



Research Article

Assessment of Stressors and Coping Mechanisms Among Mothers of Hearing Impaired Children in South-Western Nigeria

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Abstract

Stress is a major health-related problem among the mothers of hearing impaired persons. There is however dearth of information about the level of stress and coping mechanisms among this population especially in urban settings in Nigeria. This study, therefore focuses on the evaluation of categories of stressors and coping mechanisms among the mothers of hearing impaired children in South -Western Nigeria. The study was a cross sectional survey which relied on social learning theory. 320 respondents comprising mothers of hearing impaired students participated in the study using purposive sampling technique to select the participants from special schools across the senatorial districts within Ogun, Ondo and Lagos states. Data were elicited from the respondents through structured questionnaire that consisted 27 items. The analyses were carried out with descriptive statistics such as percentages, frequency distribution tables and mean. Secondary data were obtained from government publications, schools records and internet materials that are relevant to the scientific investigation. The findings revealed that majority of mothers of hearing impaired students have high level of knowledge about the causes of the disability and they experienced a set of child-related stressors arising from the inability of the children to understand simple communication, inability to do domestic chores and their vulnerability to sexual abuse among others. The findings also revealed that mothers who are separated from their husbands suffered maximum stress showing significant relationship between stress level and their marital status while they adopted complaint, annoyance, avoidance and seeking social support as coping strategies to deal with the emanated psychological processes associated with the stressors. The study, however proffered appropriate remedies such as social support, enlightenment, education, empowerment of women and proper funding of special schools to assist these mothers and children.

Keywords: Coping mechanism, Hearing impaired children, Mothers, Social Learning Theory, Stress.

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Introduction

Background of the study

Physical growth of children occurs rapidly early in development. Rapid growth is a signal that the organism is passing through a sensitive period that may well have both immediate and long-term implications. At the prenatal developmental stage, vital structures continue to grow and develop so that the foetus comes more and more to resemble a newborn infant; Van Den Bergh, Van Den Heuvel, Lahti, Braeken, De Rooij, Entringer, Hoyer, Roseboom, Räikkönen and King, S. (2020). Physical disabilities are due to remarkable changes in growth and development of the foetus due to some factors such as protein-energy malnutrition (PEM) (inadequate diet of proteins), vitamins and minerals, maternal smoking during pregnancy, alcohol consumption during pregnancy, stress and trauma. All these lead to low birth weight babies, defective auditory perception, night blindness, learning and memory defects and brain damage (Antonides, Schoonderwoerd, Scholz, Berg, Nordquist and Van der Staay, 2015; Wang, Fu and Liu, 2016). The right of the parents to the custody, care and upbringing of their children is one of the most basic rights of our civilization. The emphasis upon the importance of the home unit in which children are brought up by their natural parents is one of the great humanizations of African civilization (Braden, Boute, Wynter-Hoyte, Long, Aitken, Collins, Frazier, Gamble, Hall and Hodge, 2022).

Women have many roles: spouse, mother, caregiver, friend and/or worker (Sumra and Schillaci, 2015). Mothers on whom the physical and psychological strains of caring for children with disabilities devolved are often very severely affected (Brewer, 2018). Children with disabilities have dependency behaviours to meet their needs (Bariroh, 2018). These dependency behaviours can be a source of stress for families, especially parents of children with disabilities (Moawad, 2012; Smith and Grzywacz, 2014). A person is said to have hearing loss if they are not able to hear as well as someone with normal hearing thresholds of 20 dB in one or both ears. It can be mild, moderate, moderately severe, severe or profound, and can affect one or both ears. Deafness is usually the result of inner ear or nerve damage. It may be caused by a congenital defect, injury, disease, certain medication, exposure to loud noise or age-related wear and tear. People who have hearing loss are only able to hear some of the speech and sounds around

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them. If they can hardly hear anything, or can't hear anything at all, they are considered to be deaf. Deaf people may be able to hear a few sounds, but can't understand speech and more than 100 thousand cases of hearing impairment are being recorded per year in Nigeria. Treatment can help, but this condition cannot be cured. It is usually self-diagnosable and laboratory tests or imaging are often required; May, Bauer, Schneider-Ziebe, and Giulini-Limbach (2023). Some common causes of hearing loss include but not limited to the underlisted factors and conditions:

- i. Infections
- ii. loud or prolonged noise exposure
- iii. ageing
- iv. getting an object stuck in the ear
- v. medication side effects and
- vi. Genetic factors

