

Original Research Article

# Level and Pattern of Social Support System Available to In-Patients with Protracted Illnesses in Jos University Teaching Hospital, Plateau State North Central Nigeria

Zuwaira I Hassan<sup>1,3\*</sup>, Tolulope O Afolaranmi<sup>1,3</sup>, Ofagbor L Ojone<sup>2</sup>, Oloriegbe A Damilola<sup>2</sup>, Olelewe C Amarachi<sup>2</sup>, Aisha Y Armiya'u<sup>4</sup>, Oluwabunmi O Chirdan<sup>1,3</sup>

<sup>1</sup>Department of Community Medicine, University of Jos. Jos, Plateau State Nigeria

<sup>2</sup>Faculty of Medical Sciences, University of Jos, Jos Plateau State, Plateau State Nigeria

<sup>3</sup>Department of Community Medicine, Jos University of Teaching Hospital Jos, Plateau State Nigeria

<sup>4</sup>Department of Psychiatry, Jos University of Teaching Hospital Jos, Plateau State Nigeria

Corresponding Author: Zuwaira I Hassan

## ABSTRACT

**Background:** Social support is a complex, transactional, multifaceted communicative processes that aims at improving individual's feelings of coping, compliance, belonging and esteem when in need. In most developing countries like Nigeria, the role of social support systems in the long term management of chronic illness has been grossly over-looked with focus directed towards medical and pharmacotherapy mostly. In this light, this study was undertaken to determine the level and pattern of social support available to in-patients with protracted illness in Jos University Teaching Hospital (JUTH).

**Methodology:** This was a cross sectional study conducted among 206 in-patients with protracted illness using quantitative method of data collection. SPSS version 20 was used for data analysis while adjusted odds ratio as well as 95% confidence interval were used in this study as point and interval estimates respectively with a p-value of  $\leq 0.05$  considered statistically significant.

**Results:** The mean age of the respondents in the study was  $46.2 \pm 10.7$  years with less than half (42.2%) being females. Adequate level of overall social support was received by 107 (51.9%) of the respondents with a mean score of  $74.2 \pm 10.4$  out of 72 while level of education, current employment status and medical related conditions were found to significantly influence the receipt of adequate social support.

**Conclusion:** The study has revealed the level overall of social support received by in-patients with protracted illness with employment status and medical related illness predicting receipt of adequate level of social support.

**Keywords:** Social support system, protracted illness, In-patients

## INTRODUCTION

Social support is a complex, transactional, multifaceted communicative processes that aims at improving individual's feelings of coping, compliance, belonging and esteem when in need. [1-3] It is essential in individuals' health, prognosis of disease, compliance with therapy especially in the setting of chronic illnesses and

recovery from curable chronic diseases. [3] It is an ever-changing process and involves not only the patients themselves but also the web of social relationships around them as well as other structures, facilities, services and the social networks that provide these necessary supports. [4] The relationship between social support and complete wellbeing has been of profound interest to

the medical and psychology community in recent decades of which body of research has convincingly documented its relationship with morbidity, mortality and possible recovery. [3,5,6]

Social support may be categorized into four broad types based on the form of supportive actions, behaviours or aid flowing through such social relationships which will include emotional support, instrumental support, appraisal support and informational support. [1] In most developing countries like Nigeria, the role of social support systems in the long term management of chronic illness has been grossly over-looked with focus directed towards medical and pharmacotherapy mostly. [6] In light of the rising burden of chronic diseases worldwide but more so in developing countries, it became imperative to assess the level and pattern of social support available to in-patients with protracted illness in Jos University Teaching Hospital (JUTH).

