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### RESEARCH ARTICLE

#### STRESS COPING STRATEGIES ADOPTED BY PREGNANT STUDENTS IN THE UNIVERSITY OF CAPE COAST AND THEIR IMPLICATIONS FOR COUNSELLING

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#### Abstract

Both being pregnant and being in school are important conditions and obligations at different points in one's life. Due to the fact that both of these things can be stressful and demanding, the purpose of this study was to evaluate the stress coping mechanisms used by pregnant student women in order to manage their stress. One research question and three hypotheses served as the basis for this investigation. For the purpose of the study, a convenient sample size of 178 participants was selected to participate. It was discovered that talking to a friend or family member was the most common method of coping utilised by the student women who were pregnant. However, there was not a statistically significant difference between the ages of the respondents, the colleges they attended, or the year in which they were enrolled in terms of the coping techniques they employ in order to manage their stress. It was inferred that specific guidance programmes geared toward helping these distinct groups of kids have a successful transition during this time of their education are required to be put into place.

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#### Introduction:-

An individual's cognitive appraisal, perceptions, and interpretations of events give those events meaning and determine whether those events are viewed as threatening or positive. Stress, on its own, is not inherently harmful; however, these factors do determine whether or not an individual experiences stress. The term "stress" can have a variety of connotations for various people depending on the circumstances. Stress is the nonspecific response of the body to any demand (Selye, 1975). It's possible that stress could have a severe impact on both our physical and mental health. Personality characteristics are also a factor in the stress equation, given that the same experience might be thrilling for one individual but exhausting for another.

Because there are no direct neurological connections between a mother and her unborn child, her ideas do not pass on to the child she is carrying. However, maternal stress and emotions cause a cascade of hormonal reactions, changes in blood flow to the uterus, and other modifications that directly influence the intrauterine milieu (DiPietro, 2012).

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The majority of pregnant women go through a range of stressful experiences as a result of the many emotional, physical, and social changes that take place during their pregnancy (Chang, Chen, & Huang, 2008). In addition, pregnant women endure anxiety for their baby's health as well as the impending adjustments to their lifestyle (Chang et al., 2008).

Despite the fact that many women describe their pregnancies as joyful and happy times in their lives, the demands and changes associated with this reproductive period, as well as the social context within which pregnancy takes place, can produce high levels of stress and anxiety for many expectant mothers. Because pregnancy requires so many changes in a woman's body, her family life, her finances, her career, and other aspects of her life, it can cause emotional distress for pregnant women. This is especially true for women with lower incomes, who are more likely to experience higher levels of stress while having fewer coping mechanisms (Norbeck & Anderson, 1989; Ritter, Hobfoll, Lavin, Cameron, & Hulsizer, 2000). Women who are pregnant may also be concerned about the well-being of their unborn children, the impending labour and delivery process, and the future obligations of parenthood (Lobel, 1998; Lobel, Hamilton, & Cannella, 2008). One definition of stress is having demands that are perceived as being too great for the available resources of the individual (Lazarus & Folkman, 1984). The social and environmental setting in which pregnancy takes place might either give rise to such demands or make existing ones more severe.

One definition of coping is "constantly shifting cognitive and behavioural efforts aimed at dealing with the demands of specific situations that are regarded as stressful," while another defines coping as "efforts aimed at dealing with the demands of specific situations that are appraised as (Lazarus & Folkman, 1984). In the context of pregnancy, coping strategies have the potential to affect the outcomes of delivery by assisting to mitigate or prevent unfavourable emotional, behavioural, cognitive, and physiological reactions to stressors.

Therefore, the capability to select and put into action an appropriate coping response could serve as a resilience resource that buffers expectant mothers and their children from the potentially harmful effects of prenatal stress exposure. This could protect both the expectant mothers and their children. For instance, those who deal with stress by reaching out to others for emotional support or by taking action to find a solution to the problem may experience fewer negative effects as a result of the stress, whereas those who avoid dealing with the source of the stress or engage in behaviours that are detrimental to their health, such as smoking, in order to alleviate their distress will have a heightened vulnerability. According to the findings of a comprehensive epidemiological study that was conducted in North Carolina involving 1,898 African-American and White women, avoidant coping methods were associated with an elevated risk of premature delivery (Dole et al., 2004; Messer et al., 2005).

