# A Controlled study of Anxiety and Depression in Mothers of Children with Learning Disability in Lagos, Nigeria

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#### **ABSTRACT**

Background: Parents of children with learning disability have been reported to suffer great stress and frustration due to increased burden of care. The manifestation of stigmatization by familial environment and the collective effect of the children with adverse impact on mothers predispose them to mental shock or a variety of neurotic symptoms and other psychiatric conditions including anxiety and depression. The objectives of the study were: to determine the general Health Questionnaire (GHQ) score of mothers of children with learning disability. To identify sociodemographic variables and to assess anxiety and depression in them.

Methods: Using structured questionnaires between March and May 2002, 106 mothers of children with learning disability in a Mentally Handicapped Home for children in Lagos, Nigeria were assessed and compared with mothers of normal healthy children in Lagos.

**Results**: The mean age of the subjects was  $40.0\pm6.6$  years. More of the subjects (26.4%) compared with mothers of normal healthy children (9.9%) had a high GHQ score and high levels of anxiety (25.5%) and depression (10.4%). Marital difficulties were associated with learning disability.

**Conclusion**: Mothers of children with learning disability are prone to emotional and psychological disorders. In order to improve the well-being of children with learning disability, there is need to look into the mental and physical health of mothers. Early and prompt treatment of associated anxiety and depression will no doubt help the children.

**KEYWORDS:** Anxiety; Depression; Mothers; Learning disability.

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# INTRODUCTION

The needs of children who have global developmental learning disabilities are complex and lifelong. Both anecdotal observations and surveys have been used to report on the effect of handicapping condition on the family and the coping responses to such a condition. It has been reported that more than half a

billion persons are disabled as result of mental, physical or sensory impairment. Some 5-15% of children aged 3-15 years in both developed and developing countries suffer from learning disability <sup>2</sup>. Studies have shown that there may be as many as 10-30 million severely and about 60-80 million mildly or moderately retarded children in the world <sup>3,4</sup>.

A number of factors have been linked with learning disability in children. Maternal low levels of education and socioeconomic status have been reported as risk factors for learning disability<sup>5</sup>. Children from disadvantaged parents/families are always subjected to developmental adverse conditions, including inadequate medical care and environmental hazard.

Disability whether physical or mental is a global problem. In developed countries, one of the ways by which societies show concern for the needs of their citizens is through legislation. In these countries, concern for the plight of disabled children has been clearly demonstrated through the various public laws and acts of parliaments. In the United States of America, for example, between 1958 and 1991, fifteen public laws relating to disabled children were made. These laws made provision for the allocation of funds to cater for the disabled children. In 1971, they also adopted the United Nations' General Assembly "Declaration on the Rights of Mentally Retarded Persons". The situation in developing and poorer countries is pathetic. Observations have revealed that these cultures are yet to develop strategies that can cater for the needs of the disabled. The giving of alms has only encouraged destitution, begging and dependence. In addition, poverty and unstable political climate have made the provision of basic needs and social security difficult. The lack of social security imposes burden of care on the parents with the resultant stress due to longterm effects and uncertainty of the problem. It is well documented that uncontrolled events and long-term threats of loss and disappointments are more linked to psychiatric disorders<sup>6</sup>. The impacts of children with learning disability on mothers are enormous and these predispose them to high level of stress with emotional and psychological symptoms7, 8,9,10. Anxiety and depression have been reported to be common in

mothers, who are traditionally saddled with the care of such children <sup>11,12,13</sup>. The anxiety and depression may focus initially on the appearance and/ or care of the children, but later on, will be directed to the question of their future functions and or survival. Frequent overconcentration and attention to the affected children have also been observed. Studies have shown that child rearing practice has been distorted and influenced by parental guilt, ambivalence, depression or rejection <sup>14</sup>. The disabled children are also exposed to a number of social ills, including physical and sexual abuses, battering and forced labour <sup>16</sup>.

