MENTAL HEALTH PROBLEMS AMONG CHILDREN AND YOUTH LIVING WITH HEARING AND VISUAL IMPAIRMENTS IN THE GAMBIA

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DECLARATION

I hereby declare that this research project is my original work and the research project has never been submitted in part or whole to any institution for the attainment of a degree and where other sources of information have been used, the authors were duly acknowledged and listed in the references.

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CERTIFICATION

This is to certify that conduct of this study and the preparation of the thesis were carried out by BADJIE AIDA in the CENTRE FOR CHILD AND ADOLESCENT MENTAL HEALTH, UNIVERSITY OF IBADAN under our supervision

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DEDICATION

To my beloved mother, my wonderful husband and Allah' precious gifts Ndey Jainaba, Aisha, Fatima Jarra and Habib Alasan Colley. And to my bestie, my sister and soulmate Mrs. Ramatoulie Jammeh Sanneh.

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ABSTRACT

Background: Children and young people with hearing and visual impairments are at higher risk of mental health problems both within special and mainstream schools. There is limited information on the mental health problems among children and young people living with hearing and visual impairments in sub-Saharan Africa including The Gambia. The aim of this study was to determine the prevalence of mental health problems among hearing and visually impaired children and young people and the relationship with socio-demographic characteristics.

Materials and Methods: This was a mixed methods study. Teachers of 151 hearing impaired and 25 visually impaired children and young people completed both the Socio Demographic and Strengths and Difficulties Questionnaire (SDQ). A multivariate analysis was done on Socio Demographic and Strengths and Difficulties Questionnaire (SDQ) to identify correlates associated with mental health problems. In the qualitative aspect, focus group discussions were held with the teaching and non- teaching staff on their perceptions of mental health, resources available, resources needed and barriers to managing mental health problems in schools. Data were analyzed using thematic analysis.

Results: The mean age of the participants was 15.5 with standard deviation of 4.0. The prevalence of emotional and behavioral problems in the study population was found to be 30%. Among the respondents 11.4% had abnormal scores on the emotional problem domain while 18.2% had abnormal scores on the conduct problems domain, 13.1% had abnormal scores on the hyperactivity domain and 6.3% had abnormal scores on peer problems domain. The results showed that among the children with mental health problems 47(36.4%) were 18years and below while only 6(11.3%) were 19 years and above. The difference in age range was significantly associated with mental

health problems (p=0.002). It was found that those who are 19 years old and above were 74% less likely to have abnormal mental health disorder than the younger group (p=0.004), while those living with their fathers alone were 6 times more likely to have mental health problems than those living with two parents (p=0.012). Majority of the teachers indicated their understanding of mental health and believed that children with visual and hearing problems have mental health issues characterized by emotional problems; sadness and crying and behavioral problems; withdrawal and isolation, anxiousness, defiance, aggressiveness and arrogance among others. Resources available to help the children were parental involvement, engaging child in the class, making the school environment friendly through co-curricular activities and peer groupings, counselling and showing love and compassion to them. The participants also expressed their inadequate mental health knowledge and skills to help the children.

Conclusion: The findings in this study showed that one third of children with hearing and visual impairments experience mental health problems. Presently, there are limited resources available within special schools to manage their mental health problems. Hence, in order to meet their comprehensive mental health needs, effective intervention strategies and services must be put in place particularly mental health training for school staff.

Key Words: children, young people, disability, impairment, mental health, special educational needs

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Children and young people account for 2.2 billion individuals worldwide and 90% live in low and middle-income countries (Myron Belfer,2007). 50% of the young population have neuropsychiatric disorders as a leading cause of health-related issues. The World Report on Disability – published in 2011 by the World Bank and WHO - estimates that there are more than one billion people globally living with disabilities. This figure includes approximately 93 million children aged 0–14 years living with ‘‘moderate or severe disability’’ (5.1%) of whom 13 million (0.7%) experience severe difficulties. However, others have put this figure even higher – with UNICEF estimating that in 2005, a 150 million children were living with disabilities globally(Vergunst *et al.*, 2017). Both groups agree that childhood disability is most common in low and middle-income countries. With a population of 1.8 million, of whom 46% are below 15 years of age (Gambia Bureau of Statistics, 2013), a national survey revealed that 1.5% of the total population suffers from severe mental disorders and another 5% have mild mental disorders that require medical attention (The Gambia Mental Health Strategic Plan, 2007-2012). Like other LAMICs, the treatment gap for mental disorders in The Gambia is huge while the country still operates on outdated mental health laws that were enacted nearly a century ago and do not reflect the mental health needs of children and young people with or without disabilities, address the issues of access to care, protection of patients from involuntary admission and treatment, protection of the rights of people with disabilities and mental disorders, , protection of vulnerable group and issues of legislative links with others (Esan *et al*, 2014).

The region of sub-Saharan Africa is among the most resource-constrained regions of the world with the worst indices of human development (UNDP, 2012)(Owen *et al.*, 2016). Yet, >50% of the population in the region is constituted by children and young people (Population Reference Bureau, 2010). The combination of poverty, low human development capacity and a large child population set the stage for poor physical, social and mental health outcomes for children and young people(Atilola, 2017). Indeed, currently available data on the prevalence of childhood mental disorders in sub- Saharan Africa suggests that up to 20% of children and young people in the region suffer from one form of mental health problem or the other, and that socio-economic factors play a significant role (Cortina et al., 2012) cited in (Atilola, 2017). Child and adolescent mental health (CAMH) problems are yet to be given priority in the region, as child health initiatives and policies are still geared largely towards the prevention and management of the so-called childhood killer diseases (WHO, 2003)(Atilola, 2017) almost to the exclusion of CAMH issues (Omigbodun, 2009). Further attesting to the neglected position of CAMH issues in sub-Saharan Africa is the near absence of CAMH policies in the region (Kleintjes et al., 2010).

Without a CAMH policy, preventive and restorative mental health services for children and young people with disabilities cannot be anchored on an integrated platform that can ensure success particularly for children and young people with disabilities(Atilola, 2017). In such settings, children will suffer from preventable mental health problems particularly those with disabilities while those in need of curative services may not get it(Atilola, 2017). Unprevented and untreated mental health problems among children and young people with disabilities are associated with a lot of personal distress and constitute a major social and economic burden on families and the society at large (Merikangas, 2007)(Adeniyi, Omigbodun and Adeosun, 2019).

According to the United Nations convention on the rights of the child, the term disability is a broad term which includes persons who have long term physical, mental, intellectual or sensory impairments which in encounter with certain barriers will hinder their full participation and interaction in the society on equal basis as others(Szmukler and Bach, 2015). Thus, the term disability has been used to represent the conceptual components associated with the disability that impacts the person. It also includes environmental effects that limits the person (Szmukler and Bach, 2015). Disability can be described as the restriction or lack of ability to perform certain functions. According to the WHO(Msall and Hogan, 2007), disability is "an umbrella term, covering impairments, activity limitations, and participation restriction. Thus, disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives" (Thabet *et al.*, 2015). Persons living with some form of disability account for about 15% of the world population (Thabet *et al.*, 2015). Disability is a condition that can be caused by an accident, trauma, developmental aberration(s) or disease(s) which may limit a person's mobility, hearing, vision, speech/language or mental function(s).

Conditions that are considered as disabilities in children and adolescents are vast and they include: autism spectrum disorder, deaf-blindness, deafness, developmental delay, emotional disturbances, hearing impairment, intellectual disability, multiple disability, orthopedic impairment, traumatic brain injury, speech or language impairment, and visual impairment including blindness (Smith, 2007). Disability is grouped into physical, psychological, sensory etc.

Disability is a global problem. According to the world report on disability published in 2011, globally one billion individuals in the world live with some form of disabilities(Szmukler and Bach, 2015). Children and young people account for 1/10th of this population, with 13million of them experiencing severe disabilities. The United Nations Children Emergency Funds (UNICEF)

has set the bar even higher with an estimate in 2005 of 150 million children living with disabilities globally (Kuper *et al.*, 2014). However, despite these discrepancies, it is agreed that the burden is higher in low and middle-income countries. In fact, out of the 1 in 20 people living with disabilities, 3 out of 4 will come from a developing country. More often than not, they are among the poor or the poorest (Szmukler and Bach, 2015).

Children and the young with disabilities face several challenges in society especially in low and middle-income countries (Owen *et al.*, 2016). Just like any other mental illness, stigmatization that surrounds children with special needs is increasingly being recognized as a central issue (Owen *et al.*, 2016). The child is either stigmatized or the child and the family are stigmatized (Stephen P. Hinshaw). Consequently, children with disabilities have barriers in participating in many activities in society and this also includes education as some research have shown that not only are they are less likely to start school early, but they also have lower attendance rates(Vernosfaderani, 2014)(Marciana *et al.*, 2015). This gap in school attendance widens even more at the secondary school level(Kuper *et al.*, 2014) . In addition, despite their higher health care needs, they still have poor access to health care services (Kuper *et al.*, 2014). Lastly, there is also a perceived lack of inclusion of children and young people with disabilities in the development plan. National policies and strategies either in health or education seldomly reflect the needs and welfare of children and the young with disabilities(Ibeziako *et al.*, 2009). This exclusion in the long run may not only have deleterious effect on their physical health but also on their mental health(Blais *et al.*, 2003).

Having a disability irrespective of type increases the risk of developing mental health problems and disorders because of associated adverse and environmental factors(Kuper *et al.*, 2014). Several studies suggest that young people with intellectual disabilities often show behaviors and

experiences that may be associated with mental health problems. About 4% to 18% of young people with intellectual disabilities have a mental health diagnosis (Kuper *et al.*, 2014).

Moreover, mental health problems in young people with disabilities often go undiagnosed and untreated which greatly impacts on them acquiring skills relevant for them to be integrated back to their communities(Kuper *et al.*, 2014). Globally,10% to 20% of children and young people have mental health problems but their mental health needs are largely neglected. Moreover, mental disorders being the leading cause of disability in this age group and the everlasting effect it poses on them (Kieling c, Omigbodum et al 2011). Mental health problems are common in young people with physical disabilities. A physical disability may lead to social isolation as it can prevent some children from leaving the house or experiencing things previously experienced(Wiman, Helander and Westland, 2002). This may result to loss of personal independence especially if the disability requires the constant care and support of family members, carers or professionals. (Shaw Mind Foundation, 2015). This can eventually lead of feelings of helplessness, boredom and depression(Wiman, Helander and Westland, 2002). Children and the young with disabilities and their families often suffer a great deal of financial burden especially when it involves purchase of medications and transportation to and from schools and hospitals(Furnham and Lousley, 2013). This situation can lead to increased amount of stress and anxiety to the disabled child which may become severe enough to cause a mental health problem. (Shaw Mind Foundation, 2015)

Parents have limited access to services for their children let alone for their own psychological issues (Helander 1993). Where available, disability services such as health care, respite homes, locomotive and ambulatory devices and medical services are often limited or not accessible to parents (Helander 1993). It is obvious that children spend time with their caregivers in the homes and a lot more of their time in schools under the care and tutorage of the teachers as well. Aside

from their job as teachers, teachers serve as parents and counsellors to children especially those with disabilities in schools(Ibeziako *et al.*, 2009). Moreover, most schools in the developing countries do not have school mental health trained personnel, but teachers and staff may have knowledge about the health needs of students that the family may be unaware of, and they could be trained to carry out simple psychosocial interventions and act as sources of referral(Ibeziako *et al.*, 2009). With limited mental health care resources in the developing countries, teachers can play a significant role in early detection of mental health problems in children under their tutorage in schools hence early identification and intervention for young children's mental health problems is crucial to improve developmental trajectories and reduce the severity of emotional and behavioral disorders for children especially those with disabilities(Ibeziako *et al.*, 2009). Moreover teachers, have an opportunity to play a key role in early identification and referral for children's developmental, behavioral, and emotional problems (2013 US National Conference on Mental Health). Additionally, schools are regarded as suitable/fertile settings for screening and identification as they are less stigmatizing, and intimidating when compared to hospitals and clinics(Ibeziako *et al.*, 2009). Another reason why schools are ideal places for mental health is the fact that teachers can often be more objective observers of children's development than are parents. Teachers as well have the advantage of being able to assess an individual child's functioning in comparison to a naturalistic developmental comparison group displaying a range of normative behaviors (Rothì, Leavey, & Best, 2008). Hence, WHO defined a Health Promoting School as 'a school that constantly strengthens its capacity as a healthy setting for living, learning and working and which fosters health and learning with all measures at its disposal' (WHO 2008: online) A Health Promoting School combines policy, skills-based health education, a healthy physical and

psychosocial school environment, and access to services to provide a comprehensive approach.(Ibeziako *et al.*, 2009).

1.2 Statement of the Problem and Justification

About 50% of Gambian population are children. (GBoS, 2013), 10% of this population live with a disability (Gambia Federation of Persons with Disability, 1995). According to the EMIS, prevalence rate of students with special needs/disabilities at school level is 0.84 per cent with gender differentials of 0.46 and 0.37 per cent for males and females respectively('Validated SNE Policy Framework', 2016/2022). Though not significant, there are differentials at regional levels, however, there is no local data showing prevalence of mental disorders in children and young people with physical disabilities in The Gambia, though, a research conducted among adult population aged 15 and above showed 20% prevalence (The Gambia Mental Health Report Strategic Plan 2007-2012). However, holistic needs of children and young people with disability requires a multiple approach and concerted efforts of all stakeholders but the onus lies on the State to finance appropriate programs to promote their physical, emotional, social, cognitive, and spiritual development('Validated SNE Policy Framework', 2016/2022) yet this vulnerable group of children and young people have only their physical and educational needs catered for while nothing is done or known about their emotional needs (Special Needs policy framework 2005/2015). Presently, there are few special resource centres providing educational services to children with disabilities such as those who are visually impaired, hard of hearing and having learning difficulties however prevalence of mental health problems among young people with hearing and visual impairment is largely unknown in The Gambia. This study intends to fill the gap by investigating mental health disorders among children and young people living with hearing and visual impairment in the two special schools for the deaf and blind in The Gambia.

1.3 Aim

The aim of this study was to determine the prevalence of mental health problems in children and young people living with hearing and visual impairments in selected schools in The Gambia.

1.4 Specific objectives

This study was conducted with 5 specific objectives outlined below:

1. To determine prevalence and patterns of mental health problems among children and young people living with hearing and visual impairments in selected schools in The Gambia.
2. To determine sociodemographic correlates of mental health problems among children and young people living with hearing and visual impairments selected schools in The Gambia
3. To determine teaching and non-teaching staff's perceptions of mental health problems, etiology and symptoms among children and young people.

4. To determine teachers' perceptions on resources available and resources needed for tackling mental health problems in children and young people living with hearing and visual impairments.

6. To determine teachers' perspectives of barriers to children and young people receiving mental health care and possible solutions to mental health problems in children.

CHAPTER TWO

LITERATURE REVIEW

2.1 Concept of Disability

The concept of disability is subject to a wide range of interpretations. A study of contemporary literature on disability yields many different definitions based on medical, legal, sociological, psychological and even subjective emphasis (Ingstad and White, 1995). According to the World Health Organization, disability is any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being resulting from any impairment (WHO, 1976). Disability is a term which, in relation to an individual, describes a functional limitation (for performing tasks, skills and behaviour) which he or she may have arising from physical, intellectual or sensory impairment, medical conditions or mental illness. Such impairments, conditions or illnesses may be permanent or transitory in nature. (*Guidelines for Inclusion: Ensuring Access to Education for All,* UNESCO, Validated SNE Policy Framework', 2016/2022). According to the WHO, disability is "an umbrella term, covering impairments, activity limitations, and participation restriction. Thus, disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives" (Thabet *et al.,* 2015). Disabilities are the functional limitations that are the consequences of impairments while impairments are the physical conditions. The term disability means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of such individual.

Handicap refers to the disadvantages that people with disabilities face(Wiman, Helander and Westland, 2002). Handicaps are not individual characteristics but refer to the discriminating

structures and “rules of the game” in the system’s interaction between the individual and his/her environment(Wiman, Helander and Westland, 2002).

Impairment is a physical, intellectual, mental or sensory characteristic or condition, which places limitations on an individual’s personal or social functioning in comparison with someone who does not have that characteristic or condition. (VSO, 2006, ‘Validated SNE Policy Framework’, 2016/2022). It is a kind(s) of physiological loss or dysfunction in a person. The abnormality could be partial or total loss of an organ/systemic functions or part of the body which may be visible or invisible; congenital or acquired Impairments thus leading to deficiencies in bodily, sensory, and mental functions(Wiman, Helander and Westland, 2002).