## **METHODOLOGY**

### **STUDY AREA**

This study was conducted in Jos University Teaching Hospital (JUTH) which is one of the three tertiary health institutions in Plateau state with an estimated bed capacity of 500 located in the Laming area of Jos North Local Government. [7] The institution has several service delivery outlets which includes: In-patient service unit, General Out-patient Department, Family health clinic, Emergency Paediatric Unit, Paediatric Out-Patient Department, Ante-natal Care, Family Planning, Obstetric Care unit, Gynaecology Emergency unit, Accident and Emergency Unit, Medical Out-Patient Department, Surgical Out-Patient Department and Intensive Care Unit, among others. [7]

### **STUDY POPULATION**

The study population comprised of individual 18 years and above on admission for in-patient care for a period of 3 months

and more in Jos University Teaching Hospital.

### **STUDY DESIGN**

A cross sectional study design was employed to assess the level and pattern of social support available to patients on in – patient care for a period 3 month and more.

### **SAMPLE SIZE ESTIMATION**

The sample size for this study was determined using the appropriate sample size determination formula for a cross sectional study. [8] Where  $n$  is the minimum sample size,  $Z$  is the standard normal deviate at 95% confidence interval (1.96),  $q$  is the complementary probability (1 –  $p$ ),  $d$  is the precision of the study set at 0.05 and  $p$  is the proportion respondents who received adequate total social support from a previous similar study 84% (0.84) giving a minimum sample size of 206. [9]

### **CRITERIA FOR INCLUSION IN THE STUDY**

This included all adults 18 years and above on admission for in-patients care for a period of 3 months and more who were clinically stable, fully conscious and willing to participate in the study.

### **SAMPLING TECHNIQUE**

Jos University Teaching Hospital was selected from the list of the 3 tertiary health institutions in the state following which all the patients on admission for in - patient care who had met the inclusion criteria in all the in-patients care units (wards) of the hospital where sampled during the period of the study until the sample size is met.

### **DATA COLLECTION**

Data was collected using semi-structured interviewer administered questionnaires. The questionnaire was designed by adapting existing social support study instruments. [10] The questionnaire was translated to Hausa, which was the language understood by most of the

respondents and then back translated to English language. The questionnaire had three sections namely:

Section A: Socio-demographic and occupational characteristics.

Section B: Assessment of type and duration of illness

Section C: Assessment of level and type of social support system

Ethical clearance was sought and obtained from Jos University Teaching Hospital Institutional Health Research Ethical Committee. Written and verbal informed consents were obtained from all the respondents with confidentiality and anonymity of their responses assured and maintained. In order to confirm clarity and comprehension and to make necessary corrections where applicable, the data collection instruments was pretested among in-patients in Plateau State Specialist Hospital. Four research assistants were trained on the contents and requirements of the study protocol by the research team lead. The data collection spanned a period of three months.

## GRADING AND SCORING OF RESPONSES

Emotional support was assessed as the interactions that positively affect the respondents' feelings, moods or appearance while instrumental support was assessed to the tangible component of social support systems such as the provision of physical assistance and services by others to alleviated the needs of the respondents. [1,11] Appraisal support in this study was assessed as the availability of communication that boosts respondents' morale, positive affectation of their feelings of self-worth, bolstering their self-esteem and their ability to live positively with their ailment. [1,11] Furthermore, information support in this study was assessed as offering of vital and much required information to patients regarding the nature of their disease and ways to prevent complications while positive social interaction refers to process of establishing friendships and relationship

that promote social and emotional development of the patient. [1,11]

Emotional, tangible and informational forms of social support were assessed using 5 stem questions each on a four point rating scale with four points allotted to the most favourable response and 1 point to the least favourable response. This gave a maximum attainable score of 20 scores each for emotional support, tangible and informational support respectively. Appraisal support and positive social interactions were assessed using 4 stem questions each on a four point rating scale with four points allotted to the most favourable response and 1 point to the least favourable response. This gave a maximum attainable score of 16 scores each for appraisal and positive social interaction components of social support system. A percentile plot was applied to each of these components of social support system and scores corresponding to 50<sup>th</sup> percentile and above were graded as adequate while scores below the 50<sup>th</sup> percentile graded as inadequate level of support. The overall level of social support score was obtained by the cumulating all the scores of the individual components of social support system assessed giving a total of 92. Similarly percentile plot was also applied and scores corresponding to 50<sup>th</sup> percentile and above were graded as adequate overall level of social support

## DATA ANALYSIS

The data obtained were processed and analyzed using SPSS version 20 where socio-demographic characteristics of the respondents were expressed in frequency and percentage. Mean  $\pm$  standard deviation were used as summary indices for age of the respondents and components of social support system assessed. Adjusted odds ratio were used as point estimates in the logistic regression model while 95% confidence interval was used as the interval estimate. A probability value of less than 0.05 was considered statistically significant in this study.

