

Perceived Social Support and Manifested Psychopathological Symptoms of Caregivers of Children with Psychological Illness

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Abstract— This study was carried out to observe the influence of Perceived Social Support (PSS) on manifested psychopathological symptoms of selected caregivers of children diagnosed with psychological illness attending a Neuropsychiatric hospital in Lagos Nigeria. A total of 309 participants (mean age = 41.2 years) were purposively selected during clinic appointment days and responded to Multidimensional Scale of Perceived Social Support (MSPSS) and Awaritefe Psychological Index (API Form X). Data was analyzed using descriptive and inferential statistics. A 17.8% prevalence of severe general psychopathology among the participants was revealed. Also PSS was found to independently and significantly predict insomnia ($\beta = -.202$, $p = .000$) reporting an R^2 of .041; mood disorder ($\beta = -.345$, $p = .000$) with an R^2 of .119, general somatic disorder ($\beta = -.179$, $p = .002$) with an R^2 of .032, and general psychopathology ($\beta = -.254$, $p = .000$) with an R^2 of .065. There is a high prevalence of psychopathological symptoms among the participants, and that the beta scores indicate strong negative associations between PSS and insomnia, mood disorder, general somatic disorder and general psychopathological symptoms.

Keywords — Social support, psychopathological symptoms, caregivers, children.

I. INTRODUCTION

Psychopathology is a term which refers to either the study of mental illness or mental distress or the manifestation of behaviours and experiences which may be indicative of mental illness or psychological impairment (ScienceDaily 2020). It is the study of mental disorders in relation to their causes, development, course, classification, and treatment. The World Health organization (WHO) reported that an estimated 154 million people suffer from depression, and 25 million people suffer from schizophrenia (WHO, 2008). Nearly half the world's populations are affected by mental illness with an impact on their self-esteem, relationships and ability to function in everyday life (Storrie, Ahern & Tuckett, 2010). About 64 million Nigerians suffer from various symptoms of psychopathology (WHO, 2007; Owoyemi,

2013). On a global level, it is estimated that approximately 20 per cent of young people experience one form of psychopathological symptom or the other each year (Patel, et.al, 2007).

Psychological distress is widely used as an indicator of the mental health of the population in public health, in population surveys and in epidemiological studies and, as an outcome, in clinical trials and intervention studies. Psychological distress is frequently seen as a state of emotional suffering characterized by symptoms of depression (e.g., lost interest; sadness; hopelessness) and anxiety (e.g., restlessness; feeling tense) (Mirowsky & Ross, 2002).

Burnette and Mui (1997), conceptualized psychological distress and its symptoms as including lack of enthusiasm,

problems with sleep (trouble falling asleep or staying asleep), feeling downhearted or blue, feeling hopeless about the future, feeling emotional and bored or a passing interest in things and thoughts of suicide (Mirowsky & Ross, 2002). Psychopathological symptoms include unpleasant subjective state of depression and anxiety (being tense, restless, worried, irritable and afraid), which has both emotional and physiological manifestation (WHO 2008). It is also opined as a continuous experience of unhappiness, nervousness, irritability and problematic interpersonal relationships (Chalfant, Heller, Roberts, Briones, Aguirre-Hochbaum, & Farr 1990) and negative feelings of restlessness, depression, anger, anxiety, loneliness, isolation and problematic interpersonal relationships (Burnette & Mui, 1997).

The concept of social support originated from research in clinical medicine during the 1970s (Caplan 1974). As noted by Bohus, Woods, and Chan (2005), social support is very important interpersonal resources that an individual make use of in his daily relationship in order to improve or maintain the psychological well-being of the individual, this utilization is often done unknowingly. The trio went further to define social support as an interpersonal relationship between individuals within a readily available network characterized by close personal relationships, shared interdependence and identification with common values. This definition of Bohus, woods and Chan is very reliable and it captures the essence of social support in an individual life and his interaction, however we can view social support this way, an exchange of psychological resources which include love, interaction, information, care etc. as well as physical resources like food and shelter between two or more individuals who believe that the purpose of these psychological and social resources is to enhance their wellbeing.