The disability may lead to functional impairment in a child which may lead to difficulty in performing daily activities(Wiman, Helander and Westland, 2002). This which may require special attention and additional needs in school environment. Special Needs are conditions or factors that hinder normal learning and development of children and young people. The hindrance is a life-long condition that does not allow proper progress of an individual because of factors like disabilities, social, emotional, economic, health and other conditions(‘Validated SNE Policy Framework’, 2016/2022). These conditions are also referred to as barriers to learning and development. The barriers can be environmental, congenital or both. (‘Validated SNE Policy Framework’, 2016/2022)

According to the World Health Organization’s (WHO) Comprehensive Mental Health Action Plan 2013-2020, “Mental health is a state of **well-being** in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”. (World Health Organization (WHO) (2013) *Mental Health Action Plan 2013-2020.).* **Child mental health** is defined as Optimal Psychological

development & functioning**,** Positive sense of self, ability to manage thoughts, emotions & build social relationships, aptitude to learn & acquire an education opportunity to ultimately be able to have full participation in society (WHO (2013) *Mental Health Action Plan 2013-2020*)

Disability is a condition that can be caused by an accident, trauma, developmental aberration(s) or disease(s) which may limit a person's mobility, hearing, vision, speech/language or mental function(s)(Wiman, Helander and Westland, 2002). Some individuals with disability may have more than one disability. Globally some 180 million young people between the ages of 10-24 live with a physical, sensory, intellectual or mental health disability significant enough to make a difference in their daily lives(Wiman, Helander and Westland, 2002). About 150 million (80%) live in the developing world (United Nations, 1990). Evidence from numerous studies has shown that people with disabilities may be more vulnerable to abuse than others(Msall and Hogan, 2007) An estimated 19 million of the world's children are visually impaired, while 1.4 million are blind, according to WHO criteria (WHO 2013). There are limited population-based data on the epidemiology of childhood Visual Impairment and Blindness owing to the methodological challenges to obtaining accurate information on uncommon and heterogeneous disorders(Vernosfaderani *et al.*, 2014). In particular, robust data on the frequency of mild/moderate Visual Impairments are lacking for many countries where data are available for those with severe sight or visual impairment/blindness (SVI/BL). However, studies estimate the prevalence of childhood blindness in middle- and lower-income countries at between 0.2 and 7.8 per 10 000 (P, Hutchinson AK, Lewallen S 2011).

From an analysis in an American city of over 40,000 children, researchers found out that disabled children were 3.4 times more likely to be abused or neglected, 3.8 times more likely to be neglected, 3.8 times more likely to be physically abused, 3.1 times more likely to be sexually

abused and 3.9 more likely to be emotionally abused (Sullivan *et al*, 2000). All in all, 31% of the disabled children in the study had experienced one form of abuse or the other (Sullivan et al, 2000). The higher prevalence of sexual abuse among children and adolescents with hearing and visual impairment predisposes them to contracting sexually transmitted diseases (EF, 2012). Evidence has shown that blind and deaf people are very vulnerable to contracting HIV and they face serious barriers to access HIV/AIDS information, testing and treatment. Several studies indicate that they are as likely, if not twice as likely, to be infected with HIV (Hanass-Hancock *et al*., 2010).

Deaf persons learn about the world and interpersonal relations through their visual sense (Jambor and Elliot, 2005) cited by (Adeniyi, Omigbodun and Adeosun, 2019). When it comes to sexuality, they may be limited by their hearing impairment, likewise, the visually impaired by their impairment and as a result they often lack basic information about sexuality, intimate relationships, and HIV-related risks (UNICEF, 2012)(Adeniyi, Omigbodun and Adeosun, 2019). In addition, the information they do have is often unclear, incorrect, partial or biased (Jambor and Elliot, 2005)(Adeniyi, Omigbodun and Adeosun, 2019). The signs related to sexuality are often "seen" by the non-hearing impaired and the non-visually impaired as "too explicit", as they involve touching body parts in order to refer to them (UNICEF, 2012,(Adeniyi, Omigbodun and Adeosun, 2019)). These aspects are inherent to the blind and the "deaf culture" and to their way of addressing sexuality. This shows the significance of using printed materials and graphics for the blind to feel and sign language for the deaf to see and understand, and to ensure that television programmes include sign language interpreters in order to get the basic information clearly across to them (UNICEF, 2012)(Adeniyi, Omigbodun and Adeosun, 2019).

Children and adolescents with disabilities and their families face many barriers to their full participation in society(Mathias *et al.*, 2018). These barriers limit their capacity to contribute

towards and access community resources and services, including educational and health services (Mathias *et al.*, 2018). Like all young people, children with disabilities need to live in safe and supportive environments; they need education, health services and access to sports and recreation. They also need to acquire skills that will enable them to contribute meaningfully and become productive citizens in their respective environments (UNICEF, 1999)(Adeniyi, Omigbodun and Adeosun, 2019).

Young people with disabilities face social isolation, poverty and discrimination (Banks, Kuper and Polack, 2017). Numerous studies show that the greatest problems reported globally by experts and by individuals with disabilities are prejudice, social isolation and discrimination in society (UNICEF, 1999)(Mathias *et al.*, 2018). In a country like Pakistan, a child with a disability is said to be referred to as a 'little angel' (Muhammad, 2011)(Thabet *et al.*, 2015). Educating such children, including them in social interactions or preparing them for participation in the adult world seems unnecessary and meaningless to many(Msall and Hogan, 2007). Families of children and adolescents with disabilities often anticipate their early deaths, and not their survival due to burn out and burdening of care that usually comes with the disability (UNICEF, 1999).

"Disability" as an umbrella term, is used to identify the impairments that result from either disease and injury, the physical, and mental or emotional functional limitations or difficulties a person has because of the impairments, as well as the participation restriction they experience from an unsupportive environment. Thus, the term disability has been used to represent almost any of the conceptual components associated along the ability continuum that impacts the person, but it also includes the environmental effects that create a limiting impact from the context outside the person.

UN Convention on the Rights of Persons with Disabilities (CRPD) characterized that 'Persons with disabilities include those who have long-term physical, mental, intellectual or sensory

impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'. We take the term to embrace those with a mental disorder or impairment that has persistence over time and who may therefore have a range of encounters with the mental health system, experience the effects of social stigma or remain without access to needed health supports.

As is the case in most low- and middle-income countries (LMICs), SSA has few economic or human resources dedicated to the mental health of children and young people and in most countries, there is no clear pathway to access treatment, especially in-patient facilities. (WHO, 2010)(Kieling *et al.*, 2011). Resource-poor countries have the highest proportion of children living in very difficult circumstance and in dire need of mental health care (Review, 2012)(Robertson *et al.* 2004) and there is sufficient evidence to demonstrate significant morbidity from child mental health disorders in the developing world (Rahman *et al.* 2000). Many resource-constrained countries do not have a mental health policy, let alone a child mental health policy (WHO 2005) and Gambia, which is one of the smallest countries in Sub Saharan Africa, is no exception. In many developing countries, trained mental health professionals often number less than one per million of the population and the clear majority of people with mental health problems cannot be reached through centralized care (Rahman *et al.* 2000). The situation is even more critical for children and young people, as there is an extreme shortage of professionals in the child mental health service sector (Kieling *et al.*, 2011)(Dogra and Omigbodun 2004). It is often argued that a lack of knowledge on the part of classroom teachers, attributed to a lack of training, is one of the main barriers to inclusion (Breuer, 2017). However, attempts to identify the actual nature of the required knowledge are often meagre.

Breuer suggested that teachers need knowledge about learning difficulties and that they need to be skilled in using specific instructional methods(Breuer, 2017). Evidence on teaching practice and pedagogy in special and mainstream education suggests that the teaching strategies used in mainstream education can be adapted to assist students who have been identified as having special educational needs(Ponkko, Taanila and Ebeling, 2003). Classroom teachers do not recognize or know how to implement effective teaching practices for pupils with special needs, (Lewis and Norwich 2005). The survey on disabled children in the mainstream schools done by UNICEF and the Gambia government was introduced to assess the problems and constraints that beset both the disabled students and teachers in the learning and physical environments of the schools in The Gambia (UNICEF, Gambia government 2000). Thus, in this report, capacity issues, criteria for the selection of teachers, drop-out rates, the coping strategies and the efficiency of the schools in terms of providing acquisition of basic life and learning skills for disabled children have been assessed. The data from UNICEF findings reveals that 25.7 per cent of the disabled children in the mainstream schools are partially sighted. 12.3 are children with significant percent speaking problems, significant mobility problems 8.9 per cent, hard of hearing 5.4 per cent and significant manipulation and fits problems 3.7 per cent each. (UNICEF, Gambia government 2000). The study also reveals that, there is lack of special facilities and services for the disabled children in the mainstream schools to enhance their educational environment. Due to the high incidence of disability within the school going age of 14-18 years and the limited number of specialized educational institutions and mainly in the urban areas, children with disability are found in mainstream educational institutions with the semi urban and rural settings. In general, there are no set criteria for admission of disabled children in mainstream schools(UNICEF, Gambia government 2000). (Mathias *et al.*, 2018) Admission is mostly based on non-severity of the

disability, the conviction of the parents to the child's education and the head teachers' co-operation and about 65.4 percent of the schools surveyed do not tailor their timetable to suit the disabled children. (UNICEF, Gambia government 2000). The reasons for the non-flexibility of the timetable to accommodate the needs of the disabled children include lack of trained personnel in mainstream schools in The Gambia (UNICEF, Gambia government 2000).

However, responding to differences between pupils is not just a matter of 'good teaching', because we know that what works for most does not work for some. Indeed, that is the reasoning that originally led to the development of special needs education as a separate form of provision; but this is also the point where difficulties arise in articulating what is distinctive about either special or inclusive education (Schirmer 2003). What do teachers need to know and do? What is the role of specialist knowledge and how should it be used? Firstly, teachers need to know that it is important to differentiate between forms of provision and the teaching and learning that occurs within them (Kershner 2000). This is an important distinction because often they are confounded in the literature on special educational needs. As the places where formal learning occurs, forms of provision are the contexts within which teaching, and learning take place (Lewis and Norwich 2005). The actual teaching approach adopted by the teacher is generally determined by the teacher's beliefs about how people learn (Lewis and Norwich 2005). Learners vary across many dimensions and teachers are constantly making multiple decisions about how to respond to all kinds of difference (Lewis and Norwich 2005). Differences themselves are a matter of degree rather than of categorical distinction, so that a learner is considered to have special or additional needs when the magnitude of difficulty experienced by that learner exceeds the teacher's capacity to know how to respond (Forlin,2001).

Conditions that are considered as disabilities in children and adolescents are vast and they include: autism spectrum disorder, deaf-blindness, deafness, developmental delay, emotional disturbances, hearing impairment, intellectual disability, multiple disability, orthopedic impairment, traumatic brain injury, speech or language impairment, and visual impairment including blindness (smith, 2007).

2.2 Hearing Impairment

Hearing impairment is one of the most disabling conditions (WHO, 2001). As a term, it refers to both partial and complete loss of the ability to hear (WHO, 2010). There are about 250 million people with hearing impairment globally with majority found in developing countries (WHO, 2002). A 13.4% of school children were found to be hearing impaired during a National survey on prevalence of hearing impairment in Nigeria (National Ear Care Programme, 2001). In another study by Olusanya *et al* (2000), a prevalence of 13.9% of hearing impairment was found among students in mainstream secondary schools in Lagos, Nigeria. This high prevalence of hearing impairment in developing countries may be linked to be a result of lack of or inadequate and screening programs and appropriate screening devices for ear diseases (Olusanya et al, 2007). Other factors that contribute to a higher incidence of hearing impairment in developing countries include infections such as otitis media, meningitis, rubella, poor access to appropriate health care and a lack of adequate vaccines (Saunders, 2007). Another factor is the widespread unregulated access to ototoxic medications, such as gentamicin (Olusanya, 2007; Saunders *et al*, 2007; Jacob et al, 1997).

Hearing loss can be classified by numerous clinical criteria, including causality (hereditary or non-hereditary), time of onset (congenital or acquired), age of onset (pre-lingual and post-lingual),

anatomic defect (conductive, sensorineural and mixed) (Connelly, 2005). It can also be classified by severity as mild, moderate, severe and profound (Connelly, 2005).

Conductive hearing loss is characterized by an obstruction to air conduction that prevents the proper transmission of sound waves through the external auditory canal and/or the middle ear (Shemesh, 2012). It is marked by an almost equal loss of all frequencies. The auricle or pinna, external acoustic canal, tympanic membrane or bones of the middle ear may be dysfunctional. Conductive hearing loss may be congenital or acquired through trauma, severe otitis media, otosclerosis, neoplasms, or atresia of the ear canal (Shemesh, 2012).

Sensorineural hearing loss occurs when the sensory receptors of the inner ear are dysfunctional (Bess *et a*l, 1988). Sensorineural hearing loss is a lack of sound perception caused by a defect in the cochlea and/or the auditory division of the vestibulocochlear nerve (Bess *et al*, 1988). This type of hearing loss is more common than conductive hearing loss and is typically irreversible. Sensorineural hearing loss may result from congenital malformation of the inner ear, intense noise, trauma, viral infections, ototoxic drugs such as cisplatin, salicylates, fractures of the temporal bone, meningitis, cochlear otosclerosis, or genetic predisposition (Bess *et al*, 1988; Culbertson and Gilbert, 1997). However, more than 90% of hearing loss is sensorineural (nerve deafness), which typically results from permanent damage to the hair cells of the cochlea (Bess *et al*, 1988). Hearing loss in children is commonly congenital which means that the child is born with it and it is sensorineural in nature. The cause can be genetic or acquired through maternal infections or birth problems. Several sensorineural losses also arise in children from infections such as meningitis occurring in early life (Bess *et al*, 1988).

Mixed conductive and sensorineural hearing loss have both conductive and sensory dysfunctions. Mixed hearing loss is due to disorders that can affect the middle and inner ear simultaneously,

such as otosclerosis involving the ossicles and the cochlea, head trauma, middle ear tumours and some inner ear malformations (Bess *et al*, 1988).

In addition, hearing impairment can be classified based on the age of onset into pre-lingual or post-lingual. Where pre-lingual hearing loss is the type of hearing impairment that is sustained prior to the acquisition of language, which can occur as a result of congenital conditions or through hearing loss in early infancy. Pre-lingual deafness impairs an individual's ability to acquire spoken language (Bess *et al*, 1988). Post-lingual deafness is hearing impairment that is sustained after the acquisition of language. This can occur as a result of disease, trauma, or as a side-effect of a medication (Shemesh, 2012). Typically, hearing loss is gradual and often detected by family and friends of affected individuals long before the patients themselves will acknowledge the disability Deafness may be caused by factors in the environment, a combination of genetic and environmental factors or genetic factors alone (Barlow-Stewart and Saleh, 2007).

2.3. Visual Impairment

Visual impairment refers to a sight limitation that interferes with interaction with the physical environment and requires special accommodation and care to acquire information(Vernosfaderani *et al.*, 2014). Visual impairment challenges individuals' abilities to participate in daily activities and interact effectively with the physical environment. Visual impairment (VI) has a significant impact on the affected child's psychological, educational and socioeconomic experiences, during childhood and beyond(Vernosfaderani *et al.*, 2014). Prior studies have suggested that individuals who have visual impairments tend to be dependent upon others, have decreased capabilities to perform daily activities, and experience negative psychological symptoms, such as isolation, depression, and anxiety (Burmedi et al., 2002). Such challenges generate psychological distress and stress that diminish quality of life (Chou, 2008).

The control of blindness in children and young people is considered a high priority of the World Health Organization's VISION 2020–The Right to Sight" global initiative (Gilbert C and Foster A 2001). Although childhood blindness is relatively uncommon, it is a priority of Vision 2020 for several reasons: the number of "blind years" in children is almost equal to the number of blind years due to age-related cataract; many of the causes of blindness in children are either preventable or treatable; and many of the conditions associated with childhood blindness also cause child mortality (eg, measles, congenital rubella syndrome, vitamin A deficiency)(Plagiarism *et al.*, 2014) and so the control of blindness in children is closely linked to child survival (Gilbert C, Foster A 2001). The prevalence of blindness in children and young people ranges from approximately 0.2–0.3/1000 children and adolescents in developed countries to 1.5/1000 children and adolescents in developing countries (Foster A, Gilbert C 1992).

It is estimated that three-quarters of the world's blind children and adolescents live in the poorest regions of Africa and Asia (Gilbert C, Foster A 2001). The causes of childhood blindness differ markedly between different regions, apparently related to socioeconomic factors (Steinkuller et al.1999). In very low-income regions, corneal scarring secondary to vitamin A deficiency, measles keratitis or ophthalmia neonatorum is the main cause of childhood blindness(Vernosfaderani *et al.*, 2014). In some of these countries, cataract is now assuming greater importance as the economies are improving (Gilbert C 2007). Reliable population-based data on the causes of blindness in children are difficult to obtain, as such surveys require very large samples, making them extremely labor-intensive and costly. Examination of children enrolled in schools for the blind has the advantage of enabling a large number of children to be examined relatively quickly by a few examiners, however, has the disadvantage of inherent selection bias (Gogate P 2007).

The following terminologies are used to better understand the types of visual Impairment. Total Blindness describes a category of individual who can only learn through the use of braille or other visual media. In Legal Blindness, the individual who has less than 20/200 vision in the more functional eye or a very limited visual acuity in the area of vision. Low Vision refers to a severe visual loss in distance and near vision. Individuals in this category use a combination of vision and other senses to learn and they may also require adaptations in lighting or the print size (and in some cases, braille might be needed)(Vernosfaderani *et al.*, 2014).

