

## Socio-Demographic Factors and Intimate Partner Violence as Determinants of Depression Among Female Workers of University of Ibadan

Aide Sylvester Okhakhume<sup>1</sup>, Dooior Mkpelanga

Department of Psychology, University of Ibadan

Department of Psychology, Benue State University, PMB 102119, Makurdi, Benue State -Nigeria

**Abstract:** Community based research on intimate partner violence against women using valid epidemiological methods both for descriptive and analytical studies has an important role in the planning for intervention against domestic violence. One of the weaknesses with previous studies is that they have used less specific diagnostic concepts for depressions and methodologies that is likely to underestimate intimate partner violence. Therefore, this study examined influence of demographic factors and interpersonal violence on depression among women at University of Ibadan, Nigeria. The study utilized survey design using random sampling technique across four selected Faculties of the University. Three hundred (300) women participated in the study yielding a return rate of 95%. Their ages ranged between 24 and 54 years with mean of 35.54 and standard deviation of 7.45. The instrument used was closed-ended questionnaire divided into three sections. This comprised of demographic variables, interpersonal violence and depression. Five hypotheses were tested. The result shows that younger participants reported less prevalence of depression than the older participants. Further, single workers reported significant lower score on depression than married and divorced workers. Additionally, female workers with school certificate and OND/NCE reported significantly higher score on depression than those with HND/Degree, Masters and Ph.D holders. There was no significant influence of religion on depression. Finally, inter-personal violence significantly predicted of depression. Based on the findings of the result, it was recommended that establishment of counselling units be included in the current federal service reforms being embarked upon. Also, the finding that interpersonal violence affects depression may encourage health professionals to identify groups of women at high risk of developing depression, and devise appropriate and effective measures or behavioural interventions to help abused women reduce their depression.

**Keywords:** Socio-demographic Factors, Intimate Partner Violence, Depression and Women.

### I. Introduction

Depression is a common mental disorder that presents with lower mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration (WHO, 2008). These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of her or his everyday responsibilities (WHO, 2008). The general term depression is often used to describe disorder, but since it is also used to describe a temporary depressed or sad mood, more precise terminology is preferred in clinical use and research (WHO, 2008). Depression is a significant public health concern worldwide and has been ranked as one of the illnesses having the greatest burden for individuals, families, and society (USDHS, 1999; WHO, 2002).

Everyone feels blue or sad from time to time. It is a normal life experience. But when these emotions increase in intensity, persist for more than a few weeks, and start to interfere with a person's life especially in a workplace, it may be signal of depression. No amount of "cheering up" can make the depression go away, no amount of exercise, vitamins or vacation can make it disappear, that is because depression is a psychological problem, not a weakness. Depression is a common illness. At some point in life around one in every five women and one in every ten men will suffer from depression. At any given time one in every twenty adults is experiencing a serious major depression (Nuyen et al., 2005). Naturally problems that are common in the general population are common in people at work. In any one year about three in every ten employees have mental health problem, and depression is one of the most common problems. It makes them less productive at work and is responsible for high rates of sick leave, accidents and staff turnover (Adeoye, 1999). Depression tends to be marked in Africans by somatic symptoms, which may explain why it is under-diagnosed or under-recognized (Ohaeri & Jegede, 1991). Early detection of depression can be enhanced by screening person for the disorder when they attend a hospital for other reasons (Edward, 2000). The family practice clinic provides an excellent opportunity for this, as most patients present first at the clinic for all types of illnesses. Despite the high prevalence of depression, there is a paucity of data among patients seen in family practice clinics in North-

Central Nigeria in particular and West African in general. Work is generally good for our mental health, but there are times when certain experiences can make work un-enjoyable (Adeoye, 1999). Most times, the pressure of, and the stress at work coupled with other life's problems (intimate partner violence) can make depression more likely to occur. Adeoye (1998) showed in his studies that certain jobs are more likely to make people unhappy in their workplace. Depression can affect the employee's productivity, morale and effectiveness. Unfortunately, in Nigeria workers conditions and environments have been described as poor (Nwokedi, 2004). This could be one of the factors that can make the workers become depressed. According to Cal Man (1999) depression can seriously affect someone's ability to work effectively and it may be so bad that he or she will have to stop work completely for a time.