Also Cohen & Willis (1985) viewed social support as the resources provided by other persons intended to enhance the wellbeing of the recipient. Social supports according to beliefs of scholars boost confidence, reliance, emotional stability and self-reliance by the giver reassurance and compliment to the receiver. Another way to look at social support is the observation that an individual is being assisted and has assistance readily available to him/her or the extent to which a person is assimilated into a social network. Social support from significant others also promotes good mental health as it boost confidence and self-esteem by offering reassurance and compliments. In a social context for example, a care giver who has, for example, an autistic child and has access to social support from a spouse, friends, family and the society at large will be psychologically healthier than

the other caregiver with similar problem but lacks necessary social support.

According to Mousavi, Kalyani, Karimi, Kokabi, Piriaee (2015), differences in how people react and adjust to stressful events can be interpreted by a number of psycho-social factors, when psycho-social resources are available, an individual may cope with the occurrence of negative stressful events. As noted by Kerenhappachu & Sridevi (2014), some of the multiple problems of having a mentally challenged child in the family are mainly related to the social ridicule and social stigma. As the child grows up and the disability becomes quite noticeable by the society it becomes a distressing predicament of social embarrassment and stigma, which may lead to isolation of the child even within the family and the child may be restricted from coming out when relatives and friends visit the house or may be left back at home when parent go out. The advent of deinstitutionalization of the mentally ill initiated interest in caregiver burden globally (Flyckt, Löthman, Jörgensen, Rylander & Koernig 2013).

The World Health Organization (2008) stated that in developing countries, the family members cater for their patients and this fallout occurs in the context of inadequate mental health facilities Abdul Kareem et.al (2009). However, recent changes in family structures and rapid economic decline in these countries are threatening the support available to patients with chronic mental illness (Abdulkareem et al., 2009).

Social support has been shown to have some level of influence on health-related behaviors. Koenig and Larson (2001) found a link between social support and depression, and concluded that a generally positive link exists between social support and mental health. Research has suggested that social support is related to increased psychological health perception (Taylor, Peplau & Sears, 2015). A study by Lahuerta, Borrel, Rodriguez-sanz, Perez and Nebot (2004), on the influence of social network on the mental health in the elderly found that 31.2% of the caregivers who took part in the study had mental disorder. Research finding showed that individual in supportive social relationships were happier and healthier and lived longer than those who were socially isolated (Harvey & Alexander 2013; Kantar 2016). In a related study low social support was reported as being an important variance in subjective wellbeing (Çelikel-Çam, & Erkorkmaz, 2008) and increased the probability of psychopathology (Rausmussen, Wrosh-Scheier, & Carver, 2006) and related to more frequent emotional problems (Yelsma & Yelsma, 2008). Also relatives of schizophrenic

patients perceived higher levels of burden when they experienced low levels of social support (Goncalves-Pereira et al., 2013). High levels of social support have equally been found to be associated with better well-being (Gutiérrez-Maldonado et al., 2005). It is likely that, as a result of caregiving tasks, primary caregivers stay away from their social networks making burden of care to significantly relate to limited social networks (Grandón, Jenaro, & Lemos, 2008).

Stinson, Logel, Zanna, Holmes, Cameron and Wood (2012), established that social support has been shown to have influence on interpersonal relationships because individuals' feelings of self-worth have a bearing on both their beliefs and social behaviors among geriatric caregivers. Thus low social support may damage interpersonal relationships making caregiver feel socially isolated with negative perception of their social relationships. Stinson et al., (2012) affirmed that by implication, a lack of positive social relationships leads to negative psychological states such as anxiety or depression, and that only support that is perceived as adequate would influence the appraisal process and function as a stress buffer.

Support from family and friends have been found to reduce the impact of psychological problems among caregivers (Calvete & Connor-Smith, 2006). Studies show that social support could help caregivers to cope with everyday life stressor and lighten the burden of workload and reduce vulnerability to depression, stress and anxiety, act as a protective factor that could decrease psychological problems among caregivers (Dollete, Steese, Phillips & Matthews, 2004) provides motivational influence on caregivers' performance (Wentzel, 2014) and is significantly negatively correlated with psychological health symptoms (Vyavaharkar, Moneyham, Corwin, Saunders, Annang, & Tavakoli, 2016).