2.4. Epidemiology of Hearing and visual Impairment

In 2001, WHO estimated that 250 million people worldwide had disabling hearing impairment which is defined as moderate or worse hearing impairment in the better ear(Barón, 2015). That is a Better Ear Hearing Loss (BEHL) of 41 dB or greater. Two thirds of persons with hearing impairment live in developing countries (WHO, 2002). According to a study in the United States of America (U.S.A), about 1 in 5 adolescents suffer some sort of hearing impairment (Shargorodsky *et al*, 2010). Furthermore, an estimated 19 million of the world's children are visually impaired, while 1.4 million are blind, according to WHO criteria (WHO 2013). These studies estimate the prevalence of childhood blindness in middle- and lower-income countries at between 0.2 and 7.8 per 10 000 (WHO 2013). Hearing impairments are associated with a broad range of consequences for the child's cognitive, social, and emotional development(Fellinger *et al.*, 2009). The differences in these outcomes not only depend on the degree of hearing loss and auditory performance with hearing aids or cochlear implants, but also on a variety of factors such as additional disabilities, IQ, parental resources, and educational circumstances. Studies of mental health among deaf children have shown higher rates of psychiatric disorders than in hearing comparison groups or samples of the general population, with rates ranging from 0 to

77%.(Fellinger *et al.*, 2009) The poor often are unable to afford the preventive and routine care necessary to avoid hearing loss; furthermore, when hearing loss occurs, they frequently are unable to afford hearing aids, cochlear implants, and rehabilitation services to reduce the negative impact (Taha, 2010). The cost of rehabilitation services, special education, and lost employment because of hearing impairment can impose a substantial economic burden on countries and communities (WHO, 2006; Olusanya and Newton, 2007)

2.5. Education for the Disabled children and young people in The Gambia

The Education Policy calls for a radical and holistic change of attitudes and conceptions about persons with disabilities to ensure that they too have access to relevant and quality education. However, it is important to understand the exact dynamics and magnitude of the problem of children with disabilities and their special needs in order to address their educational needs in the Gambian ('Validated SNE Policy Framework', 2016/2022). To do so, they should first be identified, diagnosed, sensitized and then helped to have access to education. Although access to education has improved for children with mild visual and hearing impairments in the country, children with intellectual disabilities and multiple disabilities and those afflicted with epilepsy still face numerous barriers including socio-cultural beliefs and practices that result in stigma and discrimination on some children with disabilities and their families. There are also limitations in accessibility to physical structures for children with physical disabilities to enhance their movements and access to education('Validated SNE Policy Framework', 2016/2022).

Early identification, assessment, and referral for early intervention were inadequate or lacking. Children with mental impairments, profound multiple disabilities and all other forms of unidentified and unknown disabilities were only admitted in the Methodist School for Learning difficulties without proper diagnosis and interventions in place for them('Validated SNE Policy

Framework', 2016/2022). This inadequate support for children with these challenging disabilities has resulted in some dropping out at an early stage of their education('Validated SNE Policy Framework', 2016/2022).

Thus, the revised Education Policy 2004 - 2015 outlines the relevance of early identification, assessment and appropriate placement in school for any child who may have a disability of any kind and in need for special educational needs and placement ('edited Special Needs Education Manual',2004/2015). However, there is limited capacity for teachers teaching in the special schools. Only a few of them have specialized training in special education and none have any form of training in child and adolescent mental health to be able to handle the emotional needs of these needy children.

2.6. National and International Legal Framework on Disability in The Gambia

The Government of the Gambia has over the years adopted series of policies, programs and initiatives. Government has also committed itself by ratifying many international and regional treaties in recognition of persons with disabilities as human beings with full and equal rights thus the emphases for every person to develop to their full potentials irrespective of gender, ethnicity, economic and social background. These instruments anchored on the 1997 Constitution and other national blueprint documents as the base for the inclusion of disability in development programs. This Policy framework is heavily based on the Revised Education Policy 2004 – 2015 in Chapters 5.6.1 to 5.6.4 and the strategic plan 2014 – 2022.

The Bill of Rights in the Constitution of The Gambia makes provision in Section 30 for the right to education of all persons: The Constitution also makes specific reference to the rights of Persons with Disabilities, section 31 (2) protects people with disabilities against discrimination and

exploitation, While Section 33, the anti-discrimination clause in the Constitution, outlaws discrimination. The Children's Act 2005 also domesticates the CRC and other child-related international legal instruments to which The Gambia is a State Party in Section 18 (1) 18 (2). In Section 12, the Act makes specific reference to the right of a child in need of special protection measures, which includes children with disabilities. The Convention on the Rights of the Child Article 23 addresses their special needs. Other international instruments include the 1948 Universal Declaration of Human Rights (UDHR), the 1966 International Bill of Rights (International Covenant on Civil and Political Rights [ICCPR] and the International Covenant on Economic, Social and Cultural Rights [ICESCR]) and the 1971 General Assembly Resolution on the Declaration on the Rights of Mentally Retarded Persons (Article 1), the 1975 Declaration on the Rights of Disabled Persons and the World Programme of Action Concerning Disabled Persons (WPA) adopted by the General Assembly in 1982, the UN Standard Rules on the Equalization of Opportunities for Persons with Disability (1993), the Salamanca Statement on Principles, Policies and Practices in Special Needs Education (1994), EFA Flagship on the right to education for Persons with Disabilities (2001) and the Vienna Declaration and Program of Action adopted by the World Conference on Human Rights in 1993. However, with all these pronouncements of the legal framework both nationally and internationally, nothing much is done about mental health of children and young people with disabilities both in special schools, mainstream schools and in the community at large in the Gambia.

2.7. Limitations in the Provision of Special Needs Educational Services for Children and Young people with Disabilities in The Gambia

All intervention programs geared towards helping children and young people with disabilities are mostly long term, demanding, costly and challenging because most conditions are of permanent

nature('Validated Special Needs Education Policy Framework', 2016/2022). Children with disabilities require additional needs and support to enable them to enjoy the educational benefits like other children. Their education program should be designed in such a way that it facilitates their learning process through a differentiated curriculum and instruction with adaptive pedagogical methods in order for them gain maximally('Validated Special Needs Education Policy Framework', 2016/2022). Hence, a disabled child is referred to having 'special educational needs', if he/she has: a learning requirement that is significantly different from the majority of children of the same age; or a disability which prevents or hinders him/her from making use of educational facilities of a kind generally provided for children of his/her age in provided schools. Thus, special needs education and additional support will be required to ensure the mental, physical and social challenges that interfere with their ability to learn regardless of all odds('Validated Special Needs Educational Policy Framework',2016/2022).

Despite the efforts of government and non-governmental organizations in providing services in local communities there are still challenges to be addressed. These include: Some mainstream schools are still inaccessible to children with disabilities in The Gambia, Special Needs Resource centres are still not available in all regions, Inadequate resources and capacity limit the abilities of stakeholders to provide quality services to children and to extend their services to all parts of the country, Limited availability of physical infrastructure (absence of, eg, ramps and gutters) which hinder easy mobility of children with special needs at all levels of educational institutions, limited critical services including identification and assessment services for children with special needs for appropriate placement, Limited specialized training for teachers handling children with special needs, Inadequate specialized teaching and learning materials, Inadequate data on children with special needs for policy planning and implementation, Inadequate awareness raising and

sensitization on special needs education. Issues, Unavailability of family and children support groups for children with special needs, Girls with disabilities are less likely to be enrolled and attend primary education than boys. (1998 Disability survey).

2.8. Mental health Disorders in Children and Young People

Mental health problems inflict a huge social and economic burden on society. They deprive affected individuals of a good quality of life and happiness due to missed educational, job and personal opportunities, broken relationships, stigma and discrimination (Groce, 2004). Current global epidemiological data consistently reports that up to 20% of children and adolescents suffer from a disabling mental illness (WHO, 2002). For young people, neuropsychiatric disorders are a leading cause of health-related burden, accounting for 15–30% of the disability-adjusted life years (DALYs) lost during the first three decades of life (Lopez, 2006). For example, suicide is the third leading cause of death among adolescents globally and up to 50% of all adult mental disorders have their onset in adolescence (Groce, 2004).

In 2004, 9% of adolescents in the United Kingdom aged 12 to 17 experienced at least one major depressive episode in the past year (National Survey on Drugs Use and Health, 2005). In a two-stage epidemiological survey conducted in Ibadan, Nigeria, among children aged 7 to 14, a weighted prevalence of approximately 20% for the presence of Diagnostic and Statistical Manual III (Revised) disorders was obtained (Gureje *et al*, 1994). The assessment of the mental health of 1,873 adolescents from 20 rural and urban schools in South West Nigeria, showed that 20% had depressive symptoms, 22.3% had suicidal ideation and 11.5% had made a suicidal attempt in the last one year (Omigbodun *et al*, 2008). In another study of 1,095 adolescents in secondary schools in Nigeria, the authors obtained a prevalence of 6.9% for major depressive disorders (Adewuya *et al*, 2007).

The disorders that most commonly affect young are anxiety disorders, which manifest through phobias, excessive worry and fear as well as depressive disorders, characterized by states of hopelessness or helplessness that are disruptive to day-to-day life (Erskine *et al.*, 2017). Other conditions include bipolar disorder, conduct disorder, attention-deficit/hyperactivity disorder, learning disorder, eating disorder, autism, and childhood-onset schizophrenia (Erskine *et al.*, 2017).

2.9. Mental Health of Children and Young people with Disabilities

Mental health is an essential component of overall health and wellbeing of young people(Patalay and Fitzsimons, 2016). According to the National Youth Violence Resource Centre (NYVRC, 2001), at least one in five children and young people may experience a mental health problem in any given year. This, if not adequately treated, may affect their physical development, self- esteem, school performance and relationships both in the family and outside including peer relationship problems in schools(Plagiarism *et al.*, 2014). The nature, prevalence, universal or culture-specific determinants of mental health problems in children and young people in resource-constrained settings has received some research attention in recent years (Belfer, 2004), especially as there are suggestions that mental disorders are under-recognised in most of these settings (Remschmidt and Belfer, 2005; Patel, 2007; Fisher *et al*, 2011). The health of children and young people with disabilities require special attention. This is because disabilities are largely associated with stigma and discrimination (Belfer, 2005). Children and young people with disabilities are often limited/restricted in their ability to use and enjoy available social facilities around them because of the associated difficulties with disability (Winters, Langer and Geniets, 2017). They largely depend on people around them sometimes for support in moving around and in basic daily needs. Children and young people with disabilities often fall victims of beliefs and myths that greatly

reduce their participation and involvement in the community and school activities (Muhammed and Muhammed, 2011). Children and young people with disabilities are among the vulnerable, marginalized, neediest and belong to most poorest of the entire world's population (Karen *et al*, 2010; Newacheck et al 2000).

2.10. Mental Health Disorders among Children with Physical Disabilities

The most common mental disorders in childhood and young people with disabilities fall into the following categories. Anxiety disorders, stress related disorders, mood disorders, obsessive compulsive disorder, disruptive behavior disorders like conduct problems, Attention Deficit Hyperactivity Disorder and Opposition Defiant Disorders are some of these different categories(Elia, 2017). Having a disability irrespective of type increases risk of developing mental health problems and disorders because of associated adverse and environmental factors(Vergunst *et al.*, 2017). Several studies suggest that young people with intellectual disabilities often show behaviors and experiences that may be associated mental health problems three or four times more often that those without disabilities with between 4%and 18% having a mental health diagnosis (Vergunst *et al.*, 2017). Moreover, mental health problems in young people with disabilities often go undiagnosed and untreated which greatly impacts on them acquiring skills relevant for them to be integrated back to their communities (Vergunst *et al.*, 2017).

Globally,10% to 20% of children and young people have mental health problems but their mental health needs are largely neglected despite mental disorders being the leading cause of disability in this age group and the everlasting effect it poses on them (Omigbodum et al 2011). Mental health problems are common in young people with physical disabilities. A physical disability may lead to social isolation as it can prevent some children from leaving the house or experiencing things previously experienced. This may result to loss of personal independence especially if the

disability requires the care and support of family members, carers or professionals. This can eventually lead of feelings of helplessness, boredom and depression. Children and young people with disabilities and their families often suffer a great deal of financial burden especially when it involves purchase of medications and transportation to and from schools and hospitals. This situation can lead to increased amount stress and anxiety to the disabled child which may become severe enough to cause a mental health problem(Shaw Mind Foundation, 2015).

UK researchers have found out that 30% of those with a long-term physical condition also have a mental health problem and 46% of people with a mental health problem have a physical condition. The statistics increases in Australia where researchers have confirmed that those with physical conditions are at a significantly greater risk of mental disorders than the public. Further, Canadian researchers have also looked at chronic illness and disability in children and found out that this age group is significantly more at risk of mental health conditions. Also, in 2012, a joint research team in the UK highlighted that those with physical disabilities are particularly at risk of anxiety and depression which was similar to the findings in the Australian Mental Health Survey. These findings showed that 29% of people with a disability reported an anxiety disorder while 17% reported an affective disorder compared to a 12% prevalence of anxiety disorders and 4% prevalence of affective disorders in the general population. This indicates that children and young people with physical disabilities stand at a higher risk of these conditions compared to those without disabilities. (Shaw Minds Foundation 2015)

This is however not a new finding as studies dated back in the 1980s in Canada found those with physical disabilities showed more depressive symptoms regardless of gender. Moreover, with data showing these findings almost 30 years ago, it is therefore more concerning to see this group of society showing elevated symptoms which indicates the strong need for comprehensive mental

health programmes in the treatment of physical disabilities in children and adolescents(Shaw Mind Foundation, 2015). Some studies have outlined some child factors as correlates of child and adolescent mental disorders. These factors among others include gender, age, ethnicity, physical health, cognitive and psychological factors, pre and perinatal exposure to illness, physical stress, alcohol, drugs, poor nutrition, infections, lifetime environmental exposure to toxins, stress, stressful life events, child abuse as associated with mental disorders. The wider community factors also serve as correlates of child and adolescent mental disorders. These factors include poor access to basic services, discrimination, social and ender inequalities, poor housing, living and environmental conditions, peer pressure and adverse media influences as associated with mental health disorders (WHO, 2012). Parental and family factors like low education in a parent, low socioeconomic status, inter parental violence, large family size, family dysfunction and parental history of mental illness among others are associated with mental disorders in children and adolescents (Merikangas et al, 2009)

2.11. Mental health problems in children and Young People with visual impairment

Visual impairments are considered to be one of the most debilitating and disabling conditions (Kim, 2003). As such, individuals who have visual impairments are likely to perceive psychological distress, fear, anxiety, and social isolation (Kim, 2003). Approximately 8% from those who are defined as blind in Israel are children and adolescents. Visual impairment is correlated with a high rate of psychopathology.). Prior studies have shown that Korean children and adolescents who have visual impairments experienced high levels of stress due to social and peer rejection in their schools and communities (Gwon et al., 2011). Additionally, Korean adolescents who have visual impairments experience some difficulties in adjusting to their school and performing self-regulated learning abilities and academic self-efficacy (Lee & Oh, 2011).

Compared to peers, Korean adolescents who have visual impairments reported experiencing more negative psychological symptoms associated with their disabling conditions (Kim, 2003 Kim, Y. (2003). For example, they experienced higher levels of depression, anxiety, and hopelessness and exhibited more deficiency in social skills and lower self-esteem than their non-visually impaired peers (Kim, Y. 2003). However, some of these children and adolescents do not receive appropriate diagnosis and treatment. Often, the clinicians and those who treat the children/adolescents lack the proper professional knowledge related to the unique diagnosis and treatment of children/ adolescents who are visually impaired. Visual impairment might influence different aspects of the psychiatric diagnosis. These aspects include the influence of the impairment on different developmental axes; the reciprocal relationship between the child and his/her environment; the clinical presentation of different psychopathologies; and the different treatment modalities for children and adolescents with visual impairment.

2.12. Prevalence of Mental Health Disorders in Children and Young People with Hearing and Visual Impairment

The relationship between hearing loss and mental health has also been studied by examining the extent of hearing loss among patients with psychiatric disorders. In a study of deaf adolescents (van Gent *et al*, 2007), psychiatric disorders were found in 46% of the adolescents, emotional disorders were present in 27%, behavioural disorders in 11% and other disorders in 7%. It was concluded that there was a high prevalence of psychopathology in this population (van Gent *et al*, 2007). An Australian study assessed 99 children with bilateral hearing impairment of at least 40 dB with a performance intelligence quotient (IQ) above 70 (Fellinger *et al*, 2008). Parents and teachers completed the Strengths and Difficulties Questionnaire (SDQ), and the Inventory for the assessment of the Quality of Life in Children and Adolescents (ILC) was administered to parents

and children (Fellinger *et al*, 2008). Results indicated that deaf children scored significantly higher on the SDQ than their counterparts from normative samples according to both parent and teacher ratings. Differences were most marked with regard to conduct problems, emotional problems and peer problems; and less marked for hyperactivity/inattention (Fellinger *et al*, 2008). In a similar study by Eldik *et al*, (2004), emotional/behavioural problems of 238 deaf Dutch children and adolescents aged 4-18 years were studied. Parental reports indicated that 41% had emotional/behavioural problems, a rate nearly 2.6 times higher than the rate of 16% reported by parents of a Dutch normative sample. Hearing impaired children aged 12-18 showed more problems with anxiety and depression and more social problems than those aged 4-11 years. Hearing impaired children with relatively low intelligence showed more social problems, thought problems, and attention problems than those with relatively high intelligence (Eldik *et al*, 2004).