The chief symptoms of hearing loss is an inability to hear sounds and treatment depends on severity. For some, hearing may be possible with surgery or a hearing device. Lip-reading skills, written or printed text and sign language may help with communication. The parents or caregivers of children with disabilities face different set of problems and need to adopt different coping skills that help to ameliorate, modify or manage stressful events or crisis situations. Parents of today face many challenges, including maintaining their own health and happiness in order to be able to facilitate their children's optimal physical, emotional, and social growth. However, parents are often unable to handle the pressure of everyday life and may therefore suffer from stress, anxiety, and/or other psychological reactions. Having a child with disability often poses specific challenges for the parents (Lalvani, 2015). Parents' reactions vary in intensity and can include disappointment, guilt, grief, sorrow, helplessness, and fear about the degree of disability and the unknown future. Among all family members, mothers are the most affected by a child's disability. They generally assume more responsibilities for the child, spend most of their daily time with the child and tend to take a more active role in caring for a child with disability than fathers. Several studies have documented stress, depression, and anxiety among mothers of children with disabilities. Level of psychological distress have been linked to the extent of a child's disability, such as the degree of motor impairment, speech difficulties, intellectual impairment, feeding problems, poor toilet training, limited self-care skills, and behavioural problems, as well as the presence of epilepsy.

Mothers, in addition to their child caring role, home making duties and jobs outside the home, constantly bear the burden of looking after their affected children and feel the stress generated by the illness condition more than any other member of the family (Dow, 2016). The effects of these burdens on the mother's health and wellbeing can therefore not

be over-emphasized in the face of her role in the management and care of the physically challenged children;(Thomas,Mitchell and Woods,2018).

Statement of the research problem

Management of the hearing impaired children is required throughout the child's life and makes severe financial, emotional, economic and social demands on the family. These demands constitute a continuing source of stress conditions on their caregivers, especially their mothers. A person under stress may show these signs: increased arguments; conflict with co-workers or employers; frequent job changes; domestic or workplace violence;Eriksen, Høgh, and Hansen (2016). Stress is encountered in everyday living but certain situations are inherently more stressful which become counter productive and destructive forces in life. One in particular is the presence of a family member who has a chronic illness or lifelong disabilities (Becker, 2016).

Mothers normally bear most of the burdens; and the subsequent demands in their multiple roles elicit more stress (Calderón and Tennstedt, 2021). For example, Sumra and Schillaci, (2015) examined stress experiences of 95 women who were simultaneously occupying the roles of caregivers, mother and wife. The findings indicated that multiple role experiences could either detract from or enhance their mental and physical health. Aizer, Stroud, and Buka (2016), in their study observed that mothers' stress causes kids to become stressed too, raising their level of the stress hormone cortisol. This could lead to insulin resistance, which in turn may stress the insulin-producing beta cells and thereby trigger diabetes-related autoimmune reactions in genetically predisposed children. Therefore, it is imperative to look at the whole family situation and try to reduce parenting stress by, for example discussing various strategies in connection with serious life events. The mother usually must play both supportive and maintenance roles, especially in a disabled children. The effect of such stressful demands on her could be the development of some physical or psychological diseases, especially if the mother in question is vulnerable,(Aizer, Stroud and Buka, 2016).

There has been a dearth research Nigeria regarding mothers' managerial role and coping skills in relation to the burden they encounter in the care of their hearing impaired children. To fill this gap was the intention of this study. This study is therefore designed to identify and describe the nature of stress factors that may serve as obstacles to mother's management role for their children who have hearing impairment and other siblings. Efforts have been made in this study to learn about the mother's coping mechanisms for dealing with stressors, which make them productive and mentally balanced.

Objectives of the study

The main objective of this study is to identify, assess perceived stressors and the coping mechanisms among mothers of hearing impaired students in southwestern (S/A) part of Nigeria

Specific Objectives are to:

1. Assess the knowledge of mothers of hearing impaired children in South Western Nigeria about the causes of the hearing disability in children.
2. Identify the categories of stressors that mothers usually encounter.
3. Examine the relationship between the stressors and the marital status of the mothers of hearing impaired children.
4. Evaluate the coping strategies adopted by the mothers of hearing impaired children in dealing with the stressors.

Research questions

The study answered the following research questions:

1. What is the level of knowledge of mothers of the hearing impaired children about the causes of the disability in children?
2. What are the categories of stressors that mothers of hearing impaired children experience?
3. What is the relationship between stressors and the marital status of mothers of hearing impaired children?
4. What are the coping strategies adopted by the mothers of the hearing impaired children in dealing with the stressors?