Though studies on the link between social support and psychological health are available in literature, there is a crevice of knowledge with particular reference to caregiver of children diagnosed with psychological disorders in Nigeria. Hence the focus of this study is to observe the prevalence and nature of mental illness as well as find out the extent to which perceived social support predicts psychological health status of caregivers of children living with psychological disorders.

A. Research Objectives

1. Find out the prevalence of perceived social support and mental health status of the participants

2. Access the predictive influence of PSS on levels of manifested psychopathological symptoms of the participants.

B. Research Questions

1. What are the prevalence of PSS and psychopathological symptoms of the participants?
2. Are there observable predictive influence of PSS on the manifested symptoms of psychopathologies among the participants?

C. Research Hypothesis

1. PSS will significantly predict levels of psychopathological symptoms among the participants.

II. MATERIALS AND METHODS

A. Participants

A cross sectional research survey design was employed in the study. Participants for the study were selected from the child and adolescent mental health service center on their clinic days. The patients were identified through appointment registers with the assistance of the records personnel. A sample of 309 caregivers of children diagnosed with psychological illness (Learning Disabilities 48, Seizure disorders 64, Autism Spectrum Disorder 118, and Others 78), using The Federal Neuropsychiatric Hospital, Yaba, Lagos Nigeria, were purposively selected for this study.

B. Measures

A battery of two standardized psychological assessment instrument were used for this study, they are:

The Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet & Farley, 1988) is a 12-item scale designed to assess individual levels of social support. The response format is also 1-5 point likert-scale ranging from strongly agree-strongly disagree, where, strongly agree=5, agree=4, undecided=3, disagree=2, strongly disagree=1. The internal consistency of the scale was good, with a Cronbach's alpha of 0.91. After a four week retest for reliability exercise, the intra-class correlation coefficient (ICC) was found to be 0.84. From a pilot study Cronbach's α coefficient of .904, Guttman Split half coefficient of .852, and Spearman brown coefficient of .857 as well as a concurrent validity coefficient of $r = .921$ $p = 0.000$ was observed on MSPSS among the samples.

Awaritefe Psychological Index (API Form X) developed by Awaritefe (1982) to measure levels of manifested psychopathological symptoms. It consists of 76 items with seven sub-scales, including 2 lie scales scored on a 3 point likert scale of Yes =2, No =0 and ? =1. API Form X has acceptable reliability coefficient (Cronbach Alpha) of .87, retest reliability coefficient of .86 for males and .80 for females at 21 day interval (Awaritefe 1982), as well as a split-half reliability coefficient of .85. The sub-scales reported Guttman split half reliability coefficient of insomnia ($r=.57$), Intellect disorder ($r=.58$), Heat disorder ($r=.91$), Mood disorder ($r=.87$), Head region disorder ($r=.79$), Alimentary track disorder ($r=.78$) and General Somatic disorder ($r=.86$).

C. Setting

The child and adolescent mental health service center of the Federal Neuropsychiatric Hospital Yaba Lagos is situated in the densely populated region of Oshodi Lagos State Nigeria. It is the largest Child and Adolescent Mental Health service center in Nigeria with a clientele base of almost five thousand registered cases. Required minimum sample, using Araoye (1965) sample size determination formula for calculating sample size below a population of 10,000 is 200 participants. A total of 309 participants were however selected for the study.

D. Data Analysis

Data was analyzed using the statistical package for social sciences (SPSS 23). Descriptive statistics (Simple percentages) and inferential statistics (Multiple regression) were used for this study.