2.13. Barriers to receiving Mental health care for children and Young People with Hearing and Visual Impairments

Children and young people who are hearing and visually impaired and who also have a serious mental illness face many barriers in their efforts to accessing effective and comprehensive public mental health services (Critchfield, 2002). Studies among individuals with hearing impairment are generally few and are limited to Western countries (Gentili and Holwell, 2007). It was estimated in a study that up to 40% of deaf and hearing disabled people experience a mental health problem at some point in their lives (Hindley (1994). Van Gent *et al*, 2007 outlines that there are slightly more than twenty studies investigating the prevalence of general psychopathology in deaf and hearing disabled children and adolescents in the literature. The prevalence of psychopathology reported in these studies vary from 0% to 77% (van Gent *et al*, 2007). Children and young with hearing and visual impairments suffer a wide range of problems which may cut across many

aspects of their lives (van Gent *et al,* 2007). They are reported to be at risk of alienation and are predisposed to a range of adverse outcomes including academic underachievement, delays in cognitive and social-cognitive processing, social mal-adaptation and psychological distress or disorder (Greenberg et al, 1997; Fitzgerald, 2000). In studies examining the prevalence and correlates of psychopathology in deaf adolescents, expert ratings identified psychiatric caseness in 49% and Diagnostic and Statistical Manual (DSM) disorders in 46% (van Gent *et*, 2007). The breakdown of disorders revealed that 27% had emotional disorders, 27% had behavioural disorders and 11% had other disorders (van Gent *et al*, 2007).

The mental health of children and young people with hearing and visual impairment is largely unrecognized and unattended to. This is largely because the symptoms of mental illness in them are sometimes mistaken to be part of the disability which is usually considered normal to their developmental and behavioral change (NYVRC, 2001). This dilemma may be even more serious in children and young people with disabilities who have most of their health interventions and needs focused on their physical disabilities to the neglect of their mental health needs (Groce, 2004). Physical disabilities have been shown to have a considerable effect on the mental health of those affected. This impact may be more among children and young people with disabilities in developing countries as a result of lack of or inadequate mental health data making planning and interventions difficult for these individuals (Groce, 2004).

There is a widening mental health treatment gap for children and young people in sub-Saharan Africa (Ibeziako *et al.*, 2009). As is the case in most low- and middle-income countries (LMICs), SSA has few economic or human resources dedicated to the mental health of children and young people(In *et al.*, 2019). In most parts of the world, unfortunately, mental health and mental disorders are not regarded with anything like the same importance as physical health. Indeed, they

have been largely ignored or neglected (World Health Organization, 2001a) and there is also absence of promotion and prevention in schools, workplaces, and neighborhoods; the gap between needs and resources available continues to widen despite enormous recognition of the importance of promotion and prevention of mental disorders in this age group especially in the low and middle income countries where The Gambia is no exception (Christian kieling, Helen baker et al 2011).

The World Report on Disability – published in 2011 by the World Bank and WHO - estimates that there are more than one billion people globally living with disabilities. This figure includes approximately 93 million children aged 0–14 years living with ‘‘moderate or severe disability’’ (5.1%) of whom 13 million (0.7%) experience severe difficulties. However, others have put this figure even higher – with UNICEF estimating that in 2005, a 150 million children were living with disabilities globally(Vergunst *et al.*, 2017). Both groups agree that childhood disability is most common in low and middle-income countries. According to the United Nations, one person in 20 has a disability(Review, 2012). More than three out of four of these live in a developing country. More often than not they are among the poorest of the poor(Banks, Kuper and Polack, 2017). Recent World Bank estimates suggest they may account for as many as one in five of the world's poorest(Banks, Kuper and Polack, 2017). There is no local data on the prevalence of child and adolescent disorders in The Gambia, however, a research conducted among adult population aged 15 and above showed prevalence of 20% (The Gambia Mental Health Report 2012**)**.

Research shows that children with disabilities are expose to barriers to participation in many activities and are less likely to start school early, have lower rates of school attendance and lower transition rates to higher levels of education. The gap in school attendance associated with disability observed at the primary level widens further at the secondary level(Kuper *et al.*, 2014) . Furthermore, the overall quality of the educational experiences of disabled children is often

inadequate where they do attend school(Kuper *et al.*, 2014). Children with disabilities may also have poorer access to health services, while experiencing higher health care needs(Kuper *et al.*, 2014). Overall, there is a perceived lack of inclusion of children with disabilities in the development agenda. This exclusion is likely to have a long-term deleterious impact on their lives unless services are adapted to promote their inclusion.

With her population of about 2 million, The Gambia has no specialized psychiatrist or mental health services for the entire population. There are only two foreign psychiatrists situated in the capital main teaching hospital (Mental Health Report, 2012). Moreover, there are no child psychiatrist, children and young people with mental disorders are seen either by pediatricians or general Practioners and in most cases mental disorders in children and young people go unattended to or unrecognized(Ibeziako *et al.*, 2009). Many SSA countries do not have existing mental health policies let alone child mental health care services for which Gambia is no exception(Atilola, 2017)(Ibeziako *et al.*, 2009). For instance, results from a focus group discussion held in the child and adolescent mental health lecture hall by post graduate students from different African countries include: Ghana has no facilities for child and adolescent mental except within the education system which are mostly private and investigates mainly few areas of special needs like visual and hearing impairments and autism. In Malawi, there are no home-based psychiatrists, the few trained have moved in search of greener pastures. In Somalia, which is divided into Northern main Somali land have are said to psychiatrists but based in private settings where the poor and the disabled cannot access their services. While the southern Mogadishu has a bleak picture of mental health. In Tanzania the only child and adolescent mental health care service in Mirembe hospital closed and presently there are no services for children and adolescents including those with both physical and mental disabilities. Like the Gambia, Tanzania has one psychiatric and 35 psychiatrists' hospital

in Mirembe for a population of about 50 million people. Other countries like Sierra Leone, Cameroon, Rwanda also have a bleak picture of mental health like The Gambia. And even whereas some countries have, trained mental health professionals often number less and there is centralized care which makes access to health care difficult(Atilola, 2017). The effect of these is greatly felt by the disabled population of whom the majority are children and adolescents.

According to a survey done by The Gambia Bureau of Statistics, the population distribution in The Gambia shows that children aged 1 to 10 years account for 31.7% of the population while young people account for 23.4% (Gambia Bureau of Statistics). This shows that half a chunk of The Gambia's population are young and numerous research findings have stated that half of adult mental disorders in life start at age 14(Kesler et al 2009) and 1 in every 5 child and adolescent has a recognizable and treatable mental disorder (Kessler 2009). Hence early recognition and intervention can help minimize or avert the severity (WHO 2004).

School Resources for Mental Health Problems ln Children With Hearing And Visual Impairment

With the right teaching, that recognizes individual needs, many disabled pupils have little need for additional resources beyond the aids they use as part of their daily life. Teachers must plan lessons so that these pupils can study every national curriculum 6 subject. Potential areas of difficulty should be identified and addressed at the outset of the lesson. A lot many children with disabilities are typically attending school. This makes the school setting ideal for early identification and intervention when children with disabilities exhibit mental health concerns (Reinke et al., 2011). Teachers can play important roles in identifying and referring students for help related to mental health symptoms and concerns (Reinke et al., 2011). Teachers feel that the school setting is an integral part of supporting mental health interventions (Reinke et al., 2011). A study performed by Reinke et al. (2011) indicated that teachers are willing and open to referring students if they need

services, yet there still seem to be issues with identifying students who need help. Studies have indicated that teachers are in a role in which they can help with early identification and early intervention related to symptoms of mental health(Robinson, 2017). Meanwhile, teachers have a clear understanding of the needs of all pupils, including those with special educational needs.

Pupils labelled with the term 'Special Educational Needs' are those who have significantly greater difficulty learning than their peers and/or a disability that might hinder their access to educational opportunity. Raising a child is a demanding task, and any physical or mental disability in the mother may have negative consequences on the child's health, particularly in adverse circumstances such as poverty. (Goodman & Gotlib, 1999; Patel, et al., 2002; Rahman et al., 2004).

Long-term caregiving for disabled children comes with several associated challenges such as fatigue, financial difficulties, parenting distress and other psychological issues. Majority of parents of children with disabilities have repeatedly highlighted their feelings of discrimination, stigma and exclusion, leading to mental health issues, there is little research from the developing world addressing these issues. Parents have limited access to services for their children let alone for their own psychological issues; Where available, disability services are often limited or not accessible to parents (Helander 1993). It is very obvious that children spend time with their caregivers in the homes and a lot more of their time in schools under the care and tutorage of the teachers as well. Aside from their job as teachers, teachers serve as parents and counsellors to children under their tutorage.

The prevalence of mental health disorders among adolescents with hearing and visual impairment is largely unknown in this environment. This study intends to fill the gap by investigating mental health disorders among children and adolescents with hearing and visual impairment in The Gambia.

2.1.4. Relevance of the study to child and adolescent mental health in The Gambia and Africa

As at the time of this study, there was no data on the prevalence, pattern and correlates of mental disorders among children and young people with disabilities in The Gambia. Additionally, though there is existing mental health policy in The Gambia, however, it doesn't reflect and cater for the mental health needs of children and young people with and without disabilities. This study will provide the first set of data on mental health problems in children and young people with hearing and visual impairments in The Gambia and would serve as a template for the development of policies and strategies to aid in addressing the mental health needs of these vulnerable group both in special and mainstream schools in the whole country. Furthermore, the reports generated from this study can be a useful resource in the development of child and adolescent mental health policies and services both within the education system and the nation at large.

CHAPTER THREE

METHODOLOGY

3.1 Study Location

The study was conducted at the schools for the blind (Gambia Organization for the Visually Impaired, GoVI) and the deaf (St. Johns School for the Deaf and Hard of Hearing) in the Kanifing Municipality within urban setting of The Gambia. The two schools were selected because they are the only special schools for deaf and blind children in the whole country. Therefore, the only schools serving and providing the education needs for the blind and deaf population from all over the country.

3.1.1. Description of Kanifing Municipality

The Kanifing Local Government Area is located within the urban setting nearer to the capital city, Banjul of The Gambia. The Gambia is a small country in West Africa with a population of 1.8 million people (Gambia Bureau of Statistics, 2013). Out of this figure, Kanifing Local Government Area has a population of 377,134 persons, 4,992 persons per square kilometer and 76sq km area per square kilometer (Gambia Bureau of Statistics, 2013). This is a busy area with many schools, government offices, business etc. In 2002/2003 total primary school enrolment was 79 percent for boys and 78% for girls while secondary school 39% of boys and 27. 5% of girls were enrolled (GBoS, 20013). The region has three special schools namely: Saint John's School for the Deaf, Gambia Organization for The Visually Impaired and Methodist School for Learning Disabilities.

3.1.2 Study setting

St. John's School for the Deaf and Hard of Hearing and Gambia Organization for the Visually Impaired (GoVI)

3.1.3. Saint John's School for the Deaf

The first school for the deaf and hearing impaired in The Gambia was opened in 1978 an Irish seminarian named Patrick Nolan. In 1983, a bigger premise was built for the deaf children within the kanifing municipal area in the greater Banjul. The school was named Saint John's School for the Deaf. The roll of students increased to 100 in 1983 and 10 classrooms with 10 pupils to a class and one class teacher to a class. Currently, the school runs a primary, junior and a senior section. The school has a total number of 268 pupils. 152 pupils in the primary with 14 classrooms with 8 to 14 in a class for the primary. 61 pupils in the junior section with 6 classrooms and 9 to 12 in a class. 4 classes for the senior section, one for grade 10 with 16 students, two classes for grade 11 one with 11 pupils and the other with 12 pupils while grade 12 has 16 pupils making a total of 55 pupils in the senior section. There are 47 permanent teachers and six student teachers. Some of these teachers also have hearing impairment and all the teachers are trained to communicate in sign language. The school follows the standard education curriculum of the country. It also offers vocational skills training programs for the older students. These skills include carpentry, metal work, tailoring and computer skills. The school has facilities for auditory assessment, servicing of hearing aids, and fixing ear molds. These facilities are also made available to the general public. The school is owned by the Catholic Mission but is grant aided by the government which pays staff salaries and utility bills. 75% of pupils attending the school are on sponsorship.

3.1.4. Gambia Organization for the Visually Impaired (GoVI)

The school for visually impaired children in The Gambia was first established in 1971 with support from the Royal Commonwealth Society for the Blind. The school initially started with one class, five pupils and a teacher. The school runs both a nursery and a primary school section. Currently the school has a student roll of 50, 19 in the nursery and 31 in the primary with a total number of 25 teachers, 17 -qualified regular classroom teachers from the Gambia teacher training college with 8 teacher trainees posted to the school by the college. The new school has a 6 -classrooms, one class to a grade, 2 qualified teachers and a teacher trainee to a class. The school has a resource centre, a library, a staff room and head teacher's office with 2 male toilets and 2 female toilets for the students. GoVI enrolls youth with profound, severe, moderate and mild visual problems. Children are been trained and taught with the use of braille machines, type writers and tape recorders. The school follows the same curriculum and syllabus of The Gambia with a few exceptions in subjects like mathematics, science and technical drawing due the nature of the subjects which requires diagrams and drawing with figures. Children who perform well and complete the primary section are then mainstreamed into the regular schools to learn with their colleagues as The Gambia advocates for inclusive education for all children.

Teachers employed in the school teach all aspects of the school's curriculum, including the specialized skills such as Braille, Orientation and Mobility skills and daily living skills, extra curricula activities. There are no teachers employed specifically to teach O&M. Teachers have minimal opportunity to learn O&M skills, with some having had an opportunity to attend trainings conducted by a visiting instructor. In the majority of cases new teachers learn their O&M skills and techniques from other teachers at the school.

3.2 Study Design

The study is a mixed methods study aimed at determining the prevalence, pattern and correlates of mental health problems among children and young people living with hearing and visual problems in selected schools in the Gambia using interviewer administered questionnaires and focus group discussions.

3.3 Study Population

Study population comprised of children with visual and hearing disabilities in two special schools in and their teachers.

The Eligibility Criteria:

For the children/young persons (sample 1), participants were included into the study if they were:

1. Aged between 5 and 24 years,
2. Had visual and hearing impairment and attending the blind and deaf school
3. Consent for participation was obtained from caregiver/family member
4. Assent was provided by the child/young persons.

For the Focus Group Discussions sample (sample 2), participants were included if:

1. They were staff of the selected schools (teaching and non- teaching)
2. They have worked/interacted with the children for a minimum of 3 years.

Exclusion Criteria:

Participants were excluded from the study sample 1. if

they were below the age brackets and on refusal to give consent or assent. However, it was ensured that participants were not denied of any educational services even if they refused to participate in the study.

3.4 Sample size estimation

For the quantitative aspect of the study

The estimated sample size **n** was computed using the formula below,

$$\mathbf{n} = \frac{z^2 pq}{d^2}$$

Where;

n = Estimated Sample Size

z = is the standard normal deviate, which is 1.96 on using the 95% CI.

where p= prevalence of mental health problems in children and young people with hearing and visual problems from previous studies

Since no prevalence which could properly represent the sample was found, a p of 50% was used.

p= proportion of those children with visual and hearing disabilities who have mental health problems, which was estimated to be 50%

q = (1-P) = proportion of those children and young with visual and hearing disabilities who do not have mental health problems, which was 50%

d= the desired level of precision was set at 5% (0.05)

Therefore; $N=1.96^2 \times 0.5 \times 0.5 / (0.05)^2 = 384$

Estimation for non-response at 10% rate= 384/1-0.1=427=427

Calculation for finite population correction

$$n' = \frac{n}{1 + \frac{n}{N}}$$

Where **n**=427, **N**=318 (the total number of children in the 2 schools)

= 427/ (1+427/318)

=182.26

Proportional allocation

Sample in school 1 (for visual disability) with total number=50

N1=50/318 x100%

=15.72, =15.72/100 x182

=28.61

=29

Sample in school 2 (for hearing disability) with total number=268

N1=268/318 x100%

=84.28

=84.28/100 x182

=153.39

=153

In order to make up a whole number, 30 pupils who met the inclusion criteria were selected out of a total of 50 pupils from school for visual impairment and 154 pupils from school for hearing disability from the school registers to get a sample size of 182. However, 25 pupils out of the 30 selected pupils in the blind school and 151 pupils from the deaf school where met on ground on the very day of collecting the data. Therefore, all the 25 pupils in the blind school were included in the study and 151 pupils randomly selected.

3.5 Sampling technique

A systematic random sampling method was used to select the students that participated in the study from deaf school. 154 pupils were selected with the aid of the school registers by picking every 3rd student from deaf school. 151 pupils out of the selected 154 were met on the day of the activity and all 151 were covered in the deaf school.

From the blind school, out of the 50 pupils, only 30 met the inclusion criteria and all the 30 where selected for the study. However, 25 pupils turned up on the day of data collection and the whole 25 were recruited. Thus, 176 pupils were recruited from the two schools.

The remaining number could not be covered in any school elsewhere because these were the only special schools in the whole region and country. Although data has been collected in the upper grades (10 to 12), majority of the pupils in the deaf school were found to be above 18 years. The blind school has a teacher roll of 17 and each teacher had 1 or 2 questionnaires to complete per child together with the child. The same applied to the deaf school were the 47 teachers each had 3 to 4 questionnaires to complete with the children under him/her.

Selection of the participants for the qualitative phase: School staff were selected through convenience sampling. The school heads were given the opportunity to select these staff whom they feel can participate in the focus group discussions. There were 4 focus groups of 8 teachers each summing up to 32 participants. Each school had 2 focus group discussions making a total of 16 participants from each school. The school had a focus group for teaching and non- teaching staff.