The socio-demographic factors of age, gender, marital status, education, and income have consistently been identified as important factors in explaining the variability in the prevalence of depression. Key North American studies, particularly the Epidemiologic Catchment Area Study, the National Comorbidity Survey, the Canadian National Population Health Survey and the Ontario Health Survey found prevalence rates varying from 2.8% to 10.3%, based on the demographic factors of age and gender (Robins & Regier, 1991; Kessler, McGonagle, Zhao, Nelson, Hughes, Eshleman, Wittchen & Kendler, 1994; Offord, Boyle, Campbell, Goering, Lin, Wong & Racine, 1996). Intimate Partner Violence is known to be strongly associated with depression (Golding, 1999), which is often found in abused women staying with abusive partners. Also, depression has persistently been found in abused women after they have separated from abusive partners (Anderson, Saunders, Yoshihama, Bybee, & Sullivan, 2003; Campbell, 2002; Hegarty, Gunn, Chondros, & Small, 2004). In a meta-analysis of 18 studies, the pooled prevalence of depression among abused women was 47.6 percent, which is much higher than the lifetime rate of 18.6 percent in the general population (Golding, 1999). Also, as shown in a 2009 study, the relative risk of depression in abused women is three times higher than that of non-abused women (Bonomi, et al., 2009).

Given this background, it can be infer that there is a poverty of research work in Nigeria on influence of socio-demographic factors and intimate personal violence on depression among women at the University environment. This study therefore investigates the influence of variables like age, gender and marital status and intimate personal violence (IPV) on depression among women at University of Ibadan. It is therefore hypothesize as follows:

1. Age will significantly influence prevalence of depression among women at University of Ibadan.
2. Marital status will significantly influence prevalence of depression among women at University of Ibadan.
3. Educational background will significantly influence prevalence of depression among women at University of Ibadan.
4. Religion will significantly influence prevalence of depression among women at University of Ibadan.
5. Influence of intimate partner violence will significantly influence prevalence of depression among women at University of Ibadan.

## II. Methods

### Research Design

The study adopted a survey research design method. This involves using a self-designed questionnaire in collecting data from the participants. This method was chosen in order to make reference to phenomena as they exist in real life and it is relatively economical in terms of time and resources. The independent variables in this study are demographic characteristics and intimate partner violence, while the dependent variable is depression.

### Setting

The study was conducted among female residents at the University of Ibadan. The choice of University of Ibadan was based on its peculiarity of being the first University in the country, and cut across all ethnic and age groups.

### Participants

A total number of three hundred (300) female workers of the University of Ibadan were used for the study. The demographic characteristics obtained were: age, marital status, ethnicity, religion and educational qualification. Ages ranged between 24 and 54 years with mean of 35.54 and standard deviation of 7.45. Marital status of which 269 (89.7%) were married, 13 (4.3%) were single, while 18 (6.0%) were divorced. Also, 48 (16%) were from Hausa origin, 67 (22.3%) were from Igbo, while 185 (61.7%) were from Yoruba origin. Majority of the participants, 219 (73%) were Christians, 79 (26.3%) were Muslims, while 2 (0.7%) were

traditional worshippers. Their educational qualification were, Ph.D twenty-six (8.7%), Masters 49 (16.3%), HND/Degree 63 (21.0%), OND/NCE 57 (19.0%), and School certificate 105 (35.0%).

### **Sampling Method**

Convenience sampling method was used for this study. Participants were married female residents at the University of Ibadan which was convenient for this the study. Four faculties were chosen to represent the sample using convenience sampling method. The faculties include - social science, science, arts and education. In the social science faculty, geography, sociology and psychology departments were selected; in science, microbiology, zoology and archeology departments were selected; in arts, language and communication arts and linguistics departments were selected; while in education, guidance & counseling and educational management were selected. This was done in such a way that the sample provided the necessary information on intimate partner violence and depression related to this study.

### **Instruments**

The instruments used in this study include Demographic Questionnaire designed by the researcher, The WHO Violent against Women Inventory (VAWI), Intimate Partner Violence Scale (IPVS) and Depression Scale.

**Demographic Questionnaire:** Comprising nine (9) items of demographic data: age, tribe, marital status, educational qualification, and religion.