Literature Review

Hearing Impairment

Hearing impairment is defined as the inability of an individual to hear sounds adequately whether permanent or fluctuating. This may be due to improper development, damage or disease to any part of the ear (**Figure 1**). A person who is said to have hearing impairment is not able to hear sounds well like someone with normal hearing thresholds of 20 dB. It can be mild, moderate, moderately severe, severe or profound, and can affect one or both ears. Deafness is usually the result of inner ear or nerve damage. It may be caused by a congenital defect, injury, disease, certain medication, exposure to loud noise or age-related wear and tear. There are many causes and types of deafness. The three basic categories of hearing loss are sensorineural hearing loss, conductive hearing loss and mixed hearing loss. (Wroblewska-Seniuk, Dabrowski, Greczka, Szabatowska, Glowacka, Szyfter, and Mazela (2018).

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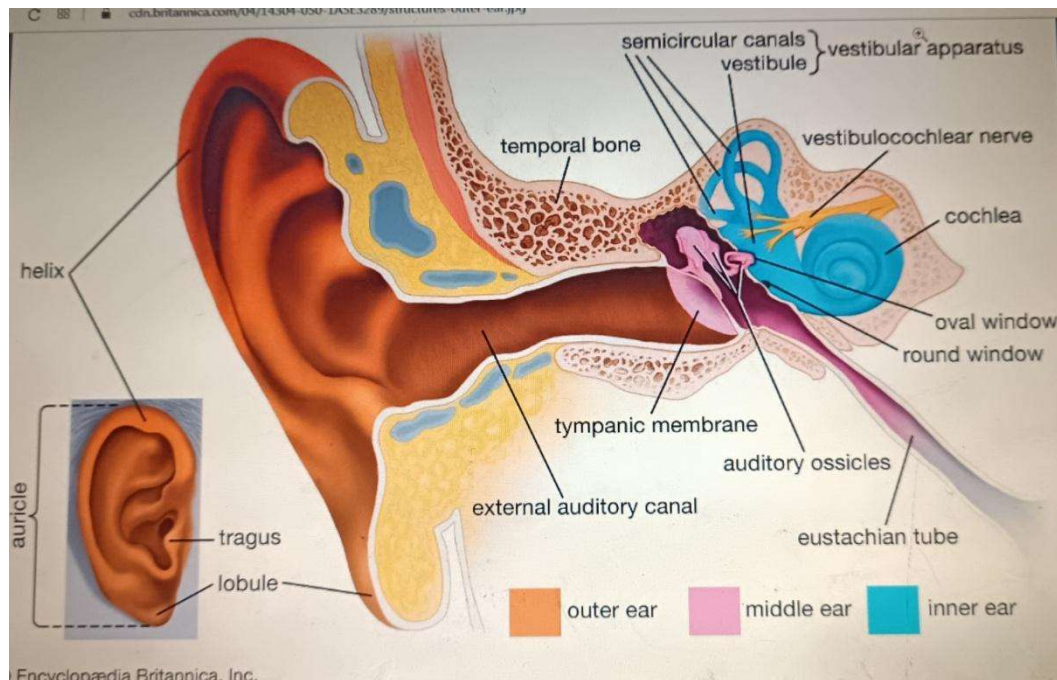


Figure 1: Structure of the human ear (Source:Encyclopedia Botannica, 2025)

Hearing Health Conditions

The underlisted are some of the common hearing health conditions:

1. Presbycusis: Hearing loss in both ears that occurs as a natural result of ageing resulting to perforated eardrum, a hole in the tissue that separates the ear canal from the middle ear, ear pain and hearing loss and drainage.
2. Otosclerosis : This is an inherited disorder that causes hearing loss due to the ear's inability to amplify sound. The symptoms may include: Conductive hearing loss, ringing in ears and balance disorder.
3. Sensorineural hearing loss : This hearing loss is caused by damage to the inner ear or the nerve from the ear to the brain. The symptoms may include: Hearing loss, speech delay, ringing in ears, middle ear infection, an infection of the air-filled space behind the eardrum (the middle ear), ear infections and ear discharge.

Hearing loss makes it hard to hear conversations and other sounds. Some people develop hearing loss as they age, but it can affect anyone (Wroblewska-Seniuk, Dabrowski, Greczka, Szabatowska, Glowacka, Szyfter and Mazela, 2018).

