل المعلومات باستخدام تحليل الإحصاء (التكرارات والنسب المئوية ومربع كاي).

أشارت نتائج الدراسة أن أعلى علامات الضغط النفسي قد سجلت عند الذكور ممن هم في أعمار ٢٠-٢٥ سنة , وأن أغلب مصادر الضغط النفسي لديهم من المشكلات العائلية والمشكلات المدرسية, بينما لا توجد علاقة ذات دلالة إحصائية بين كل من مصادر الضغط النفسي بين الطلبة طبقاً لنوعهم وأعمارهم. كما أن أكثر من نصف العينة اختارت أسلوب حل المشكلات وإجراء التمارين الرياضية وقراءة القرآن كأعلى نسب مثوية لديهم للتعامل مع ضغوطهم النفسية .

وبناءً على نتائج الدراسة أوصى الباحث على ضرورة تطبيق برامج التنقيف الصحي حول كيفية التعامل مع الضغط النفسي واختيار استراتيجيات التعامل الفعالة معه لتجنب الأساليب الخاطئة , بالإضافة إلى تعلم مهارات حل المشكلات وتقنيات الاستشارة وفتح دورات مستمرة لكوادر التعليم حول كيفية إعطاء الإسناد الاجتماعي لطلبتهم متى ما كانوا في مواقف الضغط النفسي.

Introduction

Client assessment is the first step of the nursing process. Prior to initiating action, the nurse assesses the client to determine the client's health status and the need for nursing intervention. Assessment data may be collected by several methods, one of them including interview [1-2]. Data collection is the process by which the researcher needs to collect such information for answer the research problem [3].

Stress defined as physiologic and behavioral reactions that occur in response to disequilibrium. It has physical, emotional and cognitive effects [4]. According to Selye, stress is the reaction of an organism to stimuli called stressors, which may produce damaging effects. The pattern of changes that observed represented a specific response to any stressful agent. Stress theory is based on the concepts of homeostasis (state of physiological balance) and adaptation. Because stress is an inherent and integral of life, individuals must constantly readjust to maintain themselves. A state of balance is maintained when a person learns to recognize of signal of distress and then adapts or changes functioning to meet the demands of the stressor encountered. Individuals differ significantly in how they respond to and cope with these demands [5].

Experts in stress management have proposed several effective techniques which is described in the

material that follows, that specific instructions provided for some. Any person will not know whether a particular coping approach is effective after he study the technique and use it for an adequate time [6].

Coping is the process of managing demands that tax or exceed a person's resources. Coping is influenced by primary appraisals (Is the event harmful, threatening, or challenging) and secondary appraisals (What are my coping resources and how adequate are they) [7].

A variety of programs directly or indirectly serve the health needs of school-aged population. Community health nurses (CHN) play a major and vital role in delivering the health services. In community, they fall into three categories approximating the three practices priorities of community health nursing practice, illness prevention, health protection, and health promotion [8]. CHN use a variety of intervention approaches to facilitate adaptation during times of stress and to enhance successful resolution of crisis. Some of these approaches are briefly summarized under three major categories, supportive, education, and problem solving approaches [9].

Objectives of the Study

The present study aims to:

1- To identify the sources of stress among students and its significant associations relative to their demographic data of students.

2- To assess stress' level among students relative to their age and gender.

3- To determine which coping strategies that selected by students relative to their educational levels.

Methodology

Design of the study: A descriptive analytical-study which used an assessment tool among students at school setting.

Setting of the study: The present study was conducted on students in intermediate school of Ibn Khaldon, secondary school of Bashar Ibn Burd, medical technical institute of al-Mansour, and college of Altrath / Baghdad city.

Sample of the study: A probability sample of (120) students that selected from 4 different setting of schools (30 students from intermediate school, 30 students from secondary school, 30 students from institute, 30 students from college).