Students, particularly female students, experience a great deal of stress as a result of their studies and simply being in school. According to research conducted by Ameyaw (2014), among the 311 students who participated in the survey from the University of Education Winneba, 87 percent reported that attending school and the act of studying were sources of stress for them. What kind of a predicament will it be for the ladies who are already enrolled in this school who become pregnant? In light of this, the purpose of the study was to investigate the methods of stress management utilised by students at the University of Cape Coast who are expecting children while also enrolled in one of the university's degree programmes.

### **Research Question**

The study answered the following research question:

1. What is the prevalent coping stress of stress adopted by student pregnant women in the University of Cape Coast?

### **Hypotheses**

The following hypotheses were formulated to guide the study

1. There is a statistically significant difference among the year groups of student pregnant women and the coping strategies of stress they adopt.
2. There is statistically significant difference between Sciences and Humanities student pregnant women with regards to the coping strategies they adopt in managing stress,
3. There is statistically significant difference among the ages of student pregnant women and the coping strategies of stress they adopt.

### Method:-

The research was conducted using a descriptive survey design which was exploratory in nature. This particular design was selected in order to acquire additional knowledge on the subject at hand and investigate potential future study avenues. Given the little amount of study that has been done on coping methods and pregnant women in Ghanaian higher institutions.

### Sample and Sampling Procedure

A convenience sample of 178 participants was used for this study. The selection criteria were being a student of the University of Cape Coast, women 18 years and older; having visible signs of pregnancy (protruding belly) and being willing to participate.

### Instrument

A self-report survey was distributed to collect data. The survey was divided into two sections A and B. Section 'A' comprised of personal information of the respondents such as age, year of study and college of study. Section B consists of items drawn on the coping strategies of stress. The items were structured and closed-ended. They are placed on Strongly Agreed (SA), Agreed (A) Disagreed (D) and Strongly Disagreed (SD).

A pilot test was conducted in Cape Coast Technical University, using thirty (20) pregnant students. This setting was chosen because of proximity and the similar characteristics the students possess as respondents from the University of Cape Coast. The Cronbach alpha coefficient stood at 0.84. According to Cohen a Cronbach alpha coefficient of 0.7 and above is considered reliable.

### Results:-

The results of the study are presented in this section.

#### Demographic characteristics of respondents

One hundred and seventy-eight (178) respondents from the University of Cape Coast were involved in the study. An analysis of their demographic variables was done in line with the topic under study. Tables 1 to 3 present the analysis of demographic characteristics of the

**Table 1:-** Distribution of Respondents by Age.

Age	Frequency	Percentage (%)
18-24 years	64	35.96
24-30 years	86	48.31
31-40 years	28	15.73
<b>Total</b>	<b>178</b>	<b>100</b>

Table 1 indicated the distribution of respondents by age. It showed that 86 (48.31%) fell in the age group of 24-30 years. The data also revealed that 64 of the respondents representing 35.96% fell in the age group of 18-24 years, followed by 28 (15.73%) in the age group of 31-40 years. This implied that all the respondents were below 40 years which represents the youthful age. About 50% were in the prime of this youthful age.

**Table 2:-** Distribution of Respondents by College.

College	Frequency	Percentage (%)
Agriculture and Natural Science	7	3.93
Distance Education	74	41.57
Education Studies	51	28.65
Health and Allied Science	32	17.98
Humanities and Legal Studies	14	7.87
<b>Total</b>	<b>178</b>	<b>100</b>

Table 2 revealed the analysis of the distribution of respondents by the college in which the respondents are pursuing their study. The table showed that respondents were from five colleges. The College of Distance Education had the highest number of respondents 74 (41.57%). This was followed by 51 respondents representing 28.65% from the College of Education Studies. Next were 32 (17.98%) respondents from Health and Allied Science. fourteen

respondents representing 7.87% were from the College of Humanities and Legal Studies while 7(3.93%) were from the College of Agriculture and Natural Science.

**Table 3:-** Distribution of Respondents by Year of Study.

Year of Respondents	Frequency	Percentage (%)
First	37	20.79
Second	49	27.53
Third	53	29.77
Fourth	39	21.91
<b>Total</b>	<b>178</b>	<b>100</b>

Table 3 showed the distribution of the respondents by Year of study. It showed that 53(29.77%) respondents were in the third year. This was followed by 49 respondents representing 27.53% were in the second year and 39(21.91%) were in the fourth year while 37(20.79%) were in the first year. This implies that about 50% were mid-way through their studies.