Concept of Stress

Heinen, Bullinger and Kocalevent(2017), in their own contention, defined stress as the level of anxiety perceived by an individual. Kiely (2018) went further to say that stress is

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a non-specific response of the human organism to demands made upon it, depending on the perceived threat of the demand. Stress can be described as wear and tear that the body experiences as it adjusts to a continually changing environment. Stress has physical and emotional effects, which create positive or negative feelings. This means that stress is a situation where an individual confronts an obstacle in fulfilling his strong needs and values (Shanafelt, Ripp and Trockel, 2020). Stress can be described as the behavioural or physiological responses that occur when an individual is confronted by an unpleasant situation or stressor (Folkman, 2020).

Stress is an integral part of daily life. While some stress is normal and even necessary, too much of it can affect quality of life and health. Stress can be reduced by identifying its causes, understanding and accepting what can be controlled and what cannot be controlled. Stress affects individuals differently, and the most effective ways to relieve it are different for each person. People who have a strong social support network are better able to handle life's challenges; which are supported by friends and family. Stress level can be evaluated depending on the genetic traits, support from family and friends, attitude, past experience with stress, and ability to cope (Zhu, Smith and Parrott, 2017). What is very stressful for one person may not be for another. Level of stress in any situation depends on how it is perceived and how long it lasts. Stress has a serious impact on health, especially if it is ongoing (chronic). It affects the heart and blood vessels, the nervous system, and the immune system. Stress can cause moodiness, anxiety, and difficulty in concentrating. It can make some health problems worse, such as coronary artery disease, diabetes and asthma. Overtime, stress can lead to depression, relationship problems and poor performance at work or school (Zhu, Smith and Parrott, 2017).

The physical symptoms that occur when under stress enable us to 'flee' or 'fight' the threat. This response is a basic life protecting mechanism, enhancing physical and mental defences and preparedness. It focuses attention, and mobilizes the energy and resources necessary to be able to take appropriate action. Stress reactions are dependent on personality, professional experience, physical and emotional well-being. However, when the circumstances inducing the stress are excessive, very intense or continuing over a period of time, stress may begin to negatively affect an individual's personality, health and ability to perform physically and mentally (Shields and Slavich, 2017). Folkman (2020) defined stress in terms of specific life events, that is the response that emanates from the occurrences of chronic minor life events like daily hassles or job strains. The psychological effects and emotional disequilibria which parents the physically challenged suffer are equally severe. The unending patronage of traditional and orthodox healing homes result in serious emotional distress. The parents live in perpetual fear from one spiritual home to another for assurance that their child would get well (Reddy,

Fewster and Gurayah, 2019). Sometimes, parents are persuaded to seek non-medical opinions. The interventions are often dangerous and expensive.

Concept of Coping

The study of physiological responses of stress and coping has a distinguished and long history. In the early 1930s, the biosychologist Walter Cannon used the term stress to describe challenges and disturbances to homeostasis, that is, the ability for an individual to maintain internal equilibrium to homeostasis. It involves ability to an individuals to maintain internal equilibrium by making adjustments to physiological processes, Folkman(2020). Coping involves adjusting to unusual demands, or stressors. This requires giving a greater effort and using greater energy than what's needed in the daily routines of life. Prolonged mobilization of effort can contribute to elevated levels of stress-related hormones and to eventual physical breakdown and illness.

From a physiological standpoint, coping is effortful and controlled, an organized, goal-directed, and higher-order task that takes place in the front regions of the brain, especially the prefrontal cortex (Compas, Jaser, Bettis, Watson, Gruhn, Dunbar, Williams, and Thigpen, 2017). Individuals do not react to stress in the same way in every situation, and those who are good at coping shift their strategies to fit the situation. Coping is often used to dampen stress reactivity.

There is a set of processes through which people anticipate or detect potential stressors and act in advance to prevent them or to mute their impact(Yusriani, Patiro, Prambudi and Effendy, 2023). As such, proactive coping is a blend of two extensively studied processes, coping and self-regulation. Coping consists of activities undertaken to master, reduce, or tolerate environmental or intrapsychic demands perceived as representing threat, harm, or loss (Kivimäki and Steptoe, 2018). Self-regulation is the process through which people control, direct, and correct their own actions as they move toward or away from various goals (Yusriani et al., 2023). Proactive coping combines these two processes by examining people's emotions, thoughts, and behaviors as they anticipate and address potential sources of adversity that might interfere with the pursuit of their goals (Yusriani, Patiro, Prambudi and Effendy, 2023).