3.6 Study instruments

The instruments used in the data collection were The Socio demographic questionnaire, Strengths and Difficulties Questionnaire (SDQ) Teacher version and Semi Structured focus group guide

1. **Socio-demographic Questionnaire**

This is a 44-item questionnaire designed to collect information regarding personal, family and school life of the respondents. The questionnaire was adapted from a 40-item socio-demographic questionnaire used in a Nigerian study of child and adolescent mental health (Omigbodun et al, 2008). This instrument was adapted to suit its usage though it was still used in English by the teachers to fill in demographic details of each child from the school records.

2. **The Strengths and Difficulties Questionnaire-Self- Rated, Teachers' Versions (Goodman et al, 1997)**

The extended teacher version of the SDQ was used to assess overall mental health of the children with hearing and visual problems. This is a 25-item behavioral screening questionnaire used to identify children at high risk (Goodman, 2001). The instrument assesses negative attributes in four subscales of mental symptoms (conduct problems, emotional symptoms, peer problems, hyperactivity-inattention) and positive attributes in terms of prosocial behavior in the previous 6 months (Brondbo *et al*, 2011). It explores whether the informant thinks the child has emotional or behavioural problems, and if they think so, it asks about the degree of stress and impairment in social competence. The teacher and parent versions can be administered to teachers and parents of children aged 4-16 years, while the self-report version can be completed by children aged 11-16 years (Goodman, 1997). The reliability and validity of this instrument has been shown to be acceptable (Muris, Meester 2003). This instrument is widely used (Klasen *et al*, 2000) including in many developing countries (Cortina *et al*, 2013).It was also validated in Nigeria by Adeniyi *et*

al,(2017) which showed a good internal consistency (Cronbach' alpha =0.82).The instrument performs at least as well as the Childhood Behaviour Checklist, with the added advantages of its brevity, better coverage of inattention, peer relationship and prosocial behavior, and its focus on strength.

After scoring the 25 items on a 3-point scale, (0=not true, 1=somewhat true, 2=certainly true), all items of the four problem areas (sub-scores of which range from 0 to 10 (Goodman, 1997)) were summed up to generate a total difficulty score between 0 and 40. Scores 0-13 were classified as normal, 14-16 as borderline and 17-40 as abnormal (Meltzer *et al*, 2000). The SDQ- Impact questions (5 items) were asked to assess functional impact of the problems on the child and classified as 0=normal, 1=borderline and 2 and above as abnormal

3.7 Training of research assistants

Three research assistants were well grounded in research already. However, they were further recruited for the study. One was a mental health nurse, the second has a first degree in mental health at the American international university in The Gambia and the third is a consultant within the ministry of education. they were all very fluent in English and 'wollof' local language. A day training of the socio-demographic questionnaire, and the SDQ questionnaires were conducted for all data collectors.

3.8 Pretesting

For the quantitative part, a one-day pre-test study was conducted on a small sample of children and young people with hearing and visual problems within the study sample age brackets in a mainstream school through their itinerant teachers. For the qualitative part of the study, focus

group question guide of 9 questions was used on a group of 8 itinerant teachers handling pupils with hearing and visual problems in the mainstream schools in the other regions different from the study site. This is to assess the general feasibility of the procedures in terms of time, ease of understanding of the contents and level of proficiency of the assistants and to identify potential problems ahead of the main study.

It took an average of 30 to 45 minutes for the quantitative part to complete the interview and scoring of results across all age groups age during the pretesting training. The focus group pretesting took about 2 hours. Interviewers were comfortable using the survey instruments and this further enabled discussions and exchange of ideas. However, after the pretesting of the question guide, it was realised that the focus group discussion took more time, hence the questions were reduced to 8.

3.9 Data Collection Procedure

Data collection was done on dates chosen by the school heads. The school heads chose dates that wouldn't interrupt the teaching and learning process in both schools. The data collection lasted from the 11th of February 2019 to the 15th February 2019. The necessary data for this study was obtained in two separate ways (qualitative and quantitative) from the respondents of the selected schools. The researcher together with two trained research assistants visited the selected schools and administered the questionnaire on the respondents for the quantitative while a Focus Group Discussion (FGD) guide was conducted among the staff of each school making up for 4 FGDs.

3.10 Qualitative interview

A focus group guide was used for the qualitative phase of the study. This comprised of 8 questions. All in all, there were 32 focus group participants. Each school had 16 focus group participants

divided into 2 focus groups. Each school had a focus group for teaching staff and non-teaching staff and each lasted for about one and half to two hours**.**

Venue: The focus group discussions were held in the selected schools. This was done to help reduce the cost of transport on teachers and for convenience and for teacher's easy participation in the focus discussion. Some of the staff and I arranged the resource room for the focus group discussions. The resource room was given to us by the school heads to avoid noise and distractions during the recording process.

Incentives: Refreshments and hot snacks were given to participants at the end of the sessions and transport refunds were given at the end of every session as staff stayed behind to the end of the activity in the schools. None of these monies were made known to the participants before the commencement of the discussions.

Language: Except for the focus group discussion which was held with the non- teaching staff of the school for blind that was held in wollof local language, all the other three were held in English language. This was because a lot of the ancillary staff in the blind school are not literate and majority are adult blind and wollof being the main language of communication of the area which all of them use and understand very well.

Question Guide: About 9 questions were originally developed and reviewed together with my supervisor who made recommendations and helped develop probes for each question. Adjustments were made to the question guide based on responses from the pretesting done with the itinerant teachers of the blind and deaf pupils in the mainstream schools. The same questions were used throughout the other three focus group discussions.

Preparations: For the questionnaires, each of the teachers was guided and given the number of questionnaires as per the number of pupils under his/her care in the deaf school. However, some of the teachers in the blind school are blind so they were guided and assisted in reading and filling the questionnaires by myself and the research assistants.

For the FGDs, follow ups were made through school visits within 24hrs prior to each focus group discussion to ensure everything was set. And then calls were also made every morning prior to a focus group discussion to notify school head and to confirm names of the participants. The heads of the two schools were advised not to inform any of the teachers about the focus group discussions. All the teachers got the information about the FGDs on the very morning of the focus group and consented to participate. Considering the proximity of the schools to the regional education office, only one car was used to carry research assistants. Teachers were picked up by school minibus to avoid delay in each of the mornings.

3.11 Ethical Considerations

Ethical approval and permission were obtained from The Ethics and Scientific Research Committee of the University of the Gambia and the Ministry of Basic and Secondary. The conduct of this study was guided by fundamental principles of voluntary participation; free, prior and informed consent; privacy and confidentiality. The consent form fully described the nature of the study and ensured the rights of the participants to withdraw from the study at any time without penalty or consequences.

Confidentiality of Data

The identity of the participants was anonymous and coded with numbers. All data gathered was only be accessible to the researcher and the team analyzing the data. The data was also to be used in presentations.

Informed Consent

All information regarding the study procedure was clearly explained to all participants for decision making whether to participate or not and assent was obtained from the children and adolescents. For adolescents who were competent such as able to understand the research very well, consent was obtained from them. Parental permission was obtained from all participants.

Non- maleficence to Participants

The study had no adverse effect to the participant and had no threat to the participants. No invasive procedure was carried out and maximum safety was ensured throughout the course of the study.

Beneficence

Children and adolescents who were diagnosed with mental disorders were provided with further information and were referred to a psychiatrist at the General hospital. The participants were also given information on the relevance of the results in informing policy makers in providing child and adolescent mental health services in the community.

Voluntary Participation

The will to participate in this study was absolutely voluntary and participant had the right to withdraw at any time during the course of the study without any penalty. Participants were not required to answer questions they were not comfortable with or do not want to answer.

3.12 Data Analysis

Quantitative analysis: The quantitative data collected for the study was stored by the researcher in a secure environment. The data collected was manually processed through coding and running electronically using Microsoft Excel and Statistical Package for Social Sciences (SPSS) version 22. Specifically, three levels of data analysis were performed using the SPSS: Univariate analysis involving frequency distributions and computation of percentages for all variables of interest; Bivariate analysis including chi-square test and regression analysis were used to assess the relationships between variables of interest and multivariate analysis such as logistic regression analysis as well as multiple linear regression analysis were used to study the contribution of specific variables (when the effects of others have been adjusted for) . Further specific details are as follows:

Qualitative analysis: The qualitative data was transcribed into Microsoft Word Processing Documents for each of the four groups and translated into English language. The transcribed data was then manually coded and analyzed for emerging themes.

CHAPTER FOUR

RESULTS

A total of 176 participants were recruited into this study and all (100%) of them completed the interviews and filled the questionnaires. The findings from participants in this study carried out in the two special schools in The Gambia, are therefore presented by the objectives of the study as follows:

4.1 Socio-demographic characteristics of participants

The socio-demographic characteristics give a detailed background information of the entire sample population, hence information was collected and analysed under three broad headings; personal, family and school-related characteristics of the participants.The participants that were recruited totaled 176, out of which 151 (85.8%) are from saint John school (school for deaf) while the remaining 25 (14.2%) attends GOVI (school for blind). Ninety-five (54.0%) of them were males while the rest were females. Islam was a major religion practiced among the participants, (94.9%), Education of the fathers shows 65 (37.6%) had no formal education, 43(24.8%) of the participants' fathers had basic education 35(20.2%) had secondary education while only 5(2.9%) had post-secondary education. But among the participants' mothers no one was found to have post-secondary education, majority 115(66.1%) had no formal education, 17 (9.7%) had basic education, 16(9.2%) had secondary education while 26(14.9%) of the participants do not know the level of education of their mothers.

Polygamy was more pronounced among the families of the participants, 113(64.2%) were from polygamous home. Almost all of the respondents' parents 148(84.1%) were married while only 28(15.9%) were non-married. The mean age of the participants was 15.5 years (SD =4). The

average number of children to a mother was 5 while the average number of children born to a father was 7.

Out of the 176 children from both blind and deaf school interviewed, 41(23.3%) were reported to be working before or after school. See Table 1 below

Table 1. Socio Demographic Characteristics of Participants N=176

Variables	**Frequency N**	**Percent %**
School		
St Johns (deaf)	151	85.8
GOVI (blind)	25	14.2
Religion		
Islam	167	95.4
Christianity	7	4.0
Traditional and others	1	0.6
Age		
Less or equal to 18years	129	73.3
19 years and above	47	26.7
Gender		
male	95	54.0
female	81	46.0
Religion		
Islam	167	94.9
Christianity	7	4.0
Other	2	1.2
Family Type		
Monogamous	63	35.8
Polygamous	113	64.2
Marital status of Parents		
Married	148	84.1
Non-Married	28	15.9
Who does child live with presently		
Both Parents	115	65.3
Either parent	28	15.9
Others	33	18.8
How many other people child lived with apart from parents		
None	45	25.6
1 - 2	100	56.9
Above 2	31	17.6
Does child do any work to earn money		
Yes	41	23.3
No	135	76.7
Level of father's education		
No formal education	65	37.6
Basic education	43	24.8
Secondary School	35	20.2
Post-secondary	5	2.9
Do not know	25	14.5
Level mothers of education		
No Formal Education	115	66.1
Basic education	17	9.7
Secondary School	16	9.2
Do not know	26	14.9

Others: aunts, uncles, cousins, step fathers, close relatives

4.1.1 School Related Characteristics of Participants

The majority of children participants were reported to do well academically, 139 (79.0%). Ninety-seven (55.1%) respondents reported having guidance counsellors in school despite the fact that only 36 (20.5%) participants reported visiting the counsellors. School related characteristics have been summarized in Table 2 below.

Table 2. School related Characteristics of participants N=176

Variable	Frequency	(% of N)
Does child do Well in Academics		
Yes	139	79.0
No	37	21.0
Are there Guidance Counsellors in School		
Yes	97	55.1
No	79	44.9
Has child ever Seen them		
Yes	36	20.5
No	140	79.5

4.2 Prevalence of mental disorders

The prevalence of mental disorder was found to be 30% as evidenced by the scores on the SDQ. Respondents that had normal scores meaning they have no mental disorders were 69.9%. The most prevalent problems were peer problems (28.5%) followed by conduct problems (26.7%) and hyperactivity (25.0%)

Table 3. Prevalence of mental health disorder on participants by class

Variable	Frequency	Percent
Total SDQ		
Normal	123	69.9
Abnormal	53	30.1
Emotional scale		
Normal	145	82.4
Abnormal	31	17.6
Conduct		
Normal	129	73.3
Abnormal	47	26.7
Hyperactivity		
Normal	132	75.0
Abnormal	44	25.0
Peer problem		
Normal	126	71.6
Abnormal	50	28.5
Pro-Social		
Normal	131	74.4
Abnormal	45	25.6

4.3 Correlates for Mental Health Problems in study participants

The socio-demographic characteristics were analyzed using chi-square analysis to find if there was an association with having mental health problems. Age group (p=0.002), working for money (p=0.028), academic performance (p=<0.001) and presence of school counsellor (p=0.025) were found to have significant association with having mental health problems. The associations between sociodemographic characteristics and mental health problems are indicated in Table 4.3 below.

Table 4.3 Sociodemographic Correlates for Mental Health Problems in Participants

	MENTAL HEALTH PROBLEMS		**X^2**	**P-value**
	NO	YES		
School				
St Johns	104(68.9)	47(31.1)	0.518	0.472
GOVI	19(76.0)	6(24.0)		
Age group of respondents				
Less or equal to 18yrs	82(63.6)	47(36.4)	9.170	0.002
19yrs and above	41(87.2)	6(12.8)		
Gender				
Male	62(65.3)	33(34.7)	2.096	0.148
Female	61(75.3)	20(24.7)		
Family Type				
Monogamous	49(77.8)	14(22.2)	2.904	0.088
Polygamous	74(65.5)	39(34.5)		
Marital Status of Parents				
Married	100(67.6)	48(32.4)	4.707	0.319
Separated/Divorced	14(87.5)	2(12.5)		
Father is dead	3(60.0)	2(40.0)		
Mother is dead	4(100.0)	0(0.0)		
Mother and father are dead	2(66.7)	1(33.3)		
Live with presently				
Both parents	83(72.2)	32(27.8)	10.854	0.054
Mother	13(72.2)	5(27.8)		
Father	3(30.0)	7(70.0)		
Grandparents	5(71.4)	2(28.6)		
Others	19(73.1)	7(26.9)		
Working for money				
Yes	23(56.1)	18(43.9)	4.829	0.028
No	100(74.1)	35(25.9)		
Do Well Academics				
Yes	109(88.6)	30(56.6)	22.864	<0.001
No	14(11.4)	23(43.4)		
Presence of Counsellor School				
Yes	61(49.6)	36(67.9)	5.031	0.025
No	62(50.4)	17(32.1)		
Ever see them				
Yes	22(17.9)	14(26.4)	1.656	0.198
No	101(82.1)	39(73.6)		
Problem Seek Guidance Help				
Yes	63(53.8)	29(54.7)	0.011	0.916
No	54(46.2)	24(45.3)		

***Others**: aunts, cousins, step fathers or close family members*

4.5 Multivariate Analysis (Adjusted Odds Ratio for Mental Health Problems)

After adjusting for those variables that are significant at p-value of 0.10 or less from the chi-square analysis. For every unit increase in the age (in years) of the participant there is about 20% less likely that the participant will have mental health problems with p-value <0.001. The participant who live with father alone are 5.3 times more likely to have mental problem than those who live with both parents with p-value of 0.045. Those who do well in academics are 86% less likely to have mental problem than those who do not do well with p-value less than 0.001.

Table 6 Adjusted Odds Ratio for Mental Problems

Variables				95% CI for Exp(B)	
	B	**P-value**	**Odds ratio**	**Lower**	**Upper**
Age categories (in years)					
Less than or equal to 18yrs(reference)	-	-	-	-	
19yrs and above	-0.205	<0.001*	0.815	0.729	0.910
Who child Lives with presently					
**Both Parents(reference)*	-	-	-	-	-
Mother alone	0.328	0.632	1.388	0.363	5.301
Father alone	1.668	0.045*	5.300	1.041	26.979
Grandparent	0.644	0.491	1.904	0.305	11.878
Others	0.510	0.386	1.665	0.526	5.270
Kind of work done to earn money					
**No(reference)*	-	-	-	-	-
Yes	0.618	0.171	1.855	0.765	4.498
Do well in Academics					
**No(reference)*	-	-	-	-	-
Yes	-1.840	<0.001*	0.159	0.065	0.388
Guidance Counsellor School					
**No(reference)*	-	-	-	-	-
Yes	0.276	0.503	1.318	0.588	2.958
Family type					
**Monogamous(reference)*	-	-	-	-	-
Polygamous	0.348	0.418	1.416	0.610	3.288

*p-value significant at 0.005

4.6 QUALITATIVE RESULTS

SECTION A: Focus Group Discussion Report from Teaching Staff

4.6.1 Sociodemographic characteristics of the teaching staff

There was equal representation of male and female teaching staff who participated in the study. Their qualifications range from diploma to certificate in education. The mean age of teaching staff who participated in the focus groups was 38.8 (**SD** =7.9), with an age range of 29years to 57years. The average number of years of teaching was 10.93 (**SD** = 7.75) with a range of 3years to 26 years. **See Table 1** for the demographic information of the focus group participants.