## RESULTS

The sex distribution of the respondents revealed that less than half (42.2%) were female while 122 (59.2%) were younger than 50 years of age with the mean age of  $46.2 \pm 10.7$  years. More than half of the respondents were married (61.2%) while 16 (7.8%) were either separated or divorced. Assessment of level of education attained by the respondent revealed that 108 (52.4%) had tertiary education while 21 (10.6%) had no form of formal education. More than half (57.8%) of the respondents were currently employed in paid jobs while 156 (75.7%) had been diagnosed with their illnesses for a duration of 5 years or less. See Table 1.

Assessment of pattern of social support received by the respondents in the course of their illnesses revealed that 135 (66.5%) received adequate emotional support while adequate informational support was received by 107 (51.9%). Furthermore, more than half of the respondents received adequate level of tangible support while for positive social

interaction fewer than half (47.6%) affirmed to have engaged in it on an adequate scale. The overall level of social support received by the respondents in this study was found to adequate among 107 (51.9%) with a mean score of  $74.2 \pm 10.4$  out 92. See Table 2.

The level of social support received by the respondent in the course of their various illnesses was found to be influenced by the level of education as the odds of receiving adequate level of overall social support among those with secondary level of education was 6.4 times the odds among those with no formal education (95% CI = 1.793-22.580;  $p = 0.004$ ). Similarly, the odds of receiving adequate level overall social support among respondents with tertiary education was 7.3 times the odds of those with no formal education (95% CI = 2.127-24.985;  $p = 0.002$ ) when all other factors had been held constant. Other factors with significant influence on level of social support were current employment status and medical related conditions. See Table 3.

Table 1: Socio-demographic characteristics of the respondents

VARIABLES	FREQUENCY	n= 206	PERCENTAGE
<b>AGE GROUP(years)</b>			
< 50	122		59.2
50 and above	84		40.8
Mean age $\pm$ SD	$46.2 \pm 10.7$ years		
<b>SEX</b>			
Male	119		57.8
Female	87		42.2
<b>MARITAL STATUS</b>			
Married	126		61.2
Single	50		24.3
Widowed	14		6.8
Others*	16		7.8
<b>EDUCATIONAL LEVEL</b>			
None	21		10.2
Primary	31		15.0
Secondary	46		22.3
Tertiary	108		52.4
<b>EMPLOYMENT STATUS</b>			
Employed	119		57.8
Not employed	87		42.2
<b>DURATION OF ILLNESS SINCE DIAGNOSIS (years)</b>			
$\leq$ 5 years	156		75.7
6 years and above	50		24.3
<b>NATURE OF ILLNESS</b>			
Medical related	106		51.5
Surgical related	62		30.1
Gynaecological related	18		8.7
Mental health related	14		6.8
Others**	6		2.9

\*= divorced or separated, \*\*= haematological and connective tissue diseases; SD = Standard Deviation,