Theoretical Review

The study adopts Social Learning. Theory as its theoretical fulcrum.

Social Learning Theory

According to Albert Bandura's social learning theory, a number of factors influence an individual's acquisition of certain behavioural tendencies. These include the reciprocal

interaction of personal and environmental factors. Environmental factors are the ones that are physical/external to the individual and these include opportunities for social support. Behavioural acquisition can also occur by watching the actions and outcomes of others' behaviour within the environment (observational learning). For instance the mother watches other mothers of hearing impaired and imitates some of her behaviour. Social Learning Theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural and environmental influences. Self-efficacy which expresses belief regarding one's ability to successfully carry out a course of action or perform a behaviour which is linked with actually having the skills necessary for performance of the desired behaviour. Outcome expectations reflect the belief that the performance of a behaviour will have desired effects or consequences. This is an important factor for shaping behaviour, i.e. people are likely to take some actions, if they believe that doing so will yield expected results (Devi, Khandelwal and Das, 2017).

Bandura argued that perceived self-efficacy influences all aspects of behaviour including acquisition of new behaviour and inhibition of existing behaviour. This was further confirmed by Agholor (2019) in an attempt to evaluate the role of self-efficacy in achieving health behaviour changes, observing that when certain skills have been acquired through personal experiences, observational learning and verbal persuasions, and are successfully performed, this further enhances self-efficacy. They concluded by ascribing a consistently positive relationship between self-efficacy and healthy behavioural change and maintenance (Agholor, 2019).

Bandura (1986) as cited in Koutroubas and Galanakis (2022), stated that the behavioural patterns making up personality do not operate at random but they are under the influence of a self system affecting most of the individual's behaviours, and this leads to a judgement process that in turns leads to a self-response. This self- response includes a sense of self-efficacy, which is an evaluation of one's own effectiveness in dealing with the situation. Self-efficacy develops through a special form of observational learning in which the individual observes his or her own actions in relation to the outcome of a situation. Self-efficacy increases through a number of factors, which are information, modelling and practices. According to Bandura, motivation and behaviour is a situation of the belief in one's ability, while an individual's self-efficacy belief can be enhanced via modeling, social persuasion, performance mastery and interpretation of physiological systems. Moreover, enhancing self-efficacy leads to improved behavioural motivation, thinking patterns and emotional well-being (Devi, Khandelwal and Das ,2017).

Methodology

The study adopted the use of descriptive and explanatory cross section survey to generate information from the mothers of hearing impaired students in some selected special schools from Oyo, Ondo, and Lagos states from the south western part of Nigeria. The three states were stratified into three senatorial districts each. Three hundred and sixty(360) respondents were selected through purposive sampling technique. The respondents met all the eligibility criteria and their participation was voluntary. Their opinions were assessed through structured questionnaire. Interpretation from the experts in the field ensured the face and content validity of the instrument. The researcher went round all the selected special schools to carry out the study. The head teacher in each school invited mothers at their own end for questionnaire administration. The study was carried out within a period of three months (June-September, 2024) by the researcher and six(6) trained female research assistants. The data collated were fed into the computer system using the SPSS version of the software package. Questionnaire from the field were sorted and coded. Descriptive statistics such as frequency distribution table and percentages for data analysis. All responses of the respondents were willingly to obtained, coded and accorded the high degree of confidentiality.

Table 1: List of schools randomly selected for research

Locations	Public Schools	Private Schools
Lagos East	National Orthopaedic Hospital Special School, Igbobi.	Friends of the Deaf Int'l Foundation, Ikorodu
Lagos Central	Wesley School 2 for the Hearing Impaired, Surulere	Friends of People with Disability, Lagos Island
Lagos West	Favour Auditory Oral School, Ejigbo	Gifted Talent School for the Deaf. Badagry
Ondo North	School for the Hearing Impaired, Owo	Aunty Stella Infant School for the Deaf, Akure
Ondo Central	School for the Hearing Impaired, Akure	Special Children School, Akure
Ondo South	School for the Hearing Impaired, Okitipupa	Anglican Diocese of Ondo School, Ode-Aye
Oyo North	Ogbomoso School for the Deaf, Ogbomoso	Special School, Saki
Oyo Central	Oluyole Cheshire Home, Eleyele	Anglican Diocese of Ibadan School for the Handicapped, Molete
Oyo South	Special Education Unit, Adeoyo	Sabol School for the Handicapped, Bodija

Source: Questionnaire 2024

Table 1 presented the list of the special schools selected randomly for this research. These schools comprised 9 government owned schools and 9(nine) private schools across the senatorial districts of Lagos, Ondo and Oyo States.