III. RESULTS

A. Demographic Characterizes of Respondents

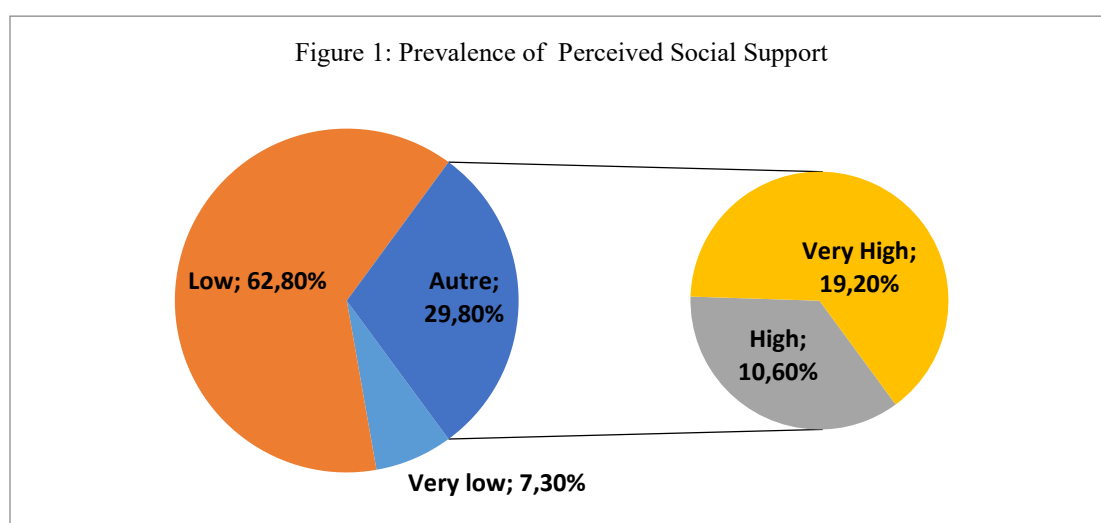
The summary of the demographic distributions by sex of the participants showed that 186 (60.2%) were females while 123 (39.8%) were males. This showed that majority of the caregivers that participated in this study were females. The distribution by the age categories of the caregivers show that 7 (2.3%) of the participants were within the age ranges of 20 and 30 years age category, 145 (46.9%) were within the age category 31 – 40 year, 148 (49.9%) were within 41 – 50 year category, 7 (2.3%) were with 51 – 60 years age category while 2 (.6%) were categorized above 60 years and above age category.

Distribution by educational background showed that 86 (27.8%) had primary education, 104 (33.7%) had secondary education, 118 (38.2%) had tertiary education. Based on the respondents marital status 189 (61.2%) of the participants were married, 99 (32%) were single while 20 (6.5%) were divorced /separated.

The distribution of participants according to the diagnosis of wards illness showed that 48 (15.5%) were caregiver of children with Learning disabilities, 64 (20.7%) cared for children with seizure, 118 (38.2%) were caregivers of children with autism while 78 (25.2%) cared for children with other forms of psychological illness not specified above.

B. Prevalence of PSS

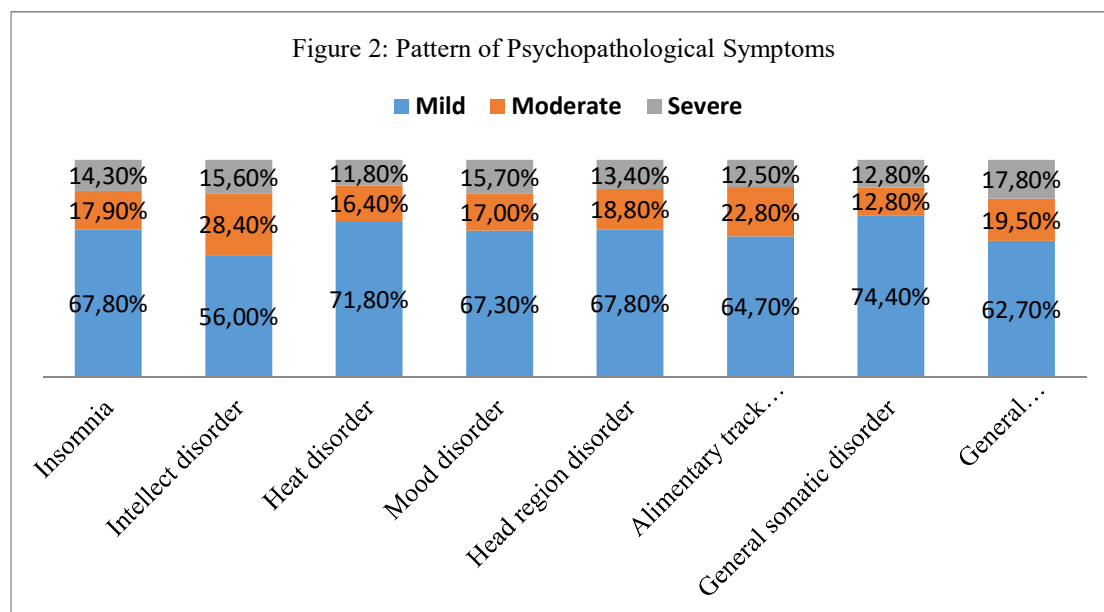
Fig. 1 is a summary of the prevalence of the PSS of caregivers of children diagnosed with psychological disorder. The figure showed that 7.3% had very low PSS, 62.8% had low PSS, and 10.6% have high PSS while 19.3% have very high PSS. In other words, 80.1% reported low PSS.



