

# Pattern Of Depression And Family Support In A Nigerian Family Practice Population

A Olanrewaju, A Akintunde, F Femi, B Ibrahim, A Olugbenga

## Citation

A Olanrewaju, A Akintunde, F Femi, B Ibrahim, A Olugbenga. *Pattern Of Depression And Family Support In A Nigerian Family Practice Population*. The Internet Journal of Family Practice. 2007 Volume 6 Number 1.

## Abstract

**Objective:** This study determines the relationship between family support and pattern of depression among patients attending the Family Practice Clinic in Wesley Guild Hospital, Ilesha, Nigeria.

**Method:** Two hundred and fifty (250) newly registered patients, who attended the clinic between June and September 2005, were selected by systematic random sampling method and studied. Relevant data were collected by using a pre-tested interviewer-administered questionnaire that incorporated Zung's Depression Scale and Perceived Social Support- Family Scale.

**Results:** The age of study subjects ranged from 16 to 84 years with the mean age of  $49.66 \pm 14.95$  years. One hundred and forty nine of the 250 subjects (59.6%) were found to have various degrees of depression. One hundred and seven subjects (42.8%) had mild depression, forty subjects (16.0%) had moderate depression and only two (0.8%) had severe depression. The proportion of depressed subjects who lived below poverty level was significantly greater than that of non-depressed subjects ( $p=0.002$ ). Subjects with poor family support were almost two times more likely to have depression than subjects with good family support ( $p = 0.018$ , O.R =1.87 (95% CI = 1.07-2.37)).

**Conclusion:** Family support is an important coping mechanism for depression especially in developing countries where other social support systems are lacking.

## BACKGROUND INFORMATION

The family is the most basic institution in any society. People are born into a family, live much of their lives within a family, and consider it to be a high priority in their value systems<sup>1</sup>. The concept of a family or the role of the family has been universally agreed to vary from a group of intimate individuals with a history and a future; to a nuclear family with father, mother and progeny; to people living under the same roof and sharing physical and economic arrangements<sup>1</sup>. In Nigeria and indeed most West African countries, a family is traditionally extended vertically to include other generations, such as grandparents; and horizontally to include other relatives, such as brothers or sisters who do not live with them. The nuclear family may also be extended through the acquisition of more than one spouse (polygamy), or through the common residence of two or more married couples and their children, or of several generations connected in the male and female lines.

The primary function of a family is the provision of

nurturance and support for psychosocial growth and development of its member. Family members, particularly a spouse, appear to be most important source of social support and account for most of the association between social support and health.<sup>2</sup> There is evidence that support from sources outside the family cannot compensate for what is missing from within the family.<sup>3</sup> Family support is crucial in the recovery and return to well-being of a depressed individual. The family offers emotional support which involves listening without judging, demonstrating understanding, patience, affection and encouragement. However, societies, the world over are bemoaning the decline of family. In most West African communities, as in many parts of the world, the ties of kinship binding individuals to their families are progressively weakened by increasing urbanization.<sup>2</sup>

Furthermore, a large body of research has shown a strong and consistent relationship between social relationships, especially the perception of social support, and overall

morbidity and mortality.<sup>3</sup> Health outcomes associated with good social support include lower susceptibility to disease, lower cardiovascular reactivity, enhanced immune function, better adjustment to recovery from illness, lower rates of mortality, and increased psychological well-being.<sup>3</sup> Social support has been conceptualized in terms of its structure and function<sup>1</sup>. Structural social support or social networks was explained as the web of social ties that surrounds the individual. Functional social support was defined as the emotional, instrumental and financial aid obtained from one's social network<sup>1</sup>. Building on this line of thinking, Sarafino<sup>4</sup> classified functional social support into emotional support which is the expression of caring, concern and empathy towards a person; esteem support as the expression of positive regard for a person; tangible or instrumental support as giving direct assistance during the time it is needed and information support as giving advice, suggestions or feedback about how a person is doing. There is evidence that lack of social supports, whether perceived or received, may increase the risk of depression<sup>4</sup>. Low socioeconomic status might also decrease a person's ability to engage in social activities. Unplanned urbanization has and is posing great strains on traditional social support systems across the developing world. The lack of social support and the breakdown of kinship structures is probably the key stressor for the millions of migrant labourers to the urban centers of Africa leaving behind millions of dependants in the rural areas whose only hope of survival are the remittances their relatives will send from distant cities. Fujita and co-worker<sup>5</sup>, in their seminal work on the social origins of depression, identified factors such as having no one to confide in as one of the vulnerability factors for depression.