Data collection: The data was collected through interview of researcher with sample by using a questionnaire format constructed by the researcher for the purpose of the study. The period of the study from 2/10/2011 to 2/12/2012 in Baghdad City.

Study instrument: The questionnaire was designed by the experience of researcher, studies related to the present study and open-end questions about which approaches that selected when student exposed to stressful events, students' answers are important to the present study for designed the study instrument

The questionnaire was consisted of four parts:

1-Demographic data of the students(4 items).

2-Sources of stress among the students(8 items).

3-Assessment of stress' level among students during the last month (10 items).

4- Coping strategies that selected by students to stress' relief (16 items).

The total items of the questionnaire was 39 items. The scores that assess stress' level among students consist of the numbers 1,2,3,4,5,6, as follows (Never0,Almost never1,Sometimes2, Fairly often3 , Very often 4). While the numbers 7,8,9,10, as follows (Never4,Almost never3,Sometimes2, Fairly often1 , Very often 0) table 1 [6].

Statistical analysis: Frequencies, percentages and chi-square.

Table 1 Scores for Assessment of Stress' level

No	Items	Scores of stress' level				
		Never 0	Almost Never 1	Sometimes 2	Fairly Often 3	Very Often 4
1-	How often have you felt ? Upset because of something that happened unexpectedly ?					
2-	Unable to control the important things in your life ?					
3-	Nervous and stressed ?					
4-	Unable to cope with all the things you had to do ?					
5-	Angered because of things that were beyond your control ?					
6-	That difficulties were piling up so high that you could not overcome them ?					
7-	Confident about your abilities to handle your personal problems ?	4	3	2	1	0
8-	That things were going your way ?					
9-	Able to control irritations in tour life ?					
10-	That you were top of things?					

This table demonstrated the Scores of Stress' level among Students. In

general population average score for males was 12 and for Females 14.[6].

Results

Table 2 Distribution of sample according to their demographic characteristics

Variables	Frequency (F)	Percentage (%)
Gender		
----- : - Males	65	54.2
- Females	55	45.8
Total	120	100
Age		
----- : - 15-20	72	60
- 20-25	48	40
Total	120	100
Level of education		
- Intermediate school.	30	25
- Secondary school.	30	25
- Institute.	30	25
-College	30	25
Total	120	100

The finding showed that more than half of students was males (54.2%), majority of them at 15-20 years(60%),

with educational level at 25% of the sample for all differential level.

Table 3 Sources of stress among students

No	Items	Total Sample/120		Rank
		F	%	
	Do you have the following?			
1-	Family problems (Abuse or Maltreatment)	84	70	1
2-	School problems	71	59.1	2
3-	Emotional problems	42	35	4
4-	Needs to be meet (Like social support)	34	28.3	5
5-	Problems with the friends	21	17.5	6
6-	Work place problems	19	15.8	7
7-	Health problems or Diseases	18	15	8
8-	Other problems	9	7.5	9

This table indicated that the main two sources of stress among students

were Family problems (70%) and School problems (59.1%).

Table 4 Associations between Sources of stress among students relative to their gender

No	Items	Gender				Total	%
		Males		Females			
		F	%	F	%		
1-	Family problems	48	40	40	30	84	70
2-	School problems	40	33.3	36	30	71	59.1
3-	Emotional problems	23	19.2	19	15.8	42	35
4-	Needs to be meet (social support)	16	13.3	18	15	34	28.3
5-	Problems with the friends	13	10.8	8	6.7	21	17.5
6-	Work place problems	15	12.5	4	3.3	19	15.8
7-	Health problems or Diseases	8	6.7	10	8.3	18	15
8-	Other problems	3	2.5	6	5	9	7.5

P value at 0.05

Chi square = 0.413

This table indicated there were no sources of stress among students significant associations between relative to their gender.