Research Question: What is the prevalent coping stress of stress adopted by student pregnant women in the University of Cape Coast?

**Table 4:-** Coping Strategies of Student Pregnant Women in the University of Cape Coast.

	Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	SE	Beta ( $\beta$ )			Tolerance	VIF
X1	I did something which I didn't think would work, but at least I was doing something	.142	.013	.124	1.271	.129	.521	1.431
X2	I expressed anger to the person(s) who caused the problem	.153	.027	.137	2.117	.068	.619	1.322
X3	Stood my ground and fought for what I wanted	.136	.021	.117	1.397	.091	.731	1.384
X4	Went on as if nothing had happened	.164	.043	.362	2.647	.108	.573	1.519
X5	Tried to look on the bright side of things	.151	.037	.172	1.294	.112	.549	1.341
X6	Tried to forget the whole thing	.026	.026	.267	3.381	.141	.735	1.378
X7	Made light of the situation; refused to get too serious about it	.049	.033	.111	3.293	.193	.633	1.371
X8	I tried not to act too hastily or follow my first hunch	.024	.039	.121	1.962	.144	.573	1.219
X9	Kept others from knowing how bad things were	.113	.048	.183	1.523	.134	.435	1.611
X10	I went over in my mind what I would say or do	.134	.014	.134	1.522	.182	.576	1.233
X11	I thought about how a person I admire would handle the situation and used that as a model	.158	.037	.118	2.381	.127	.631	1.431
X12	Talked to some who could do something concrete about the problem	.017	.031	.144	1.528	.194	.672	1.221
X13	I asked a relative or a friend I respected for advice	.187	.026	.071	3.713	.068	.883	1.411
X14	Hope a miracle would happen	.131	.043	.109	3.024	.062	.742	1.382
X15	Slept more than usual	.129	.039	.092	1.729	.020	.689	1.382
	Constant			.431				
	R			.752				

R Square	.563
Adjusted R Square	.554

Dependent Variable: Coping Strategies

Table 4 shows that all the strategies jointly contributed to about 56.3% ( $r^2=0.563$ ) of the observed variance in coping strategies of stress adopted by student pregnant women. The relationship between the coping strategies and stress was high, positive and significant ( $r=0.752$ ). The regression result is given as:

$$Y = .431 + .114X_1 + .153X_2 + .136X_3 + .164X_4 + .151X_5 + .026X_6 + .049X_7 + .024X_8 + .113X_9 + .134X_{10} + .158X_{11} + .017X_{12} + .187X_{13} + .131X_{14} + .129X_{15}$$

It is therefore evident that the most prevailing coping strategy adopted by the respondents was “I asked a relative or a friend I respected for advice” ( $\beta = 0.187$ ,  $p = 1.411$ ). This was followed by “Went on as if nothing had happened” ( $\beta = 0.164$ ,  $p = 1.519$ ). The next was “I thought about how a person I admire would handle the situation and used that as a model” ( $\beta = 0.158$ ,  $p = 1.431$ ). The least coping strategy adopted was “Talked to some who could do something concrete about the problem” ( $\beta = 0.017$ ,  $p = 1.221$ ).

### Hypothesis 1:

There is a statistically significant difference among the year groups of student pregnant women and the coping strategies of stress they adopt.

**Table 5:-** ANOVA Test for Coping Strategy Difference of Student Pregnant Women, UCC in Terms of Year Groups.

		Sum of Squares	df	Mean Square	F	Sig.
I did something which I didn't think would work, but at least I was doing something	Between Groups	.044	4	.044	.186	.667
	Within Groups	47.892	176	.237		
I expressed anger to the person(s) who caused the problem	Between Groups	.706	4	.706	3.004	.085
	Within Groups	47.471	176	.235		
Stood my ground and fought for what I wanted	Between Groups	.490	4	.490	1.401	.238
	Within Groups	70.667	176	.350		
Went on as if nothing had happened	Between Groups	.078	4	.078	.245	.621
	Within Groups	64.627	176	.320		
Tried to look on the bright side of things	Between Groups	.593	4	.593	1.299	.256
	Within Groups	92.245	176	.457		
Tried to forget the whole thing	Between Groups	.044	4	.044	.186	.667
	Within Groups	47.892	176	.237		
Made light of the situation; refused to get too serious about it	Between Groups	.490	4	.490	1.980	.161
	Within Groups	50.020	176	.248		
I tried not to act too hastily or follow my first hunch	Between Groups	.005	4	.005	.013	.909
	Within Groups	74.833	176	.370		
Kept others from knowing how bad things were	Between Groups	.240	4	.240	1.084	.299
	Within Groups	44.755	176	.222		
I went over in my mind what I would say or do	Between Groups	.020	4	.020	.052	.821
	Within Groups	76.902	176	.381		
I thought about how a person I admire would handle the situation and used that as a model	Between Groups	3.064	4	3.064	7.765	.006
	Within Groups	79.696	176	.395		
Talked to some who could do something concrete about the problem	Between Groups	1.588	4	1.588	6.662	.011
	Within Groups	48.157	176	.238		
I asked a relative or a friend I respected for advice	Between Groups	.123	4	.123	.633	.427
	Within Groups	39.108	176	.194		
Hope a miracle would happen	Between Groups	1.255	4	1.255	4.391	.037
	Within Groups	57.725	176	.286		