In African society, women traditionally are given the primary role of caring for the sick and the dying in the family. There is paucity of information on the impact of learning disability in children and its subsequent impact on the mental health of the mothers. Therefore, the aim of this study was to look into the psychological problems suffered by mothers of children with learning disability.

## MATERIALS AND METHODS

The study was carried out in two locations in Lagos, Nigeria viz Modupe Cole Memorial Home for Mentally Handicapped Children and Staff School of the Federal College of Education (Technical) all in Akoka. The former is the only Mentally Handicapped Home for Children with boarding facility, owned by Lagos State Government. The admission is free and registration is from 6 years and above. However, it also receives financial support and donations from philanthropic organizations and individuals.

A total of 207 respondents were used in this study. This consisted of 106 subjects and 101 controls. From the register in the Centre, children aged 6-12 years with learning disability were randomly selected. Mothers of these children were invited in writing to participate in this study. The controlled group comprised mothers of normal healthy children aged 6-12 years attending the Staff School of Federal College of Education (Technical). Akoka. The number of controls was determined using cluster sampling method. Consents were obtained by giving them already designed consent forms to sign. The two groups were given structured questionnaires, which consisted of 3 Sections to fill. The first part was used to collect information on basic sociodemograpic data; age, highest educational attainment, occupation, marital status, religion and Family type. The second part was the General Health Questionnaire (GHQ-28), which was used in the study to screen the respondents for possible psychiatric morbidity. Respondents who scored 5 and above were assumed to have psychiatric disorders. The Hospital Anxiety and Depression Scale (HADS) formed the third part and was used to assess the respondents for

anxiety and depression. The cut-off point for anxiety and depression was 8 and above. The study was anonymous and lasted for three months between March and May 2002. All mothers with mental or severe physical illness were excluded from the study.

#### **RESULTS**

A total of 207 mothers consisting of 106 subjects and 101 controls took part in the study. Table 1 shows sociodemographic characteristics of the respondents. The majority of the subjects, 98 (92.5%) aged between 30 and 50 years. The mean age of the subjects and controls were 40.0 6.6 and 34.8 6.2 years, respectively. The difference in the mean ages of the subjects and controls was statistically significant (t= 5.18; p < 0.05).

The marital status of the respondents is also illustrated in this Table. Of the 69 (65.1%) of the subjects that were married, 17 (16.0%) were separated, 3 (2.8%) divorced and 9 (8.5%) widowed. Comparatively, 81 (80.2%) of the controls were married. A total of 12 (11.9%) were widowed, 5 (4.9%) separated, while 1(0.9%) was divorced and lived with partner without marriage respectively ( $X^2$ =24.86, df=2; p<0.05).

Educational/ Occupational Status and Family type of respondents are also illustrated in Table 1. A total of 39 (36.8%) out of 106 mothers of children with learning disability and 10 (9.9%) out 101 mothers of normal healthy children had primary school education ( $X^2$ = 38.57, df=4; p<0.05). Majority of the subjects 55 (51.9%) were unemployed, compared with 19 (18.8%) of the controls ( $X^2$ =24.86, df=2; p<0.05).

Also, majority of the subjects 69 (65.1%) and the controls, 85 (84.2%) were from polygamous home setting. A total of 37 (34.9%) and 16 (15.8%) of both the subjects and controls were from polygamous background ( $X^2 = 9.85$ , df=1; p <0.05).

Table II shows the GHQ scores of the respondents. Of the 106 mothers of children with learning disability, 28 (26.4%) scored 5 and above on the GHQ compared to 10 (9.9%) of the controls. Table III highlights the psychological effects of the learning disability on the mothers. A total of 27 (25.5%) of the subjects and 7 (6.9%) of the controls, scored 8 and above on the anxiety scale. Similarly, 11 (10.4%) out of 106 mothers of children with learning disability scored 8 and above on the depression scale, compared to 4 (3.9%) out of 101 mothers.