**The WHO Violent Against Women Inventory (VAWI)** developed by WHO (2005) to evaluate level of violence perpetuated against women. It consists of behaviour-specific items related to psychological (four items), physical (six items) and sexual IPV (three items) totaling 13-items. The physical violence items are further divided into 'moderate' (the two first items) and 'severe' (the following four items) violence based on the likelihood of physical injury. The VAWI items were translated and adapted to a Swedish context by a senior researcher (third author) with extensive knowledge about intimate partner violence. VAWI has been shown to have good validity and reliability in a Swedish context - Psychological (0.74; Physical 0.86 and Sexual - 0.82, while the overall scale yielded 0.88 Cronbach alpha coefficient (Swahnberg, 2011; Swahnberg, Hearn & Wijma, 2009). A Cronbach alpha coefficient of 0.73 was obtained in the study. The thirteen (13) items responses ranged from 1 = "A little of the time" to 4 = "most of the time". An aggregate score was calculated as the mean response to the 13 individual items. Higher scores indicated a greater likelihood of intimate partner violence.

The **Zung Self-Rating Depression Scale** was designed by Duke University psychiatrist, Zung in 1965 to assess the level of depression for patients diagnosed with depressive disorder. The Zung Self-Rating Depression Scale is a short self-administered survey to quantify the depressed status of a patient. There are 20 items on the scale that rate the rating affective, psychological and somatic symptoms associated with depression. There are ten positively worded and ten negatively worded questions. Each question is scored on a scale of 1 through 4 (based on these replies: "a little of the time," "some of the time," "good part of the time," "most of the time"). Scores on the test range from 20 through 80. The scores fall into four ranges: 20-49 Normal Range; 50-59 Mildly Depressed; 60-69 Moderately Depressed; 70 and above Severely Depressed. A Cronbach alpha coefficient of 0.66 was obtained in the study.

### **Procedure**

Permission was sought from each department at the University of Ibadan before the administration of the questionnaires. The purpose of the research work was explained. Then copies of the questionnaire were given to the respective participants after explaining the instruction on how to fill the questionnaire. Confidential treatment of information was assured. With regard to the scoring of responses, the first section of the questionnaire needs no score attached to it, since the information required are bio-data of the subject.

### **Method of Data Analysis**

Various statistical methods were employed in analyzing data for this study. Descriptive statistics of frequency and percentages were used to analyze the demographic characteristics of the respondents, while simple regression and ANOVA were used to test the stated hypotheses.

## **III. Results**

The data was analyzed using SPSS package version 20. Six hypotheses were tested in this study. The results are presented in the tables below. Hypothesis one which states age will significantly impact on prevalence of depression among women at University of Ibadan was tested using independent sample t-test analysis. The result is presented in table 1.

**Table 1:** Independent t-test result comparing the prevalence of depression between young and old age groups

DV	Age	N	Mean	SD	T	df	p
Prevalence of depression	Young	167	46.84	4.01	5.535	298	.001
	Old	133	68.90	5.78			

From above table, there is significant difference between young and old people in terms of age on Prevalence of depression ( $t(298) = -5.535, p < .001$ ). The result also indicated that older participants reported higher mean prevalence of depression (68.90) than the younger counterpart (22.06). This implies that younger participants reported less prevalence of depression than the older participants. Therefore, the hypothesis was confirmed. Hypothesis two which states that marital status will significantly influence prevalence of depression among women at University of Ibadan was tested using ANOVA. The result is presented in table 2 below.

**Table 2:** One-way ANOVA showing the influence marital status on depression among female workers of University of Ibadan

Source	SS	df	MS	F	P
Marital status	45.615	2	22.807	12.379	.001
Error	17861.302	297	60.139		
Corrected Total	17906.917	299			

Table 2 shows that there was significant influence of marital status on depression ( $F(2,297) = 12.379; p < .001$ ). This result indicates therefore that single workers reported lesser depression ( $= 44.77$ ) than married and widowed workers ( $= 64.29$  &  $62.72$ ) respectively as indicated in the post-hoc test below for multiple comparisons.