Slept more than usual	Between Groups	.176	4	.176	1.955	.164
	Within Groups	18.235	176	.090		
<b>Combined ANOVA statistic</b>	<b>Between Groups</b>	<b>.524</b>	<b>4</b>	<b>.524</b>	<b>1.616</b>	<b>.193</b>
	<b>Within Groups</b>	<b>70.088</b>	<b>176</b>	<b>.347</b>		

A one-way analysis of variance was conducted to explore the differences which exist among pregnant students with respect to their stress coping strategies and the year of study. There was no statistically significant difference at the  $p < 0.05$  between the year of study of the respondents and the coping strategies they adopt ( $F = 1.616$ ,  $p = .193$ ). We, therefore, fail to reject the hypothesis and therefore conclude that there is no statistically significant difference among the year groups of student pregnant women and the coping strategies of stress they adopted ( $p > .05$ ).

### Hypothesis 2:

There is a statistically significant difference among colleges of the pregnant student with regards to the coping strategies they adopt in managing stress.

**Table 6:-** ANOVA Test for Coping Strategy Difference of Student Pregnant Women, UCC in their Colleges of Study.

		Sum of Squares	Df	Mean Square	F	Sig.
I did something which I didn't think would work, but at least I was doing something	Between Groups	.123	5	.123	.353	.553
	Within Groups	70.049	176	.347		
I expressed anger to the person(s) who caused the problem	Between Groups	1.103	5	1.103	4.466	.076
	Within Groups	49.892	176	.247		
Stood my ground and fought for what I wanted	Between Groups	.044	5	.044	.179	.673
	Within Groups	49.853	176	.247		
Went on as if nothing had happened	Between Groups	.020	5	.020	.046	.831
	Within Groups	86.490	176	.428		
Tried to look on the bright side of things	Between Groups	.123	5	.123	.497	.481
	Within Groups	49.775	176	.246		
Tried to forget the whole thing	Between Groups	.593	5	.593	2.176	.142
	Within Groups	55.069	176	.273		
Made light of the situation; refused to get too serious about it	Between Groups	4.412	5	4.412	15.836	.106
	Within Groups	56.275	176	.279		
I tried not to act too hastily or follow my first hunch	Between Groups	.397	5	.397	3.459	.064
	Within Groups	23.186	176	.115		
Kept others from knowing how bad things were	Between Groups	.314	5	.314	1.408	.237
	Within Groups	45.020	176	.223		
I went over in my mind what I would say or do	Between Groups	.593	5	.593	2.153	.144
	Within Groups	55.657	176	.276		
I thought about how a person I admire would handle the situation and used that as a model	Between Groups	.453	5	.173	1.194	.137
	Within Groups	47.182	176	.241		
Talked to some who could do something concrete about the problem	Between Groups	.706	5	.706	.784	.377
	Within Groups	181.922	176	.901		
I asked a relative or a friend I respected for advice	Between Groups	.176	5	.176	.553	.458
	Within Groups	64.471	176	.319		
Hope a miracle would happen	Between Groups	1.417	5	1.417	1.985	.160
	Within Groups	144.167	176	.714		
Slept more than usual	Between Groups	.593	5	.593	2.589	.109
	Within Groups	46.284	176	.229		
<b>Combine ANOVA statistic</b>	<b>Between Groups</b>	<b>0.2922</b>	<b>5</b>	<b>0.2922</b>	<b>0.9702</b>	<b>0.476</b>
	<b>Within Groups</b>	<b>65.863</b>	<b>176</b>	<b>0.3262</b>		

A one-way analysis of variance was conducted to explore the differences among the colleges of student pregnant women and the coping strategies of stress adopted. There was no statistically significant difference at the  $p < 0.05$  among the colleges of study of the respondents and the coping strategies they adopt ( $F = 0.970$ ,  $p = .476$ ). We, therefore, fail to reject the hypothesis and therefore concluded that there is no statistically significant difference between the colleges of student pregnant women and the coping strategies of stress they adopt ( $p > .05$ ).