Table I. Sociodemographic characteristics of the respondents

Subjec	Controls			
Characteristics	Frequency	%	Frequency	%
a. Age in years ≤20	O	0	0	0
21-25	1	0.9	3	3.0
26-30	3	2.8	17	16.8
31-35	23	21.8	21	20.8
36-40	33	31.2	37	36.6
41-45	24	22.6	13	12.9
46-50	18	17.0	9	8.9
51-55	2	1.9	1	1.0
56-60	1	0.9	0	0
61-65 TOTAL	1	0.9	101	0
TOTAL	106	100	101	100
b. Marital status Never married	7	6.6	2	2.0
Never married Married	7 69	65.2	81	80.1
Separated	17	16.0	5	4.9
Divorced	3	2.8	1	0.9
Widowed	9	8.5	12	11.9
Living together but no				
marriage	1	0.9	o	O
TOTAL	106	100	101	100
c. Highest edu. le	vel			
No schooling				
Primary school	5	4.7	0	0
Sec. School	34	32.2	10	9,9
College	40	37.7	29	28.7
University	12	11.3	30	29.7
Not stated	14	13.2	32	31.7
	1	0.9	0	0
TOTAL	106	100	101	100
d. Occupation			The control of the co	
Unemployed	55	51.9	19	18.8
Self -employed	22	20.8	43	42.6
Employed	29	27.3	39	38.6
TOTAL	106	100	101	100
e. Family type	•		-	
Monogamy	69	65.1	85	84.2
Polygamy	37	34.9	16	15.8
TOTAL	106	100	101	100

Table II. General Health Questionnaires (GHQ) Scores of the Respondents

Subj	ects	Controls			
Scores	Frequency	%	Frequency	%	
≤5	78	73.6	91	90.1	
≥5	28	26.4	10	9.9	
Total	106	100	101	100	

Table III. Anxiety and Depression scores of the respondents

Anxiety				Depression					
Subjects		Controls		Subjects		Controls			
Scores	Frequency	%	Frequency	%	Frequency	%	Frequency	%	
0-7	79	74.5	94	93.1	95	89.6	97	96.0	
8-10	21	19.8	5	4.9	9	8.5	4	4.0	
11 -14	5	4.7	2	2.0	2	1.9	0	0	
15 - 21	1	0.9	0	0	0	0	0	0	
Total	106	100	101	100	106	100	101	100	

#### DISCUSSION

The results of this study showed that anxiety and depression are common amongst mothers of children with learning disability. Comparatively, 25.5% of subjects and 6.9% of controls suffered from anxiety, while 10.4% and 3.9% had depression, respectively. This is similar to findings made in previous studies that reported high prevalence of anxiety and depression in parents of children with learning disability <sup>11-13</sup>. The high GHQ score of 5 and above of subjects (26.4%) compared with 9.9% of controls also demonstrated a high psychiatric morbidity in mothers. Studies conducted outside Africa have reported high prevalence of psychiatric morbidity in mothers of children with learning disability<sup>6</sup>.

The mean age of the subjects and the controls were  $40.0\pm6.6$  years and  $34.8\pm6.2$  years, respectively. Earlier studies had attributed learning disability to advancing age of parents 16. In the past, teenage mothers were reported with no or little risk of mental handicap to their children. However, recently, it has been found that teenage pregnancies are frequent and are associated with obstetric complications, prematurity and low birth weights (3). This may be argued as an important factor associated with learning disability even in the controls.

Another significant finding of this study was the marital dysfunction amongst mothers of children with learning disability. A total 16.0% of subjects and 4.9% of controls were separated. This was similar to earlier studies that reported high rate of marital difficulties in mothers of children with learning disability <sup>17</sup>. The high rate might be due to increased burden, frequent disruption of family routine and leisure, poor social interaction and ill- effect on their physical and mental health. Although a sizeable proportion of the controls were also found to have had marital problems, it is arguable that the prevailing economic hardship

resulting from underemployment and/or unemployment with attending social consequences might be responsible for lack of stable and long lasting relationships in some families.