Table 2: Response Rate of Respondents to Questionnaire administration

Total Number of Questionnaires Sent out	% Sent out	Number of used Questionnaires	% used questionnaire	Number of questionnaire unused	% of unused questionnaire
360	100	320	88.9	40	11.1

Table 2 presented analysis of the response rate of the respondents to questionnaire administration. From the analysis, the result showed that 320 respondents representing 88.9% of the population correctly filled the questionnaire, while 40 respondents representing 11.1% returned improperly answered questionnaire. The discarded questionnaire did not significantly alter the outcome of the study.

Data Presentation and Analysis

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 3 presented the demographic characteristics of the respondents. From the analysis of the results, their ages ranged between 15 and 74 years with mean age of 44.5 years. Majority of the respondents (130) fell within the age bracket of 35-44 years representing 40.6% of the study population. Educationally, out of 320 respondents, 79(24.7%) had no formal education, 48(15%) had arabic education, 10(3%) had primary education, 56(17.5%) had secondary education, 127(39.7%) had tertiary education. It can be inferred that majority of the respondents were educated. Maritally, 214 respondents representing 66.88% were married; 73(22.81%) were divorced; 21(6.56%) were separated; 12(3.75%) were widows. It can, therefore be inferred that majority of the respondents were married. 203(63.44%) respondents were into monogamous type of marriage while 117(36.56%) were into polygamous type. It can be inferred from the results that majority of the respondents marriage type were monogamous in nature.

Table 3: Socio-demographic Characteristics of Respondents (N = 320)

S/N	ITEMS	FREQUENCY	PERCENTAGE (%)
1	Age (years)	16	1.6
	15-24	56	18.4
	25-34	130	45.2
	35-44	72	24.8
	45-54	31	8.4
	55-64	15	1.6
	65-74	320	100
	Total		
2	Level of Education		
	No formal education	79	24.7
	Arabic	48	15
	Primary	10	3
	Secondary	56	17.5
	Tertiary	127	39.7
	Total	320	100
3	Ethnic group		
	Yoruba	237	74
	Igbo	37	11.6
	Hausa	25	7.8
	Others (Ebitra, Ijaw, Efik)	21	6.6
	Total	320	
4	Religion		
	Christianity	181	56.56
	Islam	117	36.56
	Traditional	22	6.88
	Total	320	100
5	Types of marriage		
	Monogamous	203	64.44
	Polygamous	117	36.56
	Total	320	100
6	Marital status		
	Married	214	66.88
	Divorced	73	22.81
	Separated	21	6.56
	Widow	12	3.75
	Total	320	100
7	Occupation		
	Business woman/Trader	148	46.25
	Civil servant	92	28.75
	Artisan	43	13.44
	Housewife/Unemployed	21	6.56
	Private firms	16	5
	Total	320	100

Source: Questionnaire 2024

The predominant religions of the respondents were christianity 181(56.66%), Islam 117(36.56%) and traditional 22(6.88%). The majority of the respondents were christians. 237 respondents representing 74% were yoruba, 37(11.6%) were Ibos, 25(7.8%) were Hausa while 21(6.6%) belonged to other ethnic groups such as Ebira, Ijaw, Efik. It can be inferred that majority of the respondents belonged to Yoruba ethnic group. In the same vein, 148(46.25%) respondents were women business/traders; 92(28.75%) were civil servants; 43(13.44%) were artisans; 21(6.56%) were unemployed housewives and 16(%) worked in private establishments. The results showed that majority of the respondents were Business women.

Section B : Research Questions

Research Question 1: What is the level of mother's knowledge about the causes of hearing impairment in children?

Table 4: Respondents' knowledge on the causes of hearing impairment in children.