**Table 3:** LSD multiple comparison test showing effect of marital status on depression

Marital status	N	Mean	SD	1	2	3
1. Singles	13	44.77	7.12	-		
2. Married	269	64.29	7.64	-20.48*	-	
3. Divorced	18	62.72	9.68	-22.05*	1.57	-

Table 3 shows that single workers reported significant lower score ( $= 44.77$ ) on depression than married and divorced workers ( $= 64.29$  &  $62.72$ ) with a mean difference of 20.48 and 22.05 respectively. This implies that single workers reported lesser depression than both married and divorced workers Based on the result, the hypothesis was confirmed. Hypothesis three stated that educational background will significantly influence prevalence of depression among women at University of Ibadan was tested using ANOVA. The result is presented in table 4 below.

**Table 4:** One-way ANOVA showing the influence educational background on depression among female workers of University of Ibadan

Source	SS	df	MS	F	p
Educational background	396.963	4	99.241	21.672	.001
Error	17509.953	295	59.356		
Corrected Total	17906.917	299			

Table 4 shows that there was significant influence of educational background on depression ( $F(4,295) = 21.672; p < .001$ ). Based on this result, a post-hoc test was performed for multiple comparisons. The result is presented below.

**Table 5:** LSD multiple comparison test showing effect of educational background on depression

Educational background	N	Mean	SD	1	2	3	4	5
1. School certificate	105	63.74	8.91	-				
2. OND/NCE	57	64.09	8.14	-0.35	-			
3. HND/Degree	63	36.37	5.31	27.37*	27.72*	-		
4. Masters Degree	49	33.18	7.23	30.56*	30.91*	3.19	-	
5. Ph.D	26	33.15	7.14	30.59*	30.94*	3.22	0.03	-

Table 5 shows that female workers with school certificate and OND/NCE reported significantly higher score ( $= 63.74$  &  $64.09$ ) on depression than those with HND/Degree, Masters and Ph.D holders ( $= 36.37, 33.18$  &  $33.15$ ) with a mean difference of 27.37, 30.56 and 30.59 respectively. This implies that female workers with lower educational background were more prone to higher depression than those with higher educational background. Based on the result, the hypothesis was confirmed. Hypothesis four stated that religion will significantly influence prevalence of depression among women at University of Ibadan was tested using ANOVA. The result is presented in table 4.6 below.

**Table 6:** One-way ANOVA showing the influence religion on depression among female workers of University of Ibadan

Source	SS	df	MS	F	P
Religion	79.247	2	39.623	.660	.518
Error	17827.670	297	60.026		
Corrected Total	17906.917	299			

Table 6 shows that there was no significant influence of religion on depression ( $F(2,297) = 0.660; p > .05$ ). This implies that religion has no impact on depression. The hypothesis was not confirmed. Hypothesis five stated that there will be inter-personal violence will significantly influence prevalence of depression among women at University of Ibadan was tested using simple regression analysis. The result is presented in table 7.

**Table 7:** Simple regression analysis showing the prediction of inter-personal violence on depression among female workers of University of Ibadan

Variables	$\beta$	t	$R^2$	F	p
Inter-personal violence	0.376	3.085	0.31	9.516	<.01

Table 4.7 shows that inter-personal violence significantly predicted of depression ( $F(1,298) = 9.516; R^2 = 0.31; p < .001$ ). This implies that female workers with high inter-personal violence are more prone to higher depression than those with low inter-personal violence. The variable explained 31.0% variance of depression. This result supported hypothesis five.

#### IV. Discussion

The main purpose of this study was to examine the influence of socio-demographic factors and intimate partner violence on depression among women at University of Ibadan. The findings of the study were discussed in line with previous studies. The first hypothesis which tested the influence of age on depression among women at the University of Ibadan was confirmed. The result indicated that older women were significantly more prone to depression than the younger ones. This result is supported by Patten (2002) who reported that age is one of the demographic characteristics that accounts for much of the variance in the prevalence of depression. In his study, Patten (2000) highlighted that prevalence of 12-month depression varied in men from "too low to report" for men over 65 to a high of 5.2% for the 12 to 24 age group. Also, Patten (2002) reported that women's prevalence also varied by age, ranging from a low of 3.1% for women over 65 to a high of 9.6% for the 12 to 24 age group. A similar finding was reported by The Ontario Health Survey who found comparable variation based on age (Offord, Boyle, Campbell, Goering, Lin, Wong & Racine, 1996). This pattern is also consistent with findings from Australia (Australian Bureau of Statistics, 2006).