C. Prevalence of Psychopathologic symptoms:

Fig. 2 was a summary of the prevalence of the psychopathological symptoms among caregivers of children diagnosed with psychological disorder. Severe prevalence of psychopathological symptoms range from 11.8% (heat

disorder) to 15.7% (mood disorder). Reported total of general psychopathological symptoms was 17.8%. This report shows a high prevalence of psychopathological symptoms among the participant, suggesting that majority of them might need psychological interventions.



D. Test of Hypothesis

We hypothesized that PSS will significantly predict levels of psychopathological symptoms among the caregivers of children diagnosed with psychological disorders in Lagos Nigeria. Multiple regressions was employed to test the degree to which PSS independently and significantly predicted the severities of the symptoms as well as general psychopathology score among the caregivers. As summarized in Table 1, PSS was found to independently and significantly predict insomnia ($\beta = -.202, p = .000$) reporting an R^2 of .041; mood disorder ($\beta = -.345, p = .000$) with an R^2 of .119, general somatic disorder ($\beta = -.179, p = .002$) with an R^2 of .032, and general psychopathology ($\beta = -.254, p =$

.000) with an R^2 of .065. However PSS was not found to significantly predict intellect disorder, heat disorder, head region disorder and alimentary tract disorder among the participants. This finding further reveals that 4.1%; 11.9%; 3.2% and 6.5% variance in the severities of insomnia, mood disorder, general somatic disorder and general psychopathological symptoms respectively is explained by PSS received by the participants.

Furthermore, the negative significant beta scores indicate strong negative associations between PSS and insomnia, mood disorder, general somatic disorder and general psychopathological symptoms.

Table 1: Regression analysis of degree of influence of PSS on psychopathological symptoms.

N = 309							
Psychopathological Symptoms	B	β	T	sig	R^2	F	p
Insomnia	-.034	-.202	-3.565	.000	.041	12.712	.000
Intellect Disorder	.011	.099	1.727	.085	.010	2.982	.085
Heat Disorder	-.013	-.065	-1.130	.260	.004	1.276	.260
Mood Disorder	-.207	-.345	-6.345	.000	.119	40.253	.000
Head Region Disorder	-.019	-.107	-1.867	.063	.012	3.485	.063
Alimentary Tract Disorder	-.001	-.004	-.063	.949	.000	.004	.949
General Somatic	-.054	-.179	-3.148	.002	.032	9.907	.002
General psychopathology	-.313	-.254	-4.534	.000	.065	20.553	.000

IV. DISCUSSIONS

This study returns a 17.8% prevalence of severe general psychopathology among the respondents. This high prevalence is a reflection of the severity of mental illness among the Nigerian population (Abiodun, 2006; WHO, 2008; Owoyemi, 2013; Akinniyi, Akinnawo, Akpunne & Oyeleke, 2019), seemingly made worse as suggested by our finding in this study, by the burden of caring for a ward diagnosed with psychological disorder. This supports previous research studies, showing that a large percentage of Nigerian suffers psychological disorder (WHO, 2008; Owoyemi, 2013; Akpunne & Akinnawo, 2019). Provision of care especially for children can take a toll and exert direct impact on the health of the caregiver (Ustun, Ayuso-Mateos, Chatterji, Mathers & Murray, 2004; Brown & Birstwistle, 2008). Also, the psychological distress associated with providing care has been found to be much more severe in high-risk populations, such as caregivers of psychiatric patients (Sharma, Sharma & Pradhan, 2018).