## **MATERIALS AND METHODS**

### **STUDY POPULATION AND SETTING**

The target population for this study consisted of all newly registered patients attending the Family Practice clinic of the Wesley Guild Hospital (WGH), Ilesa, Nigeria, over a period of three months. The WGH is one of the six constituent units of the Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, southwest Nigeria. The hospital provides primary, secondary and tertiary levels of care for people of all ages in its catchments area. This includes Ilesa, the surrounding towns and villages in Osun state and parts of Ekiti, Ondo, Oyo and Edo states of Nigeria. Most of the patients, however, come from Ilesa and environs.

Systematic random sampling technique was used to recruit

subjects for this study. Two hundred and fifty new patients were registered each week for thirteen weeks (between June 13 and September 10, 2005). This translates to a sample frame of three thousand, two hundred and fifty (3250). Using systematic random sampling, a sampling interval of 13 was obtained. ( $3250/250=13$ ).

Subjects who were known psychotics or receiving treatment for psycho-affective disorders and patients who refused to give consent were excluded from the study.

### **ETHICAL CONSIDERATION**

Ethical clearance was obtained from the hospital's research and ethical committee. Informed written consent was obtained from each subject. Confidentiality and privacy were ensured by not indicating the names of subjects on the questionnaire and only the investigators had access to the data. Subjects were adequately counseled before the interview took place. This was done to forestall the likelihood of some traumatic memories (relapse) or discomfort to the subjects.

### **TESTING PROCEDURE**

Data were collected using the following instruments:

i) Pre-tested, semi-structured questionnaire incorporating Zung's Self Rating Scale<sup>6</sup>. This rating scale<sup>8</sup> consists of 20 questions each with answers in a likert scale format rated from 1 to 4. The questions address the presence of depressive symptoms such as low mood, anhedonia, hopelessness, helplessness and suicidal behaviour. The raw scores are converted to 100 points scale giving the index scores. Subjects were categorized into depression levels based on the converted points of index scores of Zung's Self Rating Depression Scale<sup>6</sup>. A score of less than 50 denotes no depression; while a score of 50 to 59 represents mild depression; a score of 60 to 69 represents moderate depression and a score of 70 and above indicates severe depression. A high composite score has a strong correlation with diagnosis of depression. Comparison between the Zung's Depression Scale and DSM-IV criteria for diagnosis of depression revealed a sensitivity of 97%, a specificity of 63%, a positive predictive value of 77%, and a negative predictive value of 95%<sup>7</sup>. Furthermore, previous study had established morbidity cutoff score as a guide in determining the clinical severity of depressive symptoms (that is, no depression or mild, moderate, or severe symptoms)<sup>7</sup>. Both the Yoruba and English versions of the Zung's scale have been validated in Nigeria with good psychometric properties,

including a high index consistency reliability of 0.64 to 0.79<sup>8</sup>

ii) Perceived Social Support-Family Scale [[9. ]]] This was a 20-item validated measure of family support. Perceived family support is the degree to which one perceives how his or her needs for support are fulfilled by family. Subjects responded “yes”, “no”, or “don't know”, with each “yes” answer scoring +1. Any other response scored zero. Items 2, 6, 7, 15, 18, and 20 are reverse scored (a “no” response was scored as +1). Summated scores were used to arrive at a family support score. Possible ranges of scores are zero to twenty. Higher scores indicated higher level of perceived family support. (Scores equal to or greater than 11 points suggested strong family support, scores 7 to 10 points suggested weak family support while scores equal or less than 6 points suggested no family support). The Perceived Social Support-Family Scale has been found to have good reliability and validity. The original Perceived Social Support Scale has an alpha coefficient of 0.90 indicating that the scale has excellent internal consistency<sup>11</sup>. The instrument was translated into Yoruba (the local language spoken by majority of subjects) by a Yoruba-speaking Family Physician and a Yoruba linguistic professional who is experienced in health surveys. Precise idiomatic equivalents were employed as much as possible. The back translation, which was performed independently by another Family Physician and linguist was compared with the original translation and confirmed to be satisfactory before use.