Hypothesis which tested the influence of marital status on depression among women at the University of Ibadan was confirmed. The result indicated that single women reported significant lower depression than married and widows. This finding lays credence to several researches on influence of marital status and depression. For instance, studies have reported that being single, divorced, widowed and separated is associated with depressive episode (Cuijpers & Smit 2002; Lu et al. 2008). It was suggested that lack of emotional support in unmarried people may lead to increased likelihood of experiencing

depression (Cho *et al.*, 1998). Also, marital disruption and living alone could also create lifelong structural vulnerability to adverse life events which may be a risk factor for depression (Andrade *et al.*, 2003). Hypothesis three which tested the influence of educational background on depression among women at University of Ibadan was confirmed. The result indicated that women with lower educational background were more prone to higher depression than those with higher educational background. This finding is confirmed by several studies which found that depression was significantly associated with lower education and possible explanation given include difficulty of adjusting and coping to changes in the social environment and work related distress among less educated persons (Cuijpers & Smit, 2002; Kessler *et al.*, 2003). However, in contrast Lu *et al.* (2008) showed that depression is associated with attainment of higher education, and the explanation given includes that the rapid economic growth and industrialization of cities is more likely to have a harder effect on the population with higher education.

Hypothesis four which tested the influence of religion on depression among women at University of Ibadan was not confirmed. This implies that religion does not influence depression in the sampled population. This is in consonance with some research findings of Keita (2007) who reported similar depressive symptoms among different religious affiliations. Hypothesis five which tested the influence of inter-personal violence on depression among women at University of Ibadan was confirmed. The result indicated that women who reported high inter-personal violence were more prone to higher depression than those with lower inter-personal violence. This finding is confirmed by several studies. For instance, Chandra *et al.* (2009) and Varma *et al.* (2007) reported that intimate partner violence is associated with post traumatic stress disorder (PTSD) and depression and somatic symptoms and other psychiatric morbidity. Also, Parish *et al.* (2004) and Emenike *et al.* (2008) reported that intimate partner violence is associated with self reported adverse general health and sexual health, with negative reproductive health outcome.

## V. Conclusions

Based on the findings, the followings are the conclusion from the study:

1. Older women were significantly more prone to depression than the younger women of University of Ibadan.
2. Single women of University of Ibadan reported significantly lower depression than married and widow women.
3. University of Ibadan women with lower educational background were more prone to higher depression than those with higher educational background.
4. Religion has no significant influence on depression among women of University of Ibadan.
5. University of Ibadan women who reported high inter-personal violence were more prone to higher depression than those with lower inter-personal violence.

## VI. Recommendations

Socio-demographic factors, as indicated by age, marital status and education showed significant association with depression. Based on this finding, it is therefore recommended that the establishment of counselling units be included in the current federal service reforms being embarked upon.

Also, no woman expects that she will be hurt by a loved one. Depression, being one of the most prevalent mental health problems, is strongly associated with Inter-personal violence (IPV). Some abused women have been found to be more vulnerable to developing depression than others; therefore, it is important to understand the risk factors associated with depression in abused women. It is expected that these findings may encourage health professionals to identify groups of women at high risk of developing depression, and devise appropriate and effective measures or behavioural interventions to help abused women reduce their depression.

## VII. Limitations

One limitation of this study is that the dataset used might be small for generalization of this study which provides self-reported information. Therefore, a more generalized cross-sectional study is necessary for the result to be more acceptable. Furthermore, because of funding and space limitations, we analyzed only University of Ibadan data, and replicating this analysis in all parts of Nigeria would be beneficial to health policy makers.