S/N	ITEMS	FREQUENCY	PERCENTAGE (%)
1	Accident (Head injuries e.t.c)	25	7.8
2	Mother's sickness during pregnancy	51	15.9
3	Drug abuse	14	4.4
4	Birth Complications	34	10.6
5	Genetic factors	68	21.3
6	Infections	54	16.9
7	Exposure to loud noise	27	8.4
8	Enemy's attack	17	5.3
9	Natural cause	10	3.1
10	I don't know	20	6.3
	Total	320	100

Source: Questionnaire 2024

Table 4 presented the analysis of mothers opinions about the causes of hearing impairment in children. The results show that out of 320 respondents, 25 respondents representing 7.8% opined that accident as the cause of hearing impairment in children while 51(15.9%) respondents choose mother's sickness developed during pregnancy; 14(4.4%) chose drug abuse by the mothers; 34(10.6%) chose birth complications; 68(21.3%) chose genetic factor; 54(16.9%) chose infections; 27(8.4%) chose exposure to loud noise;

17(5.3%) supported enemy attack's; 10(3.1%) chose natural cause and 29(6.3%) did not know any cause.

It can be deduced from the results that majority of the mothers supported genetic factor as the cause of hearing impairment in children.

Research Question 2: What are the categories of stressors that mothers of hearing impairment children encounter?

Table 5 presented the stressors that the mothers' of hearing impaired children experienced. The results showed that out of 320 respondents; 93 respondents representing 29.0% experienced child-related stress; 56(17.5%) experienced financial related stress; 81(25.3%) experienced family/community related stress; 52(16.3%) experienced school related stress; 38(11.9%) experienced psychological related stress. It can be inferred that the majority of the mothers experienced child related stress

Table 5: Respondents opinions on stressors that mothers of hearing impaired children encounter.

S/N	Variable	Frequency	Percentage (%)
A	Child related stressors		
	Personal care and hygiene of the child, Inability to understand simple communication, Inability to do domestic chores, Irrational behavior of the child, Vulnerability to sexual abuse, Inability of the child to talk, Inability of the child to eat e.t.c	93	29.0
B	Financial related stressors	56	17.5
	Cost of feeding, hospital bills, transportation,		

C	Inadequate financial support Family/Community related stressors: Siblings rivalry/jealousy, social sigma, inadequate help or support from husbands and in-laws, strained relationships with friends, poor job performance e.t.c	81	25.3
D	School Related stressors: Poor school facilities, Inadequate learning aids, Lack of means of transportation to and from school, School fees expenses, Teachers' attitude, Poor Academic performance	52	16.3
E	Psychological Related Stressors: Personal feelings when noticed the children disability, Negative people opinions, Fear of having another child with disability and Search for alternative means of getting cured	38	11.9
	Total	320	100

Source: Questionnaire 2024

Research Question 3: What is the stress level of mother in relation to their types of marital status

Table 6: Respondents' opinions on their stress level in relation to their marital status

S/N	VARIABLES	FREQUENCY	PERCENTAGE
1	Non-married	63	19.7
2	Married	40	12.5
3	Divorced	74	23.1
4	Separated	88	27.5
5	Widows	55	17.2
Total		320	100

Source: Questionnaire 2024

Table 6 presented the opinions of respondents on their stress level in relation to their marital status. Out of 250 respondents, 63 are non-married representing 19.7% expressed their opinions about the level of stress; 40(12.5%) are married;74(23.1%) are divorced; 88 (27.5%) are separated; 55(17.2%) are widows. It can be concluded that mothers of hearing impaired children who are separated from their husbands have highest level of stress.

Research Question 4: What are the coping strategies adopted by mothers of hearing impaired children.

Table 7: Respondents' opinions on the coping strategies adopted by mothers of hearing impaired children.

S/N	ITEMS	FREQUENCY	PERCENTAGE
1	Acceptance	90	28.1
2	Complaints	116	36.3
3	Anger	50	15.6
4	Avoidance	26	8.1
5	Seeking social support	38	11.9
Total		320	100

Source: Questionnaire 2024

Table 7 presented the opinions of mothers of hearing impaired children on the coping strategies they adopted to reduce the stress. From the results, out of 320 respondents, 90 respondents representing 28.1% adopted acceptance as their coping strategy; 116(36.3%) adopted complaint; 50(15.6%) adopted anger; 26(8.1%) adopted avoidance; 38(11.9%) adopted seeking social support.

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adopted social support. It can therefore be inferred that majority of the mothers adopted complaints as their coping strategies in dealing with the stress associated with raising hearing impaired children

Discussion of the results

The study is to assess the stressors and coping mechanisms among mothers of hearing impaired children in Southwestern Nigeria. About 127(39.7%) of the mothers of hearing impaired children surveyed had education. There may also be connections with other factors as explained by Aftyka, Ryboiad, Rosa, Wrobel and Karakula Juchnowicz (2017). Mothers of hearing impaired children are susceptible to stress of managing and caring for their children's disability and are also vulnerable to stress caused by hormonal changes, during menstrual cycle, pregnancy and menopause hormone levels that fluctuate constantly.