St Johns School for the Deaf

Table 1. Socio Demographic Characteristics of Teaching FGPs of Deaf and Blind Schools (N=16)

Variable	Frequency (%)	Mean	SD	Minimum	Maximum
Age		38.8	7.9	29	57
≤ 40	10 (62.5)				
≥ 41	6 (37.5)				
Gender					
Female	8 (50.0)				
Male	8 (50.0)				
Work Experience		10.93	7.7		
≤10	10(62.5)				
≥11	6(37.5)				

4.7 Perceptions of teaching staff on mental illness, perceived causes and symptoms.

Question 1a. What is your understanding of mental health/ mental illness in children?

Sub-average intellectual capacity

The Focus Group Teaching Participants (FGPs) described their first thoughts and understanding of mental illness with terms like low cognitive capacity, low IQ, as low intellectual capacity, stupidity, imbecile, failures, low reasoning capacity, moron and lack of proper brain functioning. Almost all FGP's stressed on lack of understanding and low retentive capacity as a contributing factor to low performance in children with visual and hearing problems.

"When you talk about mental illness in a person or child, it means the person/child has sub-average intellectual capacity, otherwise…. who is not able to grab information as other children"

'It can also be low or slow learning problems and performance for children in class. some children can be very slow in understanding information in class and for some, you can teach the whole year all they do is stare at you without taking anything, this is mental problem for them.'

"Mental illness talks about the mind of the child, the ability of the child to retain information and digest it with time"

Emotional problems

They spoke on having emotional disturbances as mental problems too and some stressed on

Poor brain development and functioning in children lack of which may lead to poor mental health or illness in children. This, some felt could lead to malformation in brain leading to children having small heads or big heads and other mental health complications. The discussions started with what

participants felt where some of the causes of mental illness and problems in children with disabilities.

"I describe mental health as emotional problems because a blind boy in my class refuses to use his white cane when I asked and forced him to use it he said while crying that his friends laugh at him so this is very sad"

Question 1b: What are some of the causes and symptoms of mental illness in children with visual and hearing impairments?

The common theme that emerged from the teaching staff include problems with lack of proper primary support, abuse and neglect, stigma and discrimination, poverty, child labor, trauma on the child, family disruption and genetic transmission and communication barriers were among the more striking themes from the FGDs.

Parental Neglect:

'its sad to know that majority of them are not staying with their parents, they sent to live with family members in the urban here who don't even show them love, this pathetic'

'These been the only special schools, parents sometimes have no choice but to give them to close relatives to care for them as they go to school, so some of them feel the separation' imagine being blind and at the same separated from you parents only can bring mental illness'

'These deaf children are vulnerable to forms of abuse out there, so we really deal with a lot problems especially the girls, they are usually harassed sexually from home, some will tell us the teachers but won't talk, you only notice the sadness and quietness in them and know something is

wrong, when you find out its either she's raped by a step- father or a cousin or outside, so these problems remain in them for life'

Barriers in Communication

This is particularly a problem in with hearing impaired child and their families as emphasized by most of FGD participants. They felt lack of communication between families and children is a contributing factor to the poor relationships of these children and their families. Most parents do not have knowledge in sign language.

'deaf children communicate through sign language and almost all parents to these children don't know sign language. They don't even put effort to learn, so children suffer, and we suffer to in trying to make them understand these children'

Stigma and Discrimination

"Imagine been marginalized, not supported and not cared for alone can cause madness in a child much a child with disability"

'they are even refered as evil morons and nonentities as we call them in society".

Child Labor

Imagine most of them do hard work like washing dirty laundry usually for the whole family before coming to school and again when they reach home no matter how late it is they clean, mob, sell in markets, in the street, some will beg, imagine they cannot hear and they can be knocked off by a car. So, they come to school tired and sleepy'. At times when we reach out to advice families, they send them parking

Trauma on the Child:

There is a child in my child who has epilepsy aside from being blind, the mother said he felt on his head when he was just 4 months old and has been like this after a year. This can cause mental problems.

Sickness

'Sickness like meningitis can lead to deafness and also mental problems in children'

Hereditary

'Children inherit mental problems in parents like the way the inherit glaucoma, sickle cell and other illness especially if its running in the family'

Question 1c: Do children under your care experience problems with mental health?

Almost all FGP's in the teaching group responded that children with both hearing and visual problems experience mental health problems. The commonest theme that came out were behavior problems, speech problems and physical appearance as ways that show that they are experiencing mental illness**.** However**,** some of the FGP's did not think the children have mental health problems. Some of the participants felt that these children cannot have mental health problems and their behavior and inability to learn is all as a result of their impairment and not connected to mental issues.

Physical Appearance

"With me I look at the size of the head and the face of the blind child and I know that child is mental. I have two in my class, one has a small head and the one has very short fingers with thick and short face and behaves very abnormal"

Behavioral problems

A teaching staff of St John also said *"Mental illness means not being able to contain yourself as normal people do in the mind and this shows in your appearance and behaviors too, like children who cannot behave or seat still in class like others that's what I believe"*

Non -existent

"mental health to me I feel doesn't exist in the children at young age, only when they grow to be responsible that's when you talk about mental in them, but I don't think a child can be that mental because these children don't have much to think about because they can't even hear you when you talk, so their own world is small".

"I don't think these children have mental problems bordering them. It is because they are not seeing so they are expected to be slow and not to be like others, that is not mental"

Emotional issues

Yes, having emotional problems is mental illness. Some of them come to school you see sadness in their face and in the way, they sit at one place".,

"Most of the time I explain this as rudeness, they become angry and some will just sit and cry like babies. I really don't know what to do

Question 2 How do you help/ what resources do you have available to help these children?

Focus Group Participants identified many areas of intervention of which they render help to the children when identified and key among them include parental involvement, teacher sensitization on problems in children, engaging the child (child focus interventions) and making the school friendly for the children.

"**Parental involvement**:"

Virtually all focus group participants of the teaching group agreed that inviting parents to school and informing them about the problems of their children and also providing support in form counselling and advice will really help.

'*We do organize parent teachers association (PTA) meetings where they discuss issues relating to the welfare of these children including what they (teachers) noticed about the students.'* Additionally, FGDs believe a lot of these problems start from homes and they find it difficult to understand them, so visiting the family and finding out what goes on the homes they also believe will help so the need for reaching out to the families which is often done.

'As in the case of the girl that reported being raped by the aunt's husband, myself and one of the senior teachers paid a visit to actually know what condition the girl is living. To our surprise, the girl stopped coming to school, when we followed up, we later found out she has been sent back to the village by the aunt claiming she wants to break her home

"**Teacher Sensitization**"

'We organize staff meetings and advice teachers not to maltreat them because they need our help.'

No resources

'We help them by sympathizing with them, we don't have much knowledge of mental education to be able to help me'

Making the school friendly for the children

They maintain proper seating arrangement and make sure each child is oriented to his seating place to avoid knocking and falling in class according to GOVI staff. FG participants agreed that they are provided with basic amenities, appropriate recreational facilities like a children's playground is made for them to use during break and play periods. There are games that are not injurious to avoid pain. They have a gold ball with a bell in it which they use for football. Another staff said in a way to make school friendly to these children they do not encourage beating as a means of correcting, according to this staff. They (staff) also organize football clubs, girls' basket- ball club and a lot of these children are doing well in it. This brings them close and some of them wouldn't want the week to end or holidays to come because they don't have those things at home according to the discussants.

'we also organize football clubs, girls' basket- ball club and a lot of them are doing well in it. This brings them close and some wouldn't want the week to end or holidays to come because they don't have that have'

Limited Use of Corporal Punishment

FGDs explained that disciplinary measures are always employed to make sure that they learn and feel treated like their counterparts. They felt pampering them will not be helping.

"*Though we don't encourage beating, we advise teachers to use other measures to correct bad behavior like kneeling the child down, keeping the deaf child busy and giving them challenging work to and bringing them closer to them. But when it gets out of hands, we use the cane which they understand well".*

Appropriate Supervision

In another submission, the discussants said, "*we arrange them and assign teachers to keep eyes on them during lunch and avoid bullying among them either in the classroom or in the school compound".*

Counselling and prayers

As supported by a staff of St John saying, "*when they are in problems, we counsel them and we encourage them to make friends among themselves to help one another, these reduces sadness in them".*

Provision of Basic Amenities

'The school offers both lunch and breakfast to these children as a lot of them are under guardians and come to school hungry and sleepy'

Provision of appropriate recreational facilities

"A children's playground is made for them to use during break and play periods"

'as the physical exercise teacher, I introduce them to games that are not injurious to avoid pain. They have a gold ball with a bell in it which they use with me for football.'

Engaging the Children: Behavioural management

FGPs identified that keeping the child busy with class work can help reduce the burden on child and the teacher.

A teacher at GOVI school said, *"if you want problematic blind children to quiet, give the work to braille for the rest of the period".*

Those of St John school even said they do story telling in sign language, so they take it in turns and it always come out interesting and all of them will participate. As one of the staffs said

"*We incorporated singing lessons in their syllabus as a lot of enjoy it and it puts smiles even on sad face of the blind children".*

Use of Cocurricular Activities

"*We encourage them to be active as lot of them stay lazy and sleeping, so we do football dance and life skills for them like dish washing and sweeping for the girls, basket weaving and making of door mats for the boys".*

Question 3: Perspectives of teachers about resources needed to help tackle mental health problems

FGPs mentioned human, financial and material resources they perceived important to manage mental health issues in the school.

***Human Resources*: mental health training**

All the FGPs in the teaching group said it is very necessary for them to undergo training in mental health in form of workshops, TV talk show, seminars in both in special education and adolescent mental health for their benefit and that of these children. Sign language lessons for both teachers and parents.

'We need training both in special education and mental health for our benefit and that of these children. We cannot help them if we don't know how to'

'We need a mental health unit in the school and someone to train us and also help us deal with the problems when they come'

Financial resources

Almost all the discussant said or supported the need for financial support, because all what they do for these children requires money. They stressed on the need for motivation aside from the monthly wages and money to buy toiletries for the younger ones.

For example, a discussant said, "*We buy soap and toiletries for the nannies to care for the young ones in the nursery, but we have run out of cash and we really need to support them".*

Teachers incentives:

'It's really disheartening working without any source of motivation apart from your monthly wages, we really trying'

Material Support:

The teachers also said they need toys and playing materials such as balls, goalball, proper playground, educational toys and learning materials for them to feel at home and happy, because it is good for mental health

'A lot of their play materials are expensive, so we find it hard to get them'

Question 4: Teachers' perspectives on barriers to children receiving mental health care and possible solutions to mental health problems in the children

Many barriers that prevent children from receiving mental health care are listed by the discussants which include no career development for teachers, lack of qualified teachers in special education,

lack of support from government and individuals, lack of fund, lack of motivation on the part of the teachers and lack of necessary skills to identify the children with mental disorder not to talk of given them adequate care. However, recommendations to improving mental health problems of children in the schools were also made by the teaching FGPs.

Career Development

Teacher staff felt they have career development in the form of trainings, workshops, disability and mental health talk shows

A teacher at GOVI school said, "*there is no career development for us teachers handling them. We have little training in special needs and nothing in mental health so nothing much can be done for their mental health".*

Lack of Motivation and Incentives for Teachers

FGPs felt they are not motivated with all the efforts to are making to these children. Most them felt like leaving but they pity these children**.**

'We lack motivation as teachers to these children, how do you expect them to do if everything about them is left behind compared to others'

We really need support but its not forth coming, so even us teachers, our mental health is disturbed at times we think of quitting, but we pity these children.

Recommendations from Teaching FGPs

The teaching FGPs suggested career development in programs relevant for children with disabilities, motivation allowances for teachers, parental involvement and continuity of sign language education to ease communication for deaf children, establishment of mental health

service within the schools and financial aid from government among many others. With these, the teaching staff felt would improve mental health problems of deaf and blind children in the schools and ease their job too

SECTION B Focus Group Discussion Report from Non- Teaching Staff.

4.6.2 Socio Demographic characteristics of Non- teaching staff

There was equal representation of male and female non-teaching staff who participated in the study. This showed a positive gender representation of the of non-teaching staff to enhance equal participation in the focus discussions. The non- teaching staff were school administrators, school principals, vice principals, school secretaries, nannies, school caretakers and the librarian. Their qualifications range from diploma/certificate in education/audiology to undergraduate degree. The mean age of the non-teaching staff who participated in the focus groups was years 48:3 (**SD** =8.7), with an age range of 39years to 63 years. The average number of years of teaching was 13.62years (**SD** = 8.6) with a range of 4years to 32 years. **See Table 2** for the demographic information of the focus group participants.

Table 2 Socio Demographic Characteristics of Non- Teaching FGPs of Deaf and Blind (N=16)

Variable	Frequency (%)	Mean	SD	Minimum	Maximum
Age		48.31	8.7	39	63
≤ 40	5 (31.3)				
≥ 41	11(68.8)				
Gender					
Female	8 (50.0)				
Male	8 (50.0)				
Work Experience		13.6	8.6		
≤10	8 (50.0)				
≥11	8 (50.0)				
Occupation					
School Head	4(25.0)				
Administrator	8(50.0)				
Auxiliary	4(25.0)				

4.6.3 Perceptions of mental illness, causes and etiology by non- teaching staff

Question 1a What's your understanding of mental health/ mental illness in children?

FGDs in the non- teaching group used expressions like insanity, loss of touch with reality, mental retardation, when one runs mad and in the streets. However, most of the FGDs believe that mental problems affect only adults and not children, even though they are disabled, you expect them to be emotionally imbalance. Expressions and stigmatizing labels like ***dof', 'ko dess', 'nyorut', 'toolee','egoteii'…***meaning morons, embeciles, lunatics etc were used by the FGPs in this group. However, not all the FGPs used these labels. It was noticed that most of them are aware of disability and the importance of them having a good state of wellbeing. This discussion commenced in the explanations to the causes of mental illness in children with both hearing and visual problems.

Emotional Imbalance

'My understanding of mental problems is that it affects adults and not children, even though they are deaf, you expect them to be emotionally imbalance, their parents and us teachers will feel the sympathy for them'

Stigmatizing labels "Madness" "Mental imbalance" and "low cognitive capacity"

When I hear of mental ill health, I first thoughts of it are children and adults who are mentally imbalance, who have low IQ, low cognitive capacity or evil morons and nonentities as we call them in society'

Question 1b What are some of the causes and symptoms of mental illness in children with hearing and visual problems?

The following themes were identified by the FGPs in the non- teaching group.

Hereditary, trauma before and after birth, Poor Child Birth, Infection, Poor Brain Development and spiritual causes were identified as causes of mental problems in these children and more importantly lack of adequate proper primary support. This they emphasized on it as a cause for their mental health problems.

Infection

'Mental illness can also be born with usually as a result of poor child birth or infection to the mother'

Poor brain development

'The thinking capacity of a child that is mental is very low and this usually has to do with poor brain development'

Trauma

'Also trauma to child can lead to mental illness, many of the children that go through serious life events experience mental problems'

Neglect and Abuse

'With my observation as the school head, some of them come to school hungry and with taking bath, because when teachers complained of a child, I invited that child to my office and had a talk with the child, this child told me that his guardian refuses to give him food in the morning saying you cannot expect me to feed you in the morning and feed you when you close from school. So, I keep giving them money to buy breakfast so that they can stay strong and learn. This is serious trouble for a child and his mental wellbeing especially those away from home'

Another participant said *'Imagine if a deaf is raped by her step-dad, you cannot expect that child to be happy again, these are some the cases we are facing here in the school. The child will come desperate when we find out, we follow up but imagine they step on the case and silence it. Usually the aunty will kick her out saying she want to end her marriage which she will not accept'*

Family Disruption

'There is a case of a blind girl reported to me by the class teacher, this blind girl keeps crying and sleeping in the class, as I invited the mother to the school, I came to realize that the father is threatening to divorce the mother as a result of the child's blindness saying blindness is not his lineage but from the woman. So, the blind girl hears them quarrel at night and comes with pain to school'

Spiritual Causes

'Most of these conditions we believe are cause by devils, as pregnant women are expected to dress appropriately and not to go out during odd times, but some don't and many results in children coming out like this and behaving like this'. This is also a strong believe in the society here

Communication Barrier

'One thing again is a problem is the lack of communication between these deaf children and their families and society is causing a lot of problems, people and even parents will segregate them from family affairs, not talk to them and make them fell totally not important, left out of family, the only place they find love and acceptance is here in the school. Some of them wouldn't want school holidays to come or even weekends to come. There is a child the teachers observed that cries when Friday comes

'Parents don't want to learn sign language to be able to understand their deaf children, so a lot many of these problems emanate from homes and is worse on those under guardians or the fostered deaf children, when we intervene, the guardian or foster parent will send them packing'

Question 2 Do children under your care experience problems with mental health?

Appearance

'Yes mental health problems can be in them because at times some of them their appearance is not pleasant at all, either dirty or smelling you wonder if they are been cared for at home'

Low Performance

'And when it comes to performance records, some of them are not performing at all, you wonder why, but I believe some of them come with problems from home'

Question 2 How do you help/ what resources do you have available to help these children?

Involving Parents and Inviting Parents on PTA Meetings

These participants believe parents need to be told the problems their children are expose to in foster homes, some are both physically, sexually and emotionally abuse. another teacher from the same St John supported his colleague as saying "The school authority even organizes open day with the parents to come in and know how their deaf child is doing both in learning and welfare. A member of staff of St John even said that the school also offers sign language lessons to parents of these children, and that these parents were coming because the special needs unit gives them transport refunds but when that stopped, not even one of them comes now.