### Hypothesis 3:

There is a statistically significant difference between the ages of student pregnant women and the coping strategies of stress they adopt.

**Table 7:- ANOVA Test for Coping Strategy Difference of Student Pregnant Women, UCC in terms of their Ages.**

		Sum of Squares	df	Mean Square	F	Sig.
I did something which I didn't think would work, but at least I was doing something	Between Groups	.828	3	.828	2.820	.095
	Within Groups	59.343	176	.294		
I expressed anger to the person(s) who caused the problem	Between Groups	.314	3	.314	1.538	.216
	Within Groups	41.196	176	.204		
Stood my ground and fought for what I wanted	Between Groups	.961	3	.961	4.443	.066
	Within Groups	43.686	176	.216		
Went on as if nothing had happened	Between Groups	.176	3	.176	.902	.343
	Within Groups	39.529	176	.196		
Tried to look on the bright side of things	Between Groups	.123	3	.123	.565	.453
	Within Groups	43.814	176	.217		
Tried to forget the whole thing	Between Groups	.078	3	.078	.310	.578
	Within Groups	51.098	176	.253		
Made light of the situation; refused to get too serious about it	Between Groups	.706	3	.706	1.645	.201
	Within Groups	86.706	176	.429		
I tried not to act too hastily or follow my first hunch	Between Groups	.005	3	.005	.013	.909
	Within Groups	76.284	176	.378		
Kept others from knowing how bad things were	Between Groups	.064	3	.203	1.011	.403
	Within Groups	96.039	176	.475		
I went over in my mind what I would say or do	Between Groups	3.314	3	3.314	11.949	.091
	Within Groups	56.020	176	.277		
I thought about how a person I admire would handle the situation and used that as a model	Between Groups	.176	3	.176	.651	.421
	Within Groups	54.745	176	.277		
Talked to some who could do something concrete about the problem	Between Groups	.593	3	.593	1.530	.217
	Within Groups	78.284	176	.388		
I asked a relative or a friend I respected for advice	Between Groups	46.123	3	46.123	338.30	.220
	Within Groups	27.539	176	.136		
Hope a miracle would happen	Between Groups	40.593	3	40.593	359.11	.109
	Within Groups	22.833	176	.113		
Slept more than usual	Between Groups	31.373	3	31.373	272.97	.083
	Within Groups	23.216	176	.115		
<b>Combine ANOVA statistic</b>	<b>Between Groups</b>	<b>0.4614</b>	<b>3</b>	<b>0.3822</b>	<b>1.227</b>	<b>0.373</b>
	<b>Within Groups</b>	<b>64.580</b>	<b>176</b>	<b>0.3198</b>		

A one-way analysis of variance was conducted to explore the differences in the ages of student pregnant women and the coping strategies of stress adopted. There was no statistically significant difference  $p < 0.05$  among the ages of the respondents and the coping strategies they adopt ( $F = 1.227$ ,  $p = .373$ ). We, therefore, fail to reject the hypothesis and therefore conclude that there is no statistically significant difference between the colleges of pregnant student women and the coping strategies of stress they adopt ( $p > .05$ ).

**Discussion:-**

The finding of the study revealed that the most prevalent coping strategy adopted by student pregnant women was “I asked a relative or a friend I respected for advice”. This finding is in line with the findings of Ameyaw who found that the best coping strategy adopted by students is taking pieces of advice from their friends. In his study conducted among students of the University of Education, Winneba indicated that 242 out of the 311 respondents representing 78% expressed that as their number coping strategy. Kayode (2015) in a study conducted at Benin State University also found that 85% out of the 415 respondents indicated that talking to a friend was their surest way of coping with stress.