**Table 2: Pattern and level of social support received by the respondents**

Parameters	Frequency (n=206)	Percentage
<b>Emotional Social Support</b>		
Adequate level	135	65.5
Inadequate level	71	34.5
Mean score $\pm$ SD	16.4 $\pm$ 2.9 out 20	
<b>Informational Social Support</b>		
Adequate level	107	51.9
Inadequate level	99	48.1
Mean score $\pm$ SD	15.7 $\pm$ 2.9 out 20	
<b>Tangible Social Support</b>		
Adequate level	136	66.0
Inadequate level	70	34.0
Mean score $\pm$ SD	16.7 $\pm$ 2.6 out 20	
<b>Appraisal Support</b>		
Adequate level	109	52.9
Inadequate level	97	47.1
Mean score $\pm$ SD	13.3 $\pm$ 2.3 out 16	
<b>Positive social interactions</b>		
Adequate level	98	47.6
Inadequate level	108	52.4
Mean score $\pm$ SD	12.2 $\pm$ 2.4 out 16	
<b>Overall social support</b>		
Adequate level	107	51.9
Inadequate level	99	48.1
Mean score $\pm$ SD	74.2 $\pm$ 10.4 out 92	

**Table 3: Logistic Regression of Predictors of adequacy of social support**

Factors	Odds Ratio	95% Confidence Interval	P – value
<b>AGE GROUP (years)</b>			
< 50	1.2	0.587 – 2.476	0.611
50 and above	1	-	-
<b>SEX</b>			
Male	0.7	0.362 - 1.403	0.327
Female	-	-	-
<b>MARITAL STATUS</b>			
Single	0.6	0.278 – 1.408	0.258
Widowed	1.6	0.425 – 5.985	0.490
Others*	0.7	0.207 – 2.262	0.534
Married	1	-	-
<b>EDUCATIONAL LEVEL</b>			
Primary	2.4	0.672 – 8.507	0.179
Secondary	6.4	1.793 – 22.580	0.004
Tertiary	7.3	2.127 – 24.985	0.002
None	1	-	-
<b>EMPLOYMENT STATUS</b>			
Employed	2.1	1.029 – 4.360	0.042
Not employed	1	-	-
<b>DURATION OF ILLNESS SINCE DIAGNOSIS (years)</b>			
6 years and above	1.2	0.576 – 2.499	0.627
$\leq$ 5 years	1	-	-
<b>NATURE OF ILLNESS</b>			
Medicine related	4.6	1.330 – 16.051	0.016
Surgery related	3.1	0.789 – 11.842	0.106
Mental health related	1.1	0.191 – 5.629	0.966
Others**	5.3	0.647 – 43.542	0.120
Gynecology related	1	-	-

Odd Ratio = Adjusted Odds Ratio

## DISCUSSION

The receipt of adequate social support in the course any chronic illness cascading through all the various forms of social support in this study was found among more than half of participants which is in keeping with findings of other Nigerian, South African and Chinese studies. [12-14] These similarities could be

attributable to the settings where these studies were conducted while not downplaying the influence of culture, religion and nature of illness. However, findings from others studies were at variance with that of this study as low level of adequate social support was observed which brings to light that perception of social support received could also

influenced largely by the individual's state of mind. [15,16]

The various components of social support system are vital and instrumental in the assessment of adequacy of overall level social support received in the course chronic illness and more importantly in the road to recovery. Tangible as well as emotional support were more adequately received than informational and appraisal support in this study. This pattern was also seen in a study conducted Brazil while findings of another Nigerian study revealed that receipt of adequate informational support was second to emotional support rather than tangible support as found in this study. [12,17] This may be due to the fact that it is generally believed that support can more adequately be expressed by provision of material or physical aids as well as by show of empathy and concern to those in need. It is however important to state that this study could not assess the effects of these support systems on recovery and duration of hospitalization. Therefore, it will be imperative that other studies be conducted to provide insight into this as well as possibly evaluate the perceived adequacy and types social support offered available to patients from the point of view of the care givers and family members of individual with protracted illnesses. Employment status of the respondents as well as medically related illnesses was found to have significant influence on the receipt of adequate overall social support in this study. Whereas age and educational status of the respondents influenced perceived social support received in another study. [9]

## CONCLUSION

The study has revealed the level overall social support received by in-patients with protracted illness at Jos University Teaching Hospital with factors such employment status and medical related illness as predictors of receipt of adequate level of social support.

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**Conflict Of Interest:** None

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