"*We call on their parents and care givers during PTAs but not all of them respond. We advise them on their welfare".*

Counselling and Prayer

'Well, in our own efforts we offer counselling to these children, especially the girls that are usually abused in homes, we take them to hospital when we know to get checked and then make them settle with it and move on'

Peer Grouping and Support

'We do what we call peer grouping. We make them choose friends among them and encourage them to support one another and inform the administration if your friend is in trouble or sick and this has been very helpful because a lot of problems we know through their friends as they share secrets particularly the girls when they are been abused'

Sign Language Training for parents

'The school also offers sign language lessons to parents of these children. Before, they use to come because the special needs unit gives them transport refunds but when that stopped, not even one comes now.'

Involving Child Right Authorities in terms of Abuse and Neglect

'In cases of abuse, we involve necessary authorities but usually parents will cover up the cases saying family relationships will be tarnished and society will talk about it'

Proper Child Placement in Class

The FGPs identified that proper placement helps the teachers manage the noise and disturbances from the children. The blind children are seated in a way that they can easily walk in and out of the class and back to their seat with falling or getting injured. For the deaf children the FGPs said

some of them can be very stubborn and noisy, so they bring them in front of the class to reduce the problems.

'We also ask the teachers to keep the children they identify as stubborn and disturbing in front of the class and put their eyes on them.'

Use of Proper Disciplinary Measures

The FGPs all agreed that discipline is very important to these children. The FGPs stressed that these children need love and not much of sympathy because if you sympathize more you won't correct them which is not helping them

'Though we don't encourage corporal punishment, we advise teachers to use other measures to correct bad behavior like kneeling the child down, keeping the deaf child busy and giving them challenging work to and bringing them closer to them. But when it gets out of hands, we use the cane which they understand well'

Extra Curricula Activities

'We encourage them to be active as lot of them stay lazy and sleeping, so we do football dance and life skills for them like dish washing and sweeping for the girls, basket weaving and making of door mats for the boys'

Question 3 What resources do you need/want to help manage mental health problems in children?

The FGPs lamented on the need for teacher training, teacher motivation and incentives, continuous sign language training for both parents and teachers, integrating mental health into special education teacher training manual, expansion of school curriculum to include mental health

education as part of physical health education for pupils, technical and financial support, capacity building for teachers as needed resources for mental health.

Need for Training

A non-teaching staff of St John puts it this way, "*I suggest that child mental health and special education be in cooperated into the Gambia training curriculum so that every teacher can learn and benefit the children and also, the special education unit should add mental health training into their training packages and also care for them during their monitoring visits to the schools".*

Another staff even said they needed trained teacher, according to him, "*We want trained teachers to be posted to the school. The school should not be a dumping ground for every untrained teacher in special education or mental health just because the teacher doesn't want to be posted in the rural normal schools that need their services more. We have a lot of them here who cannot use braille or deal with the blind".*

Expansion of school curriculum

'children should be thought about their mental health as part physical health education, it is very important they know about themselves mentally'

Financial Support from Government

In our deaf school, some of them will come with worn out shoes, torn uniforms, we deep our hands in our pockets to support them, it would been good if we hard support from somewhere too'

Transportation

'our school buses are all faulty in both schools, children find it hard to come to school, I think this adds to their stress' so we need money to either repair or replace them'

Feeding

'Feeding too becomes a problem, though ministry helps but the children are many'

Question 4 What are some of the barriers that prevent children from receiving mental health care and possible solutions to mental health problems in the children?

The common themes that emerged from the FGPs in the on-teaching group included lack of skills and knowledge from teachers handling these children, limited financial and technical support to the education sector, high rate of teacher attrition as a result of lack of motivation and training, lack of qualified teaching staff as some of the barriers to children receiving mental health care in the schools. The non- teaching FGPs further lamented that abuses are reported when they happen, but authorities involved would sit on them and at times families would not want to pursue further especially when the culprits are family members as is usually the case. Hence, recommendations for improving mental health problems were made.

Lack of Training

'We do not have much qualified teachers in special education so teachers which we need'

'The school is full of blind teachers, when these children train up to college level, we don't have any other place to employ them as teachers. They are all posted back to the blind school where they are schooled so the cycle will continue, they are hardly absorbed in other jobs'

Lack of Funds

"*there are no more funds given as transport refunds provided by the ministry of education for parents to learn sign language in order to communicate with their deaf children, now parents have*

stopped coming and this is causing a lot of burden to the deaf children because they are not heard, to parents because they can't understand their deaf children and to the school teachers and administration as many cases emanate from home and transferred to the school, we cannot do anything".

Lack of Government Involvement

'Let the government pay hid to the school, some of them don't even know where the school is located privately owned or government sub vented, this is serious'

'Most abuse cases are been reported but usually those in authority seal them up especially if relatives are involved'

'Our affairs and welfare not heard by many especially the government too much neglect'

No Incentives and Motivation for Teachers

'No motivation for the teachers of the school by policy makers, this has led to high attrition rate of qualified and trained teachers'

Transportation Problems

'The school bus to the blind school is faulty for a year now, we put some of them in the bus from the school for learning difficulties and some even decided not to come because of the distance, the situation can be discouraging for us and the government and ministry of education is still quite about it'

'the ministry of education is not even aware of our problems because none is raising them, and people are not concern'

Neglect

'Most abuse cases are being reported but usually those in authority seal them up especially if relatives are involved'

Recommendations from Non- Teaching FGPs

The non- teaching FGPs gave important recommendations for improving mental health problems of deaf and blind children. Among these include stakeholder involvement into the welfare of the children, training both for teachers and sensitization and awareness creation for parents and enlightenment campaigns expansion of the school curriculum to include life skills education and mental health talks, continuous sign language training for both parents and guardians, parental care and understanding positive societal, family environmental approach to children and young people with disabilities. With these, the FGPs felt will improve the mental wellbeing of these children and improve their learning output.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Discussion

This study was a school based mixed methods study carried out to determine the prevalence, sociodemographic correlates and pattern of mental problems among children and young people living with hearing and visual impairment in selected schools in The Gambia. Perceptions of teachers about mental health problems and resources presently available and resources needed for tackling mental health problems in the children were also explored

5.1 Family related characteristics of participants

A total of 176 participants participated in the study. There were 51 (85.8%) are from saint John school (school for deaf) while 25 (14.2%) from GOVI (school for blind). Ninety-five (54.0%) of them were males while the rest were females. Polygamy is more pronounced among the families of the participants, 113(64.2%) are from polygamous home. But almost all, 148(84.1%) parents are married 28(15.9%) are non-married. A possible explanation for the higher rate of polygamy among the deaf and visual impaired participants might be associated with the fact that about 90% of the Gambian population is purely Muslim hence the majority marry more than one wife and produce more children compared to monogamous family settings. (Gambia Bureau of Statistics 2013). However, Adeniyi et al in a Nigerian study also found higher rates of polygamy which may be explained by the effect of the presence of a child with a disability on family stability as it has been suggested in most African cultures that a woman's status in a family is directly related to her ability to bring forth heirs, as a result, a woman who gives birth to a disabled child is less able to compete for husbands attention hence the husband might decide or be even advise by family

members to take in another wife (Schlebusch et al 2017dies have also found a significant association between polygamy, low saving rates, a high incidence of infectious diseases, higher levels of child morbidity and mortality and maternal depression in pregnancy.(Van Gent T, Goedhart AW & Treffers PD 2012). All these factors increase a child's risk of having a disability. Furthermore, with the large sizes of polygamous families, there is an expected reduction in the amount of support both in financial support and parental stimulation received by these children which further increases the risk of developing more problems.(Adeniyi, Omigbodun and Adeosun, 2019)

Studies have also shown that raising a child with a disability causes marital strain and increases the probability of divorce or separation (Adeniyi, Omigbodun and Adeosun, 2019). In addition, parenting demands and stress are higher among parents of children with disabilities(Masulani-Mwale *et al.*, 2016), leaving little or no room for a renewed marital relationship between the parents. Other factors that can lead to parental separation are societal stigma on families with children and young people with disabilities(Kuper *et al.*, 2014) and extended family practice in most Sub Saharan African countries which Gambia is not an exception. This allows for significant interference in the decisions within the nuclear family settings(Adeniyi, Omigbodun and Adeosun, 2019). However, this appears contrary to the findings in this study. The results show that almost all 148(84.1%) of the participants in this study have their parents married and 28(15.9%) are non-married among the participants. A possible explanation for the lower rate of divorce among families of the deaf and blind children in this study could be based on the collective extended family set ups in The Gambia that emphasis on unity and strengthen child support and fostering ideas in families (Disability Survey, 1998). Moreover, disabled children either blind, deaf or physically handicap many a times are sent to live with maternal grand- parents or other close family

members in villages to avoid breakups in couples and as respite for mothers of the disabled. Also, many men would follow religious doctrines that strongly encourage unity and preach against separation and divorce. Most men would rather go in for a second wife than divorce the other to avoid disunity in the family. Another reason could be because of the size of the country and the high rate of intermarriage between close blood ties hence, problems are settled within families and most of these vulnerable children are been hidden from society to avoid stigma and discrimination of family from the society (Gambia Bureau of Statistics 2013)

A significantly higher percentage (66.1%) of mothers with disabled children had no formal education compared to the fathers (37.6%). None of the participants mothers were found to have post -secondary education, in fact, some of the children couldn't tell if their parents had gone to school or not. This reflects The Gambia literacy rate which is higher in males than in females (70.5% Vs. 48.6%). Consequently, males are more likely to be employed and earn more money than their female counterparts (Gambia Bureau of Statistics, 2013). This is consistent with previous studies showing a higher rate of low educational attainment in mothers of children with blindness(Vergunst *et al.*, 2017). This is also in keeping with a study that assessed the socio-demographic characteristics of deaf and hearing children, it was found that more parents in the deafness group had no or low educational level attainment (Adeniyi, Omigbodun and Adeosun, 2019). An explanation for this could be that mothers who have no formal education might be limited in their ability to make informed decisions about the health of their children and might also have difficulty accessing health care for them (Vergunst *et al.*, 2015). Utilization of health care by pregnant mothers who are not educated might be limited and this in turn may lead to an increased risk of complications like brain infection in the baby that can subsequently lead to blindness and deafness(Msall and Hogan, 2007). Protective mechanisms against disability of any time have been

associated with more maternal education (Owen *et al.*, 2016; Adeniyi, Omigbodun and Adeosun, 2019), these mechanisms include less maternal depression, ability to access and benefit from interventions and having a better nutritional status (Adeniyi, Omigbodun and Adeosun, 2019).

5.2 School-related characteristics of participants

More than half 95 (54%) of the participants are found to be males while the rest are females. A possible explanation to this could be the fact that higher percentage of children with disabilities are not in school and even for those that are in schools, they go to school late and majority are male children. Also, many parents don't see the need for educating disabled children in The Gambia and even whereas they do send them to school, continuity of education is never promised. This is particularly high in the disabled girls. Girls with disabilities are less likely to be enrolled and attend primary education than boys. (1998 Disability survey)('Validated Special Needs Education Policy Framework',2016/2022). This is in keeping with education policy framework for special needs in the Gambia which states that, although access to education has improved for children with mild visual and hearing impairments, children with disabilities of all forms including those afflicted with epilepsy still face numerous barriers due to socio-cultural beliefs and practices that result in stigma and discrimination on them and their families in the Gambia('Validated Special Needs Education Policy Framework',2016/2022). The policy framework further elaborates on the limitations in accessibility to physical structures for children with physical disabilities to enhance their movements and access to education. This is in keeping with The Gambia Education Management Information System (EMIS), which shows prevalence rates of students with special needs at school level is 0.84% with gender differentials of 0.46 and 0.37 per cent for males and females respectively. Though not significant, there are differentials at regional level, coupled with the fact that, there are few special resource centres providing educational

services to children with disabilities such as those who are visually impaired, hard of hearing and having learning difficulties. These are the only centres providing educational needs of these children in the whole country while a bigger percentage of them are in the homes and the community without any form of education (Revised Special Needs and Inclusive Policy Framework 2016/2022). This is in line with the educational enrolment rate in the Gambia which shows that more than 90% of the children were enrolled in a primary school.

5.3 Prevalence of mental health problems in children with hearing and visual impairments

In this study, a 30% prevalence for mental health problems was found among children with both hearing and visual impairments. Other studies among children and adolescents with deafness have reported higher rates of mental health problems. (Fellinger J, Holzinger D, & Pollard R. 2012). For example, an Australian study assessed 99 children with bilateral deafness of at least 40 dB where parents and teachers completed the Strengths and Difficulties Questionnaire (SDQ) (Adigun, O. T. 2017). In this study, results indicated that, the children with deafness scored significantly higher on the SDQ than their counterparts from normative samples according to both parents' and teachers' ratings reported showing higher prevalence of (19.8%; 95% CI, 18.8%-20.7% (Adigun, O. T. 2017). In another study of adolescents with deafness, 46% reported different types of mental health problems (van Gent T, Goedhart AW, Hindley PA. & Treffers, PDA 2007, 48, 950–958). Some significant impacts of mental health problems occurring with deafness include increased social isolation and academic difficulties, whichis usually as a result of frequent absence from school and other school-related social activities (Kouwenberg, M., Rieffe, C., Theunissen, S. C. P. M., & Oosterveld, P. 2012; 1). With the use of Strengths and Difficulties Questionnaire (SDQ), a current study done by Adeniyi et al on the prevalence and correlates of mental health problems among school-going deaf adolescents in Nigeria, West Africa found out that over half

of the deaf group (65.5%) obtained a total difficulty score of 14 (cut-off point obtained from the validation of SDQ done in Nigeria) (Adeniyi and Omigbodun, 2017) and above on the SDQ as assessed by the teachers as compared with 34.5% in the hearing group.

5.4 Sociodemographic Correlates for Mental Problems Among Children with Hearing and Visual impairments

Correlates of child and adolescent mental disorders among children with hearing and visual impairments can be divided into child characteristics, family/parental characteristics and neighbor or broader contextual factors taking into consideration the multiple interacting domains and influences on child development (Merikangas *et al*, 2009; Patalay *et al*, 2016. In this study, 47(36.4%) of the children below 18 years had mental health problems as compared to only 6(12.8%) of those above 18 and this was statistically significant at P value of 0.002. In a study by Adeniyi et al, the prevalence of behavioural problems was found to be significantly higher in the deaf adolescents than the hearing adolescents as assessed by their teachers' (64.3% vs. 35.7%; p < 0.001) (Adeniyi, Omigbodun and Adeosun, 2019). Additionally, the results of this study further indicate that for every unit increase in the age (in years) of the child, there is about 20% less likely that the child will have mental health problems with p-value <0.001. However, this is somehow contrary to the findings in the study done by Cho *et al.*, 2015 that showed that visually impaired children in Korea aged 16 and above revealed a higher prevalence of mental health problems, though, these problems were associated with poor sociodemographic characteristics found in them(Cho *et al.*, 2015). Moreover, the results indicated that visual impairment itself was not associated with poor mental health in the Korean children and young people with visual impairment, instead, the poor sociodemographic characteristics found in them contributed to their increased risk for mental health problems like depressive symptom, anxiety and perceived

stress(Cho *et al.*, 2015). Furthermore, this study found that children with hearing and visual problems who live with their fathers alone were 5.3 times more likely to have mental problems than those who live with both parents with p-value of 0.045. This is inconsistent with Adeniyi et al who reported that parental separation/divorce and mother's educational status were significantly associated with higher rates of behavioral problems ($p < 0.05$). Those who do well in academics are 86% less likely to have mental problems than those who do not do well with p-value less than 0.001. A possible explanation to this could be that a percentage of children with hearing and visual problems are from poor homes, they are sometimes subjected to hawking, domestics work and little do they rest or have time to read and concentrate in class. hence these affects their academic output. Moreover, findings indicated that visually impaired children and young people tended to be isolated, stigmatized, older, and vulnerable or poorer with lower level of education and more restricted in daily activities compared to those of the non-visually impaired(Cho *et al.*, 2015).

5.5 Teaching and Non- teaching Staffs' Perceptions of Mental Health Problems, causes and etiology in the Children and Young People

In this qualitative part of the study, participants from the teaching staff used local terms like *dof, kungorut, tolee, nyamato, egoteei* which mean mad, mentally retarded, psychopath, Imbecile among others to describe children with mental health problems. These names, however, are not names they the teachers use but just to describe how they are been referred to in the society. All of these terms are stigmatizing labels which are very unfriendly and discriminating(Graham et al 2001 and Ibeziako *et al.*, 2009). In their descriptions of mental illness, some of the FGPs in the non-teaching groups used mental retardation to mean mental illness. Though discriminating names were used by the FGPs, it appeared they were not comfortable using these names. They used these descriptions to explain how society and others refer to these vulnerable children.