## References

- [1]. Adeoye, E. A. (1998). Predictors of stress in Nigerian Executives. *The Nigerian Journal of Guidance and Counselling*, 6, (1&2), 43-65.
- [2]. Adeoye, E.A (1999): Employment of Counselling as an effective strategy for enhancing workers attitude change, performance and productivity. *The Counsellor*, 17, (1),

- [3]. Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J., Linz, D., Malamuth, N., & Wartella, E. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest*, 4, 81–110.
- [4]. Bonomi, A. E., Anderson, M. L., Reid, R. J., Rivara, F. P., Carrell, D. & Thompson, R. S. (2009). Medical and Psychosocial Diagnoses in Women With a History of Intimate Partner Violence. *Arch Intern Med*, 169(18), 1692-1697.
- [5]. Campbell, J. C. (2002) Health consequences of intimate partner violence. *Lancet*. 38090. 1331-1336.
- [6]. Chandra, P. S., Satyanarayana, V. A. & Carey, M. P. (2009). Women reporting intimate partner violence in India: associations with PTSD and depressive symptoms. *Archives of Women Mental Health*, 12(4):203-9.
- [7]. Cho, M. J., Nam, J. J. & Suh, G. H. (1998). Prevalence of symptoms of depression in a nationwide sample of Korean adults. *Psychiatry Research*, 81(3), 341–352.
- [8]. Cuijpers, P. & Smit, F. (2002) Excess mortality in depression: a meta-analysis of community studies. *Journal of Affective Disorders*, 72, 227–236.
- [9]. Edward, J. G. (2000). Evidence-based approaches to prevention of depression. Paper presented to medical of Practitioners in Mebourne, Sydney and Brishare.
- [10]. Fogarty, C. T., Burge, S. & McCord, E. C. (2002). Communicating with patients about intimate partner violence: Screening and interviewing approaches. *Family Medicine*, 34:369-75.
- [11]. Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: a meta-analysis. *Journal of Family Violence*, 14(2), 99–132.
- [12]. Hegarty, K., Gunn, J., Chondros, P. & Small R. (2004). Association between depression and abuse by partners of women attending general practice: descriptive, cross sectional survey. *BMJ*, 328(7440):621-4.
- [13]. Keita GP. 2007. Psychosocial and cultural contributions to depression in women: considerations for women midlife and beyond. *Journal of Management Care and Pharmacy*, 13(9 Suppl A):S12-5.
- [14]. Kessler, R. C., Foster, C., Webster, P. S. & House, J. S (1992). The relationship between age and depressive symptoms in two national surveys. *Psychology of Aging*, 7:119-126.
- [15]. Lu J., Ruan Y., Huang Y., Yao J., Dang W. & Gao C. (2008). Major depression in Kunming: prevalence, correlates and comorbidity in a south-western city of China. *Journal of Affective Disorder*, 111:221–226.
- [16]. Mel Cal Man S. (1999). *Depression in the workplace*. Royal College of Psychiatrist Belgrave Square: London.
- [17]. Nwokedi, S.A. (2004). *Strategies for Improving Workers Conditions*. Owerri: Joe Mankpa Publishers.
- [18]. Offord, D. R., Boyle, M. H., Campbell, D., Goering, P., Lin, E., Wong, M. & Racine, Y.A. (1996): One-year prevalence of psychiatric disorder in Ontarians 15 to 64 years of age. *Canadian Journal of Psychiatry*, 41:559-563.
- [19]. Ohaeri, J. U. & Jegede, R. O. (1991). Depression and the general medical practitioner in Nigeria. *Medicare*, 6, 7-11.
- [20]. Patten, S. B. (2002). Progress against major depression in Canada. *Canadian Journal of Psychiatry*, 47:775– 80.
- [21]. Robins LN, Regier DA (1991). *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York: The Free Press.
- [22]. U.S. Department of Health and Human Services (1999): *Mental health: A report of the surgeon general* Rockville, MD.
- [23]. Varma, D., Chandra, P. S., Thomas, T. & Carey, M. P. (2007). Intimate partner violence and sexual coercion among pregnant women in India: relationship with depression and post-traumatic stress disorder. *Journal of Affective Disorder*, 102(1-3):227-35.
- [24]. World Health Organization (2008): *The World health report: Mental health: new understanding, new hope*. Geneva.
- [25]. World Health Organization (2002): *Prevention and promotion in mental health*, Geneva.
- [26]. World Health Organization (2005). Multi-Country Study on Women’s Health and Domestic Violence against Women. Initial results on prevalence, health outcomes and women’s responses. In: WHO/WHD, ed. *Geneva* :1–206.
- [27]. Zung, W.W. (1965). A Self-rating Depression Scale. *Archives of General Psychiatry* 12: 63-70.