Also in Dar-El-Salaam, Ngirisi (2016) found that pregnant women talking to their friends is one of top the ways of dealing with their stress. All the 15 women in his qualitative study indicated that visiting a spiritualist and talking to a friend were their first and second coping strategies during pregnancy.

The situation seems quite worrying from a counselling perspective. This is because pregnancy is marked as a critical period for both the pregnant woman and the child he or she is carrying (WHO, 2012). At this stage, information must be sought from a professional but if people will talk to friends and family members without seeking professional help, then it calls for a source of concern.

The study also revealed that there were no significant differences statistically among the ages, college and year of study in the terms of the coping strategies pregnant students adopt in dealing with stress. This goes to confirm the study of Andaiye (2015) in Kajiado County in Kenya when she found that there was no difference in the ages of pregnant women and the coping strategies, they adopt in managing stress. She added though there were some differences in how women perceived pregnancy, this was not statistically significant.

The researchers also perceived that there should be differences among the years of study and the coping strategies adopted by the pregnant students but the finding of the study showed otherwise. The finding is in contrast with the findings of Ketso (2015) when he found among students in Mahalapye in Botswana that, students differ significantly in their level of study and the coping mechanisms adopted in managing stress.

**Conclusion:-**

It is concluded that pregnant students go through stress and they have strategies for managing this stress. Among the coping strategies that they rely on most was asking a relative or a friend they respected for advice. This strategy may be detrimental to their health as well as that of the fetus. It also came to light that there were no statistically significant differences in the coping strategies these pregnant students adopted in managing stress in terms of their ages, year and college of study.

**Implications for Counselling**

Based on the findings and conclusion of the study, the following implications are drawn for counselling:

1. Special guidance programmes must be put in place for these special groups of students to assist them to go through the period successfully.
2. Counsellors through the Counseling Centre and the Guidance and Counselling department should create awareness about the causes, and effects of stress and the appropriate coping strategies students can adopt in managing their stress.
3. Counsellors should endeavour to educate health professionals, especially midwives who deal with pregnant women to also be in the position to offer them a bit of guidance and counselling services before, during and after delivery.

**References:-**

1. Ameyaw, A. S. (2007). The relationship between stress and academic performance. Unpublished Master's thesis. University of Education Winneba.
2. Andaiye, B. F. (2015). Challenges of pregnancy in the last two trimesters. *Journal of Applied Health*, 6(13), 23-37.
3. Chang, H. Y., Yang, Y.L., Jensen, M. P., Lee, C. N., & Lai, Y. H. (2008). The experience of and coping with lumbopelvic pain among pregnant women in Taiwan. *Pain Medicine*, 12(6), 846–853.

4. DiPietro, J. A. (2012). Maternal stress in pregnancy: Considerations for fetal development. *JAdolesc Health*, 51(2 Suppl): S3–S8. doi:10.1016/j.jadohealth.2012.04.008.
5. Dole, N., Savitz, D. A., Siega-Riz, A. M., Hertz-Picciotto, I., McMahon, M. J., & Buelkens, P. (2004). Psychosocial factors and preterm birth among African American and white women in central North Carolina. *American Journal of Public Health*, 94(8), 1358–1365.
6. Kayode, N. A. (2015). Managing strategies of stress and anxiety among students in the Benin State University of Nigeria. *Journal of Educational Research*, 5(8), 16-32.
7. Ketso, U. I. (2015). Stress among tertiary students in Mahalapye. *Cross River State Education* 3(1) 37 – 49.
8. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
9. Lobel, M. (1998). Pregnancy and mental health. In: Friedman H, editor. *Encyclopedia of mental health*. 3. San Diego, CA: Academic Press; pp. 229–238.
10. Lobel, M., Hamilton, J. G., & Cannella, D. T. (2008). Psychosocial perspectives on pregnancy: Prenatal maternal stress and coping. *Social and Personality Psychology Compass*, 2(4), 1600–1623.
11. Ngirisi, I. P. (2016). Managing stress in pregnancy among first mothers in Dar-El-Salaam. *International Journal of Humanities*, 3(7), 36-49.
12. Norbeck, J. S., & Anderson, N. J. (1989). Life stress, social support, and anxiety in mid- and late-pregnancy among low-income women. *Research in Nursing & Health*, 12(5), 281–287.
13. Selye, H., (1975). Confusion and controversy in the stress field. *J. Hum. Stress* 1, 37–44.
14. Selye, H., (1976). *Stress in Health and Disease*. Butterworth, Stoneham, MA.