Majority of the teaching and non- teaching respondents totally agreed that children with disabilities of hearing and visual problems have mental health problems and these problems can be seen in them. They lamented that even though they give some bit of financial and emotional support, they still have very limited knowledge of how to help them better. These problems they have noticed but further lamented they do not have knowledge, skills or resources both financial, material to address them. The non-teaching FGPs also elaborated on a variety of mental health issues brought to their notice by the teachers and others through their own observation and interactions with the children. These problems they try to handle within their very limited means, but a bulk of the problems are left unattended to because of their lack of knowledge in mental health, lack of stakeholder involvement, parental and government involvement. Though both teaching and non-teaching FGPs know that children with hearing and visual problems present with mental health problems, their level of understanding and approach to handling these problems defer. While the teaching staff notice and pick out these mental problems through their observation and interaction in class with the children, non-teaching staff usually come to know from reports given by these teachers and from performance records of the children. Several reasons could explain the difference in their approach and response. The teaching FGPs aside from their role as teachers, have a daily interaction with these children and would be more aware of their striking and emotional problems that the non-teaching FGPs. Furthermore, knowing that children with hearing and visual impairments have mental health problems, teachers realize their own limitations both in knowledge and skills with handling children identified and they are more likely to report problems and seek for help. As cited in (Ibeziako *et al.*, 2009) research have showed that teachers are more likely to report problems they believe would hinder their ability to teach (Mansour *et al* 2002) and teachers are in a unique position to make a difference when it comes to promoting and

addressing mental health concerns of school children in and out of the classroom(Kerebih, Gesesew and Abera, 2016). . Furthermore, findings from different articles indicate that teachers perceive externalizing, disruptive behavior such as problems with attention and hyperactivity, being defiant, peer related problems, aggression, more frequently than internalizing behaviors which include depression, school phobia, anxiety (Kerebih, Gesesew and Abera, 2016) Oshodi OY, Aina OF, Adeyemi JD, Oduguwa TO, Ogundipe OA. 2013).

Regarding their beliefs on the cause of children mental health problems among these children, majority of respondents reported poor brain development, pre-natal and peri-natal causes, head trauma and injury, genetic predisposition, childhood illness, and social related factors to be the cause of child mental health problems. These include, social problems (problem with friends, stigma and discrimination from peers and from society, teachers, etc.), problems with primary support groups such as parents or care givers and or home environment and spiritual causes. A wide range of causes as reported by FGPs fall under the Biopsychosocial model of disease(Barsky 1980) cited in (Ibeziako *et al.*, 2009) and (Atilola, 2017). All these causes are risk factors for child mental health development and are in consistent with reported research on risk factors for child mental health and development (Duncan *et al*, 1994; Grantham-McGregor and Fernald, 1997; Rahman *et al*, 2000; Ibeziako *et al.*, 2009),

Though the issue of poverty was not mentioned directly by respondents, it appeared to be a major cause of problems and a barrier to them getting the care, affection and connection need from immediate family. Majority of these children come from the rural villages and are not living with their families as reported by the FGPs. And a lot many of them come from poor homes who might be struggling to survive. Having a child with a disability who supposed to school in a special

school in the urban area is another added burden on the poor parents. This results to them sending them to leave with close family members or sought care from other people where the child end of being victim of maltreatment, physically and sexually abuse, child labour, poor health, malnutrition just to name a few. Respondents lamented on parental neglect, separation and adjustment problems in children, parents not attending PTA meetings when invited, lack of adequate school materials like good uniforms, shoes and food etc. These, they believed are happening as a result of poverty. This is in line with findings which show that adverse social circumstances such as war trauma, child abuse and neglect, being orphaned, food insecurity and poverty are also important in the development of mental disorder(Owen *et al.*, 2016). A few FGPs believed in spiritual issues as causes of mental health problems in the children and felt with more prayers from religious persons, such problems might reduce.

A respondent pointed out a scenario of a child's problem in her class emanating from home where she used to be locked up by parent to avoid them been sent away by their land lord who they think may not like to see a disabled child in his house. Studies have found that due to widespread misconceptions and stigmatization, families tend to conceal members with mental illnesses(Ahuja *et al.*, 2017). Moreover, in low-income countries, social and environmental factors related to the situations in which people with disabilities and their families live, influence the complex interactions between disability, poverty and health (Parnes *et al*. 2009;Geere *et al.*, 2013). This is pertinent to careers of children with disabilities in The Gambia. Families of a children with disabilities tend to be poor leading to poor health and poor living conditions (Elwan 1999; Geere *et al.*, 2013).

5.6 Current Approaches and Available Resources for care of children with special needs

The main factor highlighted as a barrier to care and attainment of mental health needs for the children was lack of resources and programs in the schools that reflect and cater for the mental health needs of these. Poverty, ignorance and neglect were reported as major barriers to care for families to children with disabilities. In general, studies report that children living in poverty are also more likely to experience poorer mental health and lower subjective wellbeing both in childhood and in adulthood(Briefing, 2012). This is greater in children with disabilities as similar studies has found a huge resource gap for child mental disorders, arguably even larger than the widely recognized gap for adult mental disorders(Patel, 2013).

FGPs reaffirmed their role aside from teaching as counsellors, parents, caregivers, and more so security agents and the voice for these disadvantaged and voiceless children. They reiterated on the numerous interventions currently employed within their limits to manage or tackle mental health issues in the special school setting.

Child centered interventions were also used in the form engaging child with task and keeping them busy and happy. The use of punishment and rewards were also mentioned though, they were limited and controlled use of the cane as a disciplinary measure. This is consistent with the study by Ibeziako et al which showed that corporal punishment is widely accepted and used in Nigerian schools and within the community as well. This practice is believed to be widely used in other cultures both for minor and major offences (Smith and Mosby,2003; Ebigbo,1993; Ibeziako et al, 2009) Respondents emphasized on parent-child interventions which they used to help cement relationships with the children and their families. As parental involvement in the welfare of children will improve mental wellbeing of children (Ibeziako et al, 2009). Though there was not much response gotten from parents, they felt a little progress has been made and this, they wish to continue. These interventions range from sign language training for parents. This helped ease

communication in families of deaf children. However, this discontinued when the transport refund given by the ministry of education stopped. The school staff sacrifice to offer refresher trainings in sign language lessons to newly posted teachers who do not have any form of training sign language or special education. A study in Ethiopia indicated that there is a severe shortage of child mental health professionals. Hence, teachers were identified as key players in their important role of early problem detection. This role is particularly impactful in developing countries with limited mental health care resources. However, teachers' knowledge about mental health is very limited and results indicate that teacher training was significantly associated with more accurate identification of children's problems(Desta *et al.*, 2017). Moreover, Ibeziako et al in her study on teachers' perceptions of mental health problems in Nigerian schools, argued that Teacher-student relationships have been shown to be among the most influential school psychosocial influences on student mental health (Undheim and Sund 2005

5.7 Participants' Recommendations on ways to address mental health problems in schools

Almost all FGPs agreed that schools are perfect environments to addressing mental health problems in these children. They explained that children spend almost all day with them, and a lot of their problems are known to them than their parents. Teachers believe children internalize their pains in the homes and only confide to them in schools. A possible explanation could also be the lack of communication between the children and their parents and guardians. They felt parents are always not there for these children coupled with the fact that majority are leaving away from home. Moreover, most of their problems as reported, emanate from homes particularly for those under care of guardians. The only safe place for them as reported by teachers. Hence, they expressed their limitations and the need for capacity development in child health in order for them to able to

address mental health concerns of children in schools. Similar findings relate that teachers recognize their limitations in terms of knowledge, skills and resources to manage mental health problems in children(Ibeziako *et al.*, 2009).

The respondents emphasized on governmental and stakeholder involvement as key to achieving success in developing mental health problems in the schools. The FGPs comprise of teaching and non-teaching staff. While the teaching staff lamented on wanting to receive training in special education and child mental health. The non- teaching staff emphasized on the need for the ministry to post in qualified trained teachers to the schools. An explanation to this could be the fact that school administrators want to keep a good image and reputation of the schools and this could be consistent with the findings by Ibeziako *et al* that administrators may be more reluctant to reveal limitations in the training and skills of their staff, hence they would want to maintain a good image by wanting qualified teachers posted in the schools. A study by Robinson, *et al* on effective inclusive teacher education states that Teachers must have a clear understanding of the needs of all pupils, including those with special educational needs, those of high ability, those with disabilities and be able to use and evaluate distinctive teaching approaches to engage and support them(Robinson, 2017). The researcher felt this can only be achieved through a supported teacher preparation curriculum that covers specific conditions and related distinctive pedagogies for the benefit of the teacher and learners. This is in line with recognition that 'the challenges faced by the teaching profession are increasing as educational environments become more complex and heterogeneous' (European Parliament, 2008, p.2). Among the useful suggestions made towards overcoming barriers to care include the desire for expansion of the teacher training curriculum of The Gambia to include child mental health for teachers, the inclusion of child mental health into physical health education syllabus for age appropriate children to learn like any other course,

continuous sign language training for teachers and parents to reduce emotional and psychological disconnection felt by the deaf children and enhance communication . Awareness creation campaigns that advocate for better parental care ad understanding, community sensitization campaigns with a very appropriate use of words and approach to combat stigma and discrimination in the society and to also clear misconceptions about disability and child mental health problems children are facing in the community. Building of more educational structures for special education in other regions of the country where these children can have access to learn and stay connected to their families and to their communities was raised by the FGPs. Teacher. felt improving their earnings and motivation would reduce the teacher attrition rate. Respondents expressed the fact that the only psychiatric hospital in the country does not even have a unit for child and adolescent mental health. Even whereas they have, majority of families will not take their children there to avoid stigma from society. Schools should be used as avenues for catering their mental health needs as they are less stigmatizing and intimidating. More so, majority of these children are not living with their parents who might care for their health needs. Hence, the involvement of relevant authorities in their welfare was an issue of concern. Key among these authorities ranged from health, security services to the media. Strong well planned and organized advocacy is needed in the form of awareness creation in the market places, and other places where people gather.

5.8 Conclusion

To sum up all, the study and report findings provide a strong basis for understanding the current situation in special schools about the emotional and psychological issues children with hearing and visual problems are going through and also provides evidence- based information on the need for mental health care and services in special schools. The findings in this study also showed that mental health problems exist in children with hearing and visual problems. Teachers handling

these children lack skills and training in child mental health to be able to identify, assess and make referrals for further interventions were necessary. Both the quantitative and qualitative results show significant need for integrating child mental health services into the education system in the form trainings and in schools through inclusion of child mental health into physical health education in regular and special school curriculum for age appropriate children to learn, child mental health talk shows, career development for teachers, expansion of the Gambia teacher training curriculum to include child and adolescent mental for teachers and above all having a school based child and adolescent mental health unit in the special schools for the benefit of both children and staff.

5.9 Recommendations

As is the case in most low- and middle-income countries (LMICs), SSA of which The Gambia is part of, has few economic or human resources dedicated to the mental health of children and young people with disabilities particularly those with hearing and visual problems. Hence there is need for national policy developments and guidance based on research in areas that reflect the mental health needs of these group. Therefore, for restorative CAMH services to be successful and impacting in LAMI regions like Gambia, they must be driven through the resources of the community.

Therefore, Government or private institutions should ensure:

1. Surveys on the prevalence, patterns and correlates of child mental problems among children and young people with hearing and visual impairments should be scaled up across the nation so as to obtain representative data that can adequately inform policy development.

2. Needs assessments for child and adolescent mental health services should be conducted to help inform service development
3. Inco operation of modules on CAMH in the teacher training curriculum of The Gambia Teacher training College. This will help build capacity of teachers who deal with children in schools.
4. Career development in Child and Adolescent mental health for teachers to be able to identify and give simple psychosocial support as a means to addressing mental health problems among children and young people in both special and mainstream schools in the Gambia and to also serve as source of referral for further mental health support were necessary.
5. Awareness campaigns in child mental health and disorders should be conducted in schools, to stakeholders, the community and across the country.

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APPENDICES

APPENDIX 1

Serial Number: __ __ __ __

Today's Date: __ __/__ __/__ __

SCHOOL HEALTH QUESTIONNAIRE IN ENGLISH

Please write the answers to the questions or draw a circle where it applies to you. This is not an examination it is only to find out about the child and his/her health.

SECTION I

Personal Information

1. Name of School

2. Class

3. Where does child live? (Address of Present Abode):

4. What is child's date of birth? Date of Birth: _____ _____ _____

5. How old is the child? ____

6. What gender is the child? (a) boy (b) girl

7. Does child practise any religion? No Yes

8. Please write down the exact place child attend for worship

_____

(a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (e) Other

Family Information

9. Family Type:

(a) Monogamous (b) Polygamous

10. What is child's position among mother's children?

11. Who does child live with presently?

(a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother

(f) Grandfather (g) Other [please specify] _____

12. Does child do any kind of work to earn money before or after school? Yes No

13. If yes, please describe what child does _____

_____

14. Level of Father's Education

(a) No Formal Education (b) Koranic School (c) Primary School (d) Secondary School

(e) Post Secondary (Non-University) (f) University Degree and above (e) I do not know

15. Occupation of Father: [Write the exact occupation] _____/ I do not know

16. Level of Mother's Education

(a) No Formal Education (b) Koranic School (c) Primary School (d) Secondary School

(e) Post Secondary (Non-University) (f) University Degree and above (e) I do not know

17. Occupation of Mother: [Write in the exact occupation] _____/ I do not know

School-Related Questions

18. How many children are in the class__

19. Does the child perform well academically? Yes No

19a. If Yes, explain_____

19b. If No, explain_____

20. Do you have guidance counsellors in your school? Yes No

21. Has child ever gone to see them? Yes No

22. If yes, what did the child go to see them for? _____

23. If the child has a problem at school would he/she go to the guidance counsellor for help? Yes No

23a. If yes, why would child go?

23b. If no, why not?

APPENDIX II

STRENGTHS AND DIFFICULTIES QUESTIONNNAIRE

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behavior over the last six months.

EMOTIONAL SYMPTOMS SCALE	**Not True**	**Somewhat True**	**Certainly True**
Many fears, easily scared			
Many worries, often seems worried			
Often complains of headaches, stomach-aches or sickness			
Often unhappy, down-hearted or tearful			
Nervous or clingy in new situations, easily loses confidence			
CONDUCT PROBLEM SCALE	**Not True**	**Somewhat True**	**Certainly True**
Often has temper tantrums or hot tempers			
Generally obedient, usually does what adults request			
Often fights with other children or bullies them			
Often lies or cheats			
Steals from home, school or elsewhere			
HYPERACTIVITY SCALE	**Not True**	**Somewhat True**	**Certainly True**
Restless, overactive, cannot stay still for long			
Constantly fidgeting or squirming			
Thinks things out before acting			
Easily distracted, concentration wanders			
Sees tasks through to the end, good attention span			
PEER PROBLEMS SCALE	**Not True**	**Somewhat True**	**Certainly True**
Has at least one good friend			
Rather solitary, tends to play alone			
Generally liked by other children			

Picked on or bullied by other children			
Gets on better with adults than with other children			
PROSOCIAL SCALE	**Not True**	**Somewhat True**	**Certainly True**
Considerate of other people's feelings			
Shares readily with other children (treats, toys, pencils etc.)			
Helpful if someone is hurt, upset or feeling ill			
Kind to younger children			
Often volunteers to help others (parents, teachers, other children)			

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Overall, do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?	**No**	**Yes-minor difficulties**	**Yes-definite difficulties**	**Yes-severe difficulties**

If you have answered "Yes", please answer the following questions about these difficulties:

How long have these difficulties been present?	**Less than a month**	**1-5 months**	**6-12 months**	**Over a year**

Do the difficulties upset or distress your child?	**Not at all**	**Only a little**	**Quite a lot**	**A great deal**

Do the difficulties interfere with your child's everyday life in the following areas?				
	Not at all	**Only a little**	**Quite a lot**	**A great deal**
Classroom learning				
Peer relationships				

APPENDIX III

SEMI STRUCTURED FOCUS GROUP GUIDE QUESTIONNAIRE FOR SCHOOL STAFF

Staff Name: Age:

Gender: Educational Qualification,

Years of Work Experience: Occupation:

1. Perceptions of mental health problems, etiology and symptoms

1a. What is your understanding of mental health or mental ill health?

1b. what are some of the causes of mental health problems in children with hearing and visual impairments

1c. Do children under your care experience problems with mental health. eg are they hyperactive, withdrawn, depressed, restless.

2. How do you help these children/what resources do you have available to help these children?
3. What other resources would you like/ want to help these children manage their mental health problems.
4. What are some of the barriers to accessing resources for mental health care in schools for children and possible solutions?
5. Any other suggestions or comments

APPENDIX IV

INFORMED CONSENT

I am Aida Badjie, a postgraduate student of Child and Adolescent Mental Health in University of Ibadan, Nigeria. I will be conducting a school base research study on Mental Health Problems Among Children with Hearing and Visual Impairments in Selected Schools in The Gambia. I want to assess for mental health problems in children and adolescents with hearing and visual impairments, socio demographic correlates of mental health problems in the children and adolescents with hearing and visual impairments, patterns of mental health problems in them and assess for resources available and resources needs for managing mental health problems in them.

The study will involve filling in questionnaires by teachers and the students. This may take a maximum of about half an hour of your time. Your participation in the study is voluntary and your safety and confidentiality of any information given is strictly assured. You are at liberty to withdraw from the study at any time and your decision to withdraw will be respected. Concerns of children with disabilities identified will help the ministry of Education come up with appropriate decisions and solutions to mental health needs of children with physical and mental disabilities in The Gambia.

The data of the study is strictly confidential and will be managed by the Centre for child and adolescent mental health, University of Ibadan. A report of the study will be submitted to ministry of Education of The Gambia so that it can help in setting up or scaling services of children and adolescent mental health. Some of the questions in the study will be personal and honest answers is required. You are free to ask any question at any time for clarifications.

Please sign or thumb print if you are convinced and agree to participate in this study.

…… ……..

Signature/thumb print of respondent Signature of the investigator