Table 5 Associations between Sources of Stress among Students relative to their Age group

No	Items	Age group				Total	%
		15-20 years		20-25 years			
		F	%	F	%		
1-	Family problems	46	38.3	38	31.7	84	70
2-	School problems	49	40.8	22	18.3	71	59.1
3-	Emotional problems	24	20	18	15	42	35
4-	Needs to be meet	24	20	10	8.3	34	28.3
5-	Problems with the friends	13	10.8	8	6.7	21	17.5
6-	Work place problems	10	8.3	9	7.5	19	15.8
7-	Health problems or Diseases	11	9.1	7	5.9	18	15
8-	Other problems	4	3.3	5	4.2	9	7.5

P value at 0.05

Chi square = 0.697

This table indicated there were no Sources of stress among students significant associations between relative to their age group.

Table 6 Assessment of stress' level among students according to their gender

No	gender	Scores of stress' level											
		10-14		15-19		20-24		25-29		30-34		35-40	
		F	%	F	%	F	%	F	%	F	%	F	%
1-	Males												
	65	2	3	9	13.9	21	32.3	23	35.4	5	7.7	5	7.7
2-	Females												
	55	4	7.3	11	20	25	45.5	10	18.2	3	5.4	2	3.6
Total	120	6	5	20	16.7	46	38.3	33	27.5	8	6.7	7	5.8

Note: In general population average score for males was 12 and for Females 14

This table indicated that the highest scores of stress at the level of 25 to 29 among males (35.4%), and 20 to 24 among females (45.5%).

Table 7 Assessment of stress' level among students according to their age group

No	Age	Scores of stress' level											
		10-14		15-19		20-24		25-29		30-34		35-40	
		F	%	F	%	F	%	F	%	F	%	F	%
1-	15-20 Years												
	72	3	4.3	8	11.1	23	31.9	16	22.2	15	20.8	7	9.7
2-	20-25 Years												
	48	2	4.1	4	8.4	19	39.6	10	20.9	7	14.5	6	12.5
Total	120	5	4.2	12	10	42	35	26	21.7	22	18.3	13	10.8

Note: In general population average score for males was 12 and for Females 14

This table indicated that the highest scores of stress at the level of 20 to 24 for both students' ages of 20-25 years (39.6%) and 15-20 years (31.9%).

Table 8 Coping strategies that selected by students relative to their Level of education

No	Coping strategies	Intermediate school		Secondary school		Institute		College		Total	
		F	%	F	%	F	%	F	%	F	%
1	Problem Solving Approach	14	11.7	16	13.4	20	16.7	20	16.7	70	58.5
2	Exercise	12	10	20	16.7	14	11.6	18	15	64	53.3
3	Reading or Listening to Holly Book (Al-Quran)	10	8.3	10	8.3	22	18.4	14	11.7	56	46.7
4	Listen to Music	6	5	14	11.6	20	16.7	14	11.7	54	45
5	Sleeping	12	10	20	16.6	8	6.7	8	6.7	52	43.3
6	Seek to Help	16	13.4	10	8.3	20	16.7	4	3.3	50	41.7
7	Counseling	12	10	18	15	8	6.7	10	8.3	48	40
8	Watch TV.	6	5	14	11.6	16	13.4	10	8.3	46	38.3
9	Empowerment	10	8.3	13	10.9	12	10	10	8.3	45	37.5
10	Relaxation (Deep Breathing)	14	11.6	12	10	8	6.7	8	6.7	42	35
11	Reading General Books	6	5	10	8.3	10	8.3	6	5	32	26.7
12	Refused Food	8	6.7	4	3.3	8	6.7	10	8.3	30	25
13	Taking Sedative Drugs	4	3.3	4	3.3	8	6.7	10	8.3	26	21.6
14	Seek to Social Support	4	3.3	8	6.7	8	6.7	4	3.3	24	20
15	Smoking	4	3.3	7	5.9	6	5	6	5	23	19.2
16	Alcohol intake	1	0.9	1	0.9	2	1.8	1	0.9	5	4.5

This table indicated that the top three (highest percentages) of coping strategies which selected by students who undergo stressful as follow ; Problem Solving Approach (58.5 %) , Exercise (53.3 %) , and Reading or Listening to Holly Book (Al-Quran)(46.7%).