Total income was calculated by adding the respondent's income from all declared sources. According to World Bank<sup>10</sup>, poverty is defined as living on less than one US dollar per day. In one month, this translates to less than thirty dollars. At a conversion rate of one hundred and fifty naira per dollar (N150 = \$1); poverty can be defined as living on less than (150 x 30 = N4500) per month in Nigeria.

Statistical analysis: All data collected were fed into the computer and analyzed using the Statistical Package for Social Sciences (SPSS)<sup>11</sup> for Windows software version 11. Means, modes, medians, standard deviations, proportions and percentages were determined as applicable. The means and standard deviations (SD) were calculated for continuous variables while ratios and proportions were calculated for categorical variables. Proportions and ratios were compared using the Pearson's Chi squared ( $\chi^2$ ) tests. p values of equal or less than 0.05 was taken as statistically significant.

## RESULTS

**Figure 1**

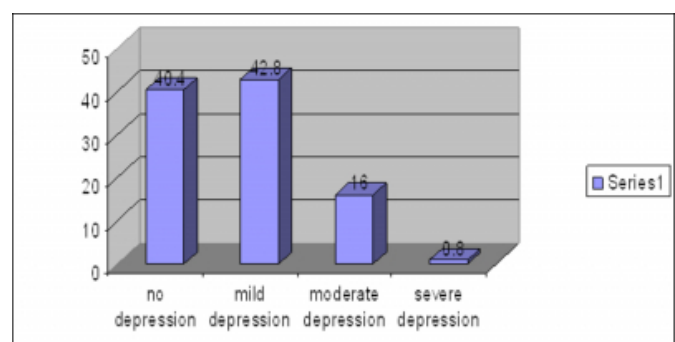
Table 1: Socio-demographic characteristics of study subjects

Characteristics	N ( % )
<b>Age group (years)</b>	
15-24	9(3.6)
25-34	41(16.4)
35-44	33(13.2)
≥45	167(66.8)
<b>Marital Status</b>	
Married	174 (69.6)
Single	25 (10.0)
Separated	8 (3.2)
Divorced	1 (0.4)
Widowed	42 (16.8)
<b>Level of education</b>	
No formal education	54 (21.6)
Primary	53 (21.2)
Secondary	53 (21.2)
Tertiary	90 (36.0)
<b>Occupation</b>	
Unemployed	12(4.8)
Housewife	1(0.4)
Self-employed	143(57.2)
Civil servant	70(28.0)
Schooling	15(6.0)
Others e.g pensioners	9(3.6)
<b>Religion</b>	
Christianity	221(88.4)
Islam	29(11.6)
<b>Family history of mental illness</b>	
Yes	2(0.8)
No	248(99.2)

Table 1 shows that majority (69.6%) of the study subjects were currently married. It also shows that most of the subjects (57.2%) were self-employed. Majority belonged to the Christian faith (88.4%) and only 0.8% gave positive family history of psychiatric illness.

**Figure 2**

Figure 1: Bar Chart depicting Zung's SDS rating of depression in study subjects



(Subjects' depression rating was categorized based on validated thresholds of Zung's scale).

Figure 1 shows Zung's SDS rating of depression in study subjects: one hundred and one subjects (40.4%) had no depression, 42.8% of subjects had mild depression, 16% had moderate depression while only 0.8% had severe depression.

**Figure 3**

Table 2: Relationship between level of income and depression rating among study subjects

Level of income	Non-depressed n=101	Depressed subjects n = 149
Below poverty level	31(29.2%)	75(70.8%)
Above poverty level	70(48.6%)	74(51.4%)

$\chi^2 = 9.510$ ,  $df = 1$ ,  $p = 0.002$

Table 2 shows that 70.8 percent of depressed subjects lived below poverty level. There was a statistical association between depression rating and poverty level.

**Figure 4**

Table 3: Relationship between family support and depression rating among study subjects

	Non-depressed (Zung SDS < 50) n=101	Depressed subjects (Zung SDS = 50-100) n = 149
Weak or no family support	55 (34.8%)	103(65.2%)
Strong family support	46 (50.0%)	46 (50.0%)

$$\chi^2 = 5.572, p = 0.018, O.R = 1.87 \text{ (95\% CI = 1.07-2.37)}$$

Table 3 shows that depression was significantly more common among subjects (65.2%) who had weak or no family support, compared with subjects (50.0%) with strong family support. Subjects with weak or no family support were 1.87 times more likely to have depression than subjects with good family support.