Zhu, Smith, and Parrott, 2017 noted that low amount of support (marital cohesion) given at home from a spouse affects meeting physical and mental demands and low latitude for making personal decisions make separated mothers vulnerable to more stress. This study supports this finding when the stress scores of separated mothers, who experience the greatest levels of stress, are compared with those in a monogamous marriage with high marital cohesion. The contrast between lower stress among monogamously married women and higher levels for those in polygamous situations requires explanation. Channa (2021) opined that, polygamy, however had the potential to cause severe problems". For example, social support may not be present when the age gap between co-wives is large. They noted that women in polygamous marriage "feared the witchcraft of co-wives... likely to be caused by jealousy over the relative treatment of children or the distribution of resources between wives' '.

Child-related factors ranked the highest among the category of stressors. These stressors are vulnerability to sexual abuse, onset of puberty and irrational behaviour of the child were the highest ranked child-related stressors. This was explained by Lalvani (2015) who stated that these persons are incapable of living independent lives or guarding themselves against exploitation and do not understand normal behaviours, not as clever as a normal person, feel inferior and try to show superiority by delinquent behaviours.

This study shows that mothers displayed a high level of knowledge about the causes and prevention of hearing challenges. Mothers' knowledge about the cause of hearing challenges had no influence on their stress levels. The higher the educational level of mothers, the higher their level of perceived seriousness of hearing challenges and the higher their level of stress. This finding is supported by Hsiao (2018) who reported that

stress factors among the educated, combined with the complex nature of human interactions contribute to multi-linked relationships and additional complexity. Ultimately, The finding of the study showed that mothers adopted complaints as coping strategies to manage the unpleasant conditions or serve as a buffer between stress and illness(Alsomali,2016).

Conclusion

This study highlighted and measured their level of perceived stress in designing an instrument that measured stress they experience in caring and managing their children's disability. The resulting scores computed from mothers' response to the 27-item stress factors, stress scores were found to vary. It was concluded that concerned with children elicited the highest scores. Main child-related stressors affecting participants were vulnerability of children to sexual abuse, onset of puberty and irrational behaviors of the children.

The study also concluded that mothers' approach stressful situations in different ways adopting five major strategies-acceptance, complaint, anger, avoidance and social support. The fact that a mother is unlikely to abandon her child might explain why most take to complaining in all the categories of stressors. Multiple responses for each category, as well as use of different coping mechanisms for different stressors, made it impossible to isolate a unique or overall coping style for each mother.

Recommendations

The following recommendations are hereby profered to assist the mothers of hearing impairment in coping with the stress associated with the care and maintenance of their children.

- i. **Social support:** It is an important mediating factor in controlling the effects of stress. Some mothers, such as those who are currently single or in polygamous situations, may need more focused support that could be found through their participation in hearing impaired peer clubs. The strengthening of networks in families and communities to provide support and care to their members especially mothers of the hearing impaired children. They should maximize their potential to participate in health development, and mental health promotion and enhance social capital. This is one of the thrusts of the National Health Promotion Policy (NHPP) through which health-related Millennium Development Goals (MDGs) can be achieved.

- ii. **Integrated management of maternal stress:** Focus should be on the detection and management of maternal stress, a major health issue for reproductive age women, which also have pervasive repercussions for child well-being. There should be routine screening of mothers for depression in paediatric services both in the children's schools or hospitals. Providers should learn about mothers' past and ongoing treatment for depression, when caring and managing their hearing impaired children so as to properly diagnose their health status.
- iii. **Education and self-management:** Mothers need to be educated about symptoms of their children's disability-inducing stress, self-management strategies, and available community-based services through seminars and public enlightenment programmes.
- iv. **Women Empowerment:** There is a need for skill development and empowerment for mothers' to promote self reliance and financial independence
- v. **Fundings:** There should be proper fundings of the special schools for the hearing impaired students and supply of teaching aids to them.

Area for Further Study

Parents and caregivers in this study were primarily female (100%) which is an important limitation to consider as fathers are also major figures in family systems and do play fundamental parts in heteronormative family dynamics alongside mothers. This study did not account for how fathers may fundamentally influence parent-deaf child dynamics. Low number of fathers participating in parenting research is an ongoing issue and is likely due to social norms emphasizing mothers as the primary caregiver. Future research could benefit from incorporating fathers in research by specifically targeting them.

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