Majority of the mothers, (36.8%) in our study had little or no education and were unemployed. Studies conducted outside Africa have reported low educational and employment status amongst parents of children with learning disability <sup>5</sup>. It has also been observed that low educational status accounts for low income and poverty In some families with polygamous setting, these contribute to a high level of stress.

The limitations of this study included the following: The number of children within the age bracket in the Centre was small, some mothers were very reluctant to be identified with their disabled children and the controlled group was resentful to mental illness generally and in spite of appeal and persuasion, most of them were unwilling to participate fully in the study. These contributed to the small population size in this study.

In conclusion, the vulnerability of parents of children with learning disability to psychiatric morbidity including anxiety and depression calls for concerted efforts to improve their health needs. There is a dire need for an adequate policy to develop useful intervention strategies. This is important because of the functional disabilities, low productivity and health hazards that are associated with anxiety and depression. It is worthy of note that the mental and physical health of these parents is essential for proper rehabilitation of the disabled children in the society.

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## **REFERENCES**

- 1. Goh S, Holland AJ. A framework for commissioning
- f or people with learning disabilities. Journal Public Health Medicine 1994; 16 (3): 279-85.
- Shah PM. Prevention of mental handicap in children in primary health care. BulletinWHO, 1991; 69 (6): 279-89.
- Sonannder K, Claesson M. Classification, prevention and rehabilitation of intellectual disability: an overview of

- research in the People's Republic of China. J Intellect Disabil Res 1997; 41 (pt2): 180-92.
- Stromme P, Valvatne K. Mental retardation in Norway: prevalence and sub classification in a cohort of 30037 children born between 1980 and 1985. Acta Paediatr 1998; 87 (3): 291-6.
- Camp BW, Broman S I, Nichols P L, Leff M. Maternal and neonatal risk factors for mental retardation: defining the 'at-risk child'. Early human Development 1998; 50 (2): 59-73.
- Roman-Clarkson S E, Clarkson J E, Dittmer I D, et al. Impact of the handicapped child on metal health of parents. British Medical journal of Clinical Res Ed 1986; 29 (6): 1395-7.
- Strand E. Living with a handicapped child. How can we face the strain? New Zealand Nur Journal 1979; 30 (32): 174-5.
- Fuller GB, Rankin R E. Differences in levels of parental stress among mothers of learning disabled, emotionally disabled and regular school children. Percept Mot skills, 1994; 78 (2): 583.
- Browne G, Bramston P. Stress and quality of life in parents of young people with intellectual disabilities. Journal of Psychiatric and Mental Health Nursing 1998; 5 (5): 415-21.
- Ong C, Chandran V, Peng L. Stress experienced by mothers of Malayan children with mental retardation. Journal Paediatr Child Health 1999; 35 (4): 358-62.
- Burden R L. Measuring the effect of illness on mothers of handicapped infants: Must depression always follow? Child Care Health Dev 1980; 6: 111-25.
- Martin C, Cabrol S, Lepine J P, et al. Anxiety and depressive disorders in fathers and mothers of anxious school refusers. Journal American Child Adolescents Psychiatry 1999; 28 (4): 916-22.
- Blacher J, Sharpiro J, Lopez S, Fusco J. Depression in Latina mothers of children with mental retardation. Am J Ment Retard 1997; 101(5): 483-96.
- 14. Mary N L. Reactions of Black, Hispanic, and White mothers to having a child with handicaps. Mental Retardation 1990; 28 (1):1-5.
- 15. Singhi P D, Goyal L, Pershal D, *et al.* Psychosocial problems in the families of disabled children. British Journal Med Psychol 1990; 63 (pt.2): 173-82.
- Zhang S L. Effects of parents' age, birth order and mental retardation of unknown aetiology. Chung Hua Shen Ching Ko Tsa Chih 1992; 25 (5): 303-318.
- Floyd F J, Zmich D E. Marriage and parenting partnership: perceptions and interactions of parents with mentally retarded and typically developing children. Child Development 1991; 62 (6): 1434-45.