## DISCUSSION

The demographic distribution of subjects in this study is characteristic of a young population which is a common phenomenon in most developing countries of West African sub-region. This demographic structure as well as social, economic and political environments in the sub-region places great stress on families<sup>1,2,3</sup>. The average family size is shrinking due to dispersal of family members. This affects the rhythm of family cycle, family-centered socialization and care of young children as well as ageing adults. Other factors that fuel this include rapid urbanization, increasing prevalence of nuclear family, low levels of education and high prevalence of extreme poverty. The result of this trend

is the acquisition of new lifestyles related to urbanization, rapid rise in infectious diseases and increasing burden of mental illness like depression which is an important cause of disability, particularly among women, adolescents and youths<sup>1,2</sup>.

In this study, one hundred and forty nine subjects (59.6%) were found to have significant depressive symptoms: mild depression-42.8%; moderate depression-16% and severe depression -0.8%. This prevalence of 59.6% was high when compared with 49% reported by Ohaeri and Jegede<sup>12</sup> in 1990 from Ibadan, South Western Nigeria but lower than 40% reported by Patel et al<sup>13</sup> from Zimbabwe, a Southern African country. More recently, Dolittle and Farrell<sup>14</sup> reported a slightly higher prevalence rate of 62% among urban poor in United States, the breakdown of which showed that 38% of their subjects were not depressed; 30% had mild depression; 22% had moderate depression and 11% had severe depression. Differences between the observed prevalence from this study and the values cited from US and Zimbabwe studies may be reflective of variation in local rates of predisposing factors to depression in the various communities as similarly suggested by Judd et al<sup>15</sup>.

Plausible reasons for these differences beyond location and times of study include the effects of severely depressed national economy on psychological state of the populace. There is a general decline in per capita income from \$1000 in 1988, the period when Ohaeri et al<sup>12</sup> conducted their studies; to \$260 in 1998, and a subsequent re-classification of Nigeria from middle to a low-income country<sup>10</sup>. Nigeria's GDP for 2004 was \$64.1 billion, which could make the country one of the richest countries in Africa after South Africa. However, due to Nigeria's high population, this translates to \$390 per capita, making the country one of the poorest in the continent<sup>10</sup>. There is also a widespread and rising level of poverty in Nigeria. According to Mustapha, "the percentage of people living below the poverty line increased from 41% in 1992 to 80% in 1998" [[16.]]]. Furthermore, WHO has cited poverty as a recognized factor in the increasing prevalence of depression worldwide<sup>10</sup>. This may explain the high prevalence rate reported in this study. Similarly, the US study was conducted among people who were daily exposed to stressors like increased rates of poverty, crime and chronic illness<sup>14</sup>.

A significant negative association existed between total income and depression in this study ( $p=0.002$ ). This is consistent with findings of other studies<sup>17,18,19</sup>. There was

also a significant association between level of family support and depression ( $p=0.018$ ). Majority of subjects with weak or no family support had depression. This agrees with findings of other studies that investigated the effects of family support on the maintenance and promotion of health of depressed individuals<sup>5,20</sup>. Fujita et al<sup>5</sup> reported that the higher the level of perceived support provided by families and friends, the less the stress due to disease, leading to good outcomes in secondary prevention and prognosis of depressive symptoms. This was supported by De Leeuw and De Graeff<sup>20</sup> in Netherlands who established in a cohort of cancer patients that the relationship between family support and depressive symptoms was especially apparent in patients with few general health complaints. In Africa generally and West Africa in particular, people are shielded from untoward effects of circumstances by supports from families, friends and significant others, but more recently, western culture has led to increasingly isolated nuclear families causing a breakdown in this protective kinship structure<sup>2</sup>. This may explain why a large proportion of subjects with depression had weak or no family support.

It is therefore important that the family support system is resuscitated to cater for health of its members. This becomes imperative in view of the prevailing poor social welfare engendered by political misrule in developing countries like Nigeria. Many different stakeholders in the community, such as religious and social groups may contribute to the social support networks needed to strengthen the roles of family in promoting and protecting mental health of its members.