Discussion

Part 1: Discussion of source of stress

Regarding to source of stress among students, the results indicated that the main sources of stress as follow; family problems (70%) and school problems (59.1%) (Table 3). These findings supported throughout the people respond to stress differently based on their own needs and resources for adapting to changing life events. All life situations are potential sources of

stress; however, work is a major-stressor for many people [10]. As well as, children and adolescents have their own sources of stress that can make home life stressful, one study found that social and academic failure experiences at school, such as being rejected by a peer or having difficulty with schoolwork [7]. Generally, other studies reported that the sources of stress are academic, financial, family, social, and daily hassles [11,12].

Part 2: Discussion of stress' level among students

Regarding to stress' level among students, the study reported that the highest percentages of stress among females 45.5% and 35.4% among males,(Table 3). The finding indicated that people vary in their reactivity to stress. Reactivity is the degree of

change that occurs in autonomic, neuroendocrine and immune responses as a result of stress. Usually, people can adapt to mild stressors, but severe stressors may cause chronic problems for health and mental health [7]. These results supported that the female students were more stressed than males [13, 14]. The study reported too that the highest percentages of stress among students' ages of 20-25 years (39.6%) and of 15-20 years (31.9%), (Table 5). This result agreed with the prevalence of stress among secondary school students was (26.1%). It was found that the main stressors were related to academic [15]. While the prevalence of perceived stress seems to be high among medical school [14].

Part 3 Discussion of coping strategies that selected by students relative to their level of education

Individual differences also influence what coping strategies are used in a somewhat surprising way [7]. Experts in stress management have proposed several effective strategies for coping with stress. Each of them is described in the material that follows, with specific instructions provided for some [6]. College males and females also reported different coping strategies for different stressors [11]. The best coping strategies are those that are not destructive but healthy ways to prevent stress from increasing or strategies for reducing tension when the stress level builds up beyond a moderate level [16].

The present study indicated that the almost of students was selected problem solving approach (58.5%) (Table 6). This result agreed with the study indicated that the three general coping strategies were identified; problem solving approach, turning to other, and using denial [7]. Also, more than half of students was selected exercise (53.3%) (Table 6). Such result supported by other study indicated that various movement (exercise) are

intended to reduced stress, expend energy, promote relaxation, and provide enjoyment through social support [7]. While Reading or Listening to Holy Book (Al-Quran) was reported (46.7%) as a coping strategy that selected by students (Table 6). This result supported through the religion helps to integrate a diverse society and provide social support in time of need. Eighty-five percent of the worlds' populations adhere to some form of religion. It plays a major role in peoples' lives, and religion practices of some sort are evident in every society. [17,7]. As well as, the first of the top five coping strategies was religion [15].

The present study indicated that drinking alcohol was less coping strategy that used by students (4.5 %). This finding agreed with the less desirable coping strategies was drinking alcohol, smoking, and using illegal drugs [13]. Because the adolescents experience stress either good or bad depending on how they cope [15]. From this reason, community health nurses can play a vital role in teaching stress-reducing techniques. Perhaps the most effective way to teach client how to manage stress is to practice this skill and demonstrate it through formal instruction as well as through role modeling [10].

Recommendations

The present study recommended to

- 1- prevent the factors that contribute of stress which considered as sources of stress among students throughout focusing on different mass media.
- 2- The health education oriented programs should be conducted on how students' selection of effective coping strategies for prevent mistake approaches when dealing with stress .
- 3- Teaching of problems solving approaches, techniques of auscultation especially of staff's schools and students, and how provide social

support and other effective coping strategies when stressful event occur among students.

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