Furthermore, our finding found significant negative association between PSS, insomnia, mood disorder, general somatic disorder and general psychopathology among the participants. This is an indication that social support help mitigate the psychological distress associated with providing care for children diagnosed with psychological disorders. This finding supports Huang, Hung, Sun, Lin and Chen (2009) and Harandi, Taghinasab and Nayeri (2017), who reported that lack of social support and family conflicts exacerbates psychological distress of providing care for loved ones.

According to Sharma et.al (2018), the stress of caregiving for psychiatric patient is also significantly linked with lower education level, being in debt, longer duration of illness, marital status, subjective feeling of psychological stress and self-acknowledgement of need of professional help. In a related study among African American caregivers living in rural areas of the South-eastern United States, Vyavaharkar, Moneyham, Corwin, Saunders, Annang, and Tavakoli (2016), returned that perceived availability of sources of support as well as satisfaction with support strongly and negatively correlated with psychological health symptoms. Similarly, McDowell and Serovich, (2011) also reported that social support negatively correlated with psychopathological symptoms. Emotional attention, right information, feedback from others on their assessment of one's performance, offering help and sociability have been described as avenues through which social support reduces the effects of mental stress (Bakhshi, Peyravi & Abedian, 2005).

In conclusion, caregivers of children diagnosed with psychological disorders, who receive social support, would have reduced mental pressure (Bahri, Dehghan & Dehghan 2014). Hence, low level of PSS particularly when there is an associated need to care for children diagnosed with psychological disorder can be strongly associated with higher severities of insomnia, depression, anxiety, and somatic complaints.

V. CONCLUSIONS

This study concludes that there is a high prevalence of psychopathological symptoms, and that social support is a significant predictor of severities of insomnia, mood disorder, general somatic disorder and general psychopathology among caregivers. Hence social support rendered and assessed could be very helpful in reducing the psychological distresses experienced as a result of providing care for children diagnosed with psychological disorders. Based on the key findings of this study, it is recommended that a supportive network or task exchange for caring for children with psychological disorders might also be appropriate; this would provide a chance for caregivers to have respite and have time alone. Furthermore, it is important for caregivers to spend time away from their caregiving duties and to become involved in other interests or hobbies thus caregivers would be able to focus on and take care of their personal needs. By becoming self-aware, caregivers are able to take better care of their physical, mental, emotional health as well as quality of life. When they feel good about themselves (mentally and physically), they feel better about their caregiving tasks, which increases their positive feelings and decreases or eliminates the negative feelings of caregiving. Again, caregivers should be educated how to manage their stressors in order to improve their mental health status. Finally, we advocate for the development of community mental health services under the primary health care which will aim at focusing not only on the treatment of the patients, but also to meet the needs of the caregivers.

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The research intention and proposed procedures for carrying the research was subjected to scrutiny by the Internal Research Ethic Committee (IREC) of Redeemer's University, Ede, Osun State southwestern Nigeria and approval granted before the study was embarked upon. A letter of approval was equally obtained from the, Research Ethics Committee of the Federal Neuro-psychiatric Hospital Yaba Lagos Nigeria. After successful ethical clearance, instructions on how to fill the questionnaire were given to the respondent and confidential treatment of information was assured as well.

Respondents who were available and willing to be part of the study on each clinic day were used for this study. Participants were further informed that they could withdraw at any time from the study without any penalty. However due to the busy schedule of the caregivers during clinic appointments the questionnaire was given to them to be completed at their own convenience and was collected after they have been filled by the respondents.

Declaration

Author(s) declare that no conflict of interest exists.

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