## References

1. Campbell TL, Bray JH. The Family's Influence on Health. In: Textbook of Family Practice. Rackel RE (Ed). Philadelphia, WB Saunder 2000; 6: 31-32
  2. Inem VA, Ayankogbe OO, Obazee EM, Ladipo MMA, Udonwa NE, Odusote K. Conceptual and contextual paradigm of the family as a unit of care. *Nig Med Pract* . 2004; 45(1): 9-12.
  3. Family and Health. 44th Directing Council. 55th Session of Regional Committee of Pan-American Health Organization. Washington DC, USA. September 2003.
  4. Sarafino EP. Health Psychology: Biopsychosocial Interactions. New York, John Wiley and Sons, 1990
  5. Fujita D, Kanaoka M. Relationship between social support, mental health and health care consciousness in developing the industrial health education of male employee. *J Occup Health* . 2003; 45:392-399
  6. Zung WWK. A self rating depression scale. *Arch Gen Psy*; 1965; 12: 63-70
  7. Zung WWK. The roles of rating scales in the identification and management of the depressed patient in the primary care setting. *J Clin Psy* 1990; 51(suppl 6): 72-7
  8. Jegede RO. Psychometric characteristics of Yoruba Version of Zung's Self Rating Depression Scale and Self Rating Anxiety Scale.; *Afr J Med Sci*; 1979; 8: 133-137
  9. Procidano M, Heller K. Measures of perceived social support from friends & from family: Three validation studies. *Amer J Comm Psych*.1983;11: 1-24
  10. World Bank Development Indicators 2005: Income Per Capita. <http://www.facts2005.org/biz10/globalworldincomepercapita.htm>. Accessed 17 October, 2006
  11. SPSS for Windows. Release 11.0.0 SPSS Inc Standard Version 2001
  12. Ohaeri JU, Jegede RO. Depression and the General Medical Practitioner in Nigeria. *Medicare* 1991; 6:7-11
  13. Patel V, Todd CH, Winston M, et al The outcome of common mental disorders in Harare, Zimbabwe. *Br J Psy* .1998; 172: 53-57.
  14. Dolittle R, Farrell M. The association between spirituality and depression in an urban clinic. *J Clin. Psych*. 2004; 6: 114-118.
  15. Judd FK, Jackson HJ, Komiti A, Murray G, Hodgins G, Fraser C. Aust N Z J.
- High prevalence disorders in urban and rural communities. 2002 ;36(1):104-7
16. Mustapha, A. "The Nigeria Transition: Third Time Lucky or More of the same" *Rev Afr Pol Econ*. 1999; 80:277-290
  17. Patel V, Araya R, Lima MS, Ludermit A, and Todd C. Women, Poverty and Common Mental Disorders in four restructuring societies. *Soc Sci Med* 1999; 49: 1461-1471
  18. Kahn RS, Wise PH, Kennedy BP, Kawachi I. State income inequality, household income, and maternal mental and physical health: cross-sectional national survey. *BMJ* 2000;321:1311-5.
  19. Araya R, Lewis G, Rojas G, Fritsch R. Education and income: which is more important for mental health? *J Epid Comm Health*. 2003; 57:501-5.
  20. De Leeuw JRJ , De Graeff A, Ros WJG , Hordijk GJ, Blijham GH. Negative and positive influences of social support on depression in patients with head and neck cancer: a prospective study. *Psycho-Oncology* 2000; 9(1): 20-28

**Author Information**

**Afolabi Muhammed Olanrewaju, MB; BS, MPH, FWACP**

Department of Family Medicine, Ladoke Akintola University Teaching Hospital

**Abioye-Kuteyi E. Akintunde, MB; BS, FMCGP, FWACP, FRACGP**

Department of General Medical Practice, Obafemi Awolowo University Teaching Hospital Complex

**Fatoye Femi, MBChB, FMCPsy**

Department of Mental Health, Obafemi Awolowo University Teaching Hospital Complex

**Bello Ibrahim, MB; BS, FMCGP**

Department of General Medical Practice, Obafemi Awolowo University Teaching Hospital Complex

**Adewuya Abiodun Olugbenga, MBChB, FMCPsy, FWACP**

Department of Psychiatry, College of Medicine, Lagos State University