# HEALTH CARE PROVIDERS KNOWLEDGE, ATTITUDE AND PRACTICES IN RELATION TO CHILD AND ADOLESCENT MENTAL HEALTH IN GOVERNMENT HOSPITALS, MONROVIA, LIBERIA

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**Key to Abbreviations (Acronyms)**

| | |
|---|---|
| **ADHD** | **Attention Deficit Hyperactive Disorder** |
| **CAMH** | **Child and Adolescent Mental Health** |
| **CCAMH** | **Centre for Child and Adolescent Mental Health** |
| **CM** | **Certified Midwife** |
| **EPHS** | **Essential Package for Health Services** |
| **GP** | **General Practitioner** |
| **HIV/AIDS** | **Human Immune Virus/Acquired Immune Deficiency Syndrome** |
| **JFKMC** | **John F. Kennedy Medical Centre** |
| **KAP** | **Knowledge Attitude Practice** |
| **LIBR** | **Liberia Institute for Biomedical Research** |
| **LISGIS** | **Liberia Institute of Statistic and Geo-information Services** |
| **LMIC** | **Low and Middle Income Country** |
| **MD** | **Medical Doctor** |
| **MOHSW** | **Ministry of Health and Social Welfare** |
| **PA** | **Physician Assistant** |
| **PTSD** | **Post-Traumatic Stress Disorder** |
| **RN** | **Registered Nurse** |
| **SCD** | **Sickle Cell Disorder** |
| **UNICEF** | **United Nations Children's Funds** |
| **WHO** | **World Health Organization** |

# Summary

Mental health problems in children and adolescents account for 10-20% of the worldwide global burden of disease and come from low and middle-income countries where 90% of young people lived (Kieling et al, 2010). Recognizing the mental health problem in children and adolescents by Health Care Providers in Liberia is a major step towards effective mental health service delivery at the Primary Health Care level which is part of the phase I of the Essential Packages for Health Services. The lack of knowledge of mental disorders in child from low and middle income countries is a challenge.

Health Care Providers play a center role towards the integration of general mental health and especially child and adolescent mental health services into the realization of the physical, mental and social wellbeing of every citizens of Liberia. Thus, the focus of this KAP research in CAMH was to examine the knowledge as well as the attitude and practices of Health Workers to CAMH.

We conducted a questionnaire survey of 404 randomly selected Healthcare workers in two government health facilities in Monrovia, Liberia. Modified Bogardus Social Distance Scale was used to assess the health care workers' attitude towards children and adolescents with mental illness. Information on their knowledge and beliefs about CAMH difficulties was sought. Their practice was explored with clinical scenarios of serious CAMH difficulties that could be encountered in the hospitals. The health workers indicated how they would have responded to each scenario.

379 respondents completed questionnaires giving 94% response rate. 37% of respondents were males and 63% females. 68% of respondents were classified as having high social distance. 50% stated that Child and Adolescent Mental Health is very important. However, 28% stated they would be ashamed if a child in their family had a mental illness. 51% believed that children and adolescents with mental illness are dangerous. 28% believed that CAMH difficulties can be transmitted through hand shake with an affected child. 28% would

oppose their child going on a date with a peer with mental illness, while 48% would object to their child even having a conversation with an affected peer. 38% of the health workers stated they knew what to do about a child presenting with suicidal thoughts. Regression analysis showed that the two predictors of high stigma/social distance were limited knowledge of the causes of mental illness and perceived negative family attitude towards mental illness.

This study elicited significant negative attitudes and misinformation among health workers regarding CAMH problems. The findings could inform interventions to improve the attitude and practice of healthcare workers towards Children and Adolescents with mental illness in Liberia.

**Key words:** **Mental Health, Attitude, Stigma, Health Care Providers, Family, Religion, Liberia. Words count: 434**

# CHAPTER ONE

## INTRODUCTION

### Background

Globally, psychiatric care is a highly neglected area in that, there is serious stigmatization of the mentally ill and care provided for them is very low. Many resource-poor countries do not have the capacity or political will to allocate funds towards care and services for people with mental illness. This leaves families to shoulder the burden of caring for relatives with mental illness. Mental health difficulties account for about 15 – 30% of the disability-adjusted life years (DALYs) lost in the first three decades of life (Kieling et al 2010).

It is estimated that 50% of adult psychiatric illness begins before age 14 and also it is an established fact that 1 in every 5 children and adolescent has a recognizable and treatable mental disorder (Kessler et al 2007; Patel et al 2007; WHO 2003).

For about 14 years, the lives of children in Liberia were submerged in a cycle of violence, trauma, displacement, severe physical punishment, abuse and neglect, and insecurity. These experiences serve as major risk factors for the development of psychiatric disorders (Panter-Brick et al 2009; Mels et al 2010), which create a major socio-economic burden for many low and middle-income countries especially post-conflict nations. It is clear and increasingly recognizable that improving the psychosocial wellbeing of children is vital toward achieving the United Nations Millennium Development Goals (UNICEF, 2007).

Liberia has an estimated population of 3.49 million and half of the population are less than 20 years old (LISGIS, 2008). Many of the young people in Liberia have not experienced normal interactional processes in their social and educational development, thereby leaving a generation of children at risk of becoming maladaptive and dysfunctional.

The lack of knowledge of mental health disorders in children from low and middle-income countries especially cannot be overemphasized. Therefore, an understanding of the knowledge of and attitude to as well as the practice of healthcare providers in relation to

child and adolescent mental health from these countries is important. This could have a significant impact on the planning of services for young people with mental illness and identifying factors that may affect their help seeking behaviour (Flisher et al 1997; Adewuya et al 2007; Heflinger and Hinshaw 2010).

It is generally believed that those with good knowledge of mental illness and who are working in healthcare institutions, example, Doctors, Physicians Assistants, and Registered Nurses, are less likely to endorsed negative behaviour or attitude towards mental illness but this is not always the case in practice. Studies conducted by Adewuya et al (2007) in Nigeria and Fernando, et al (2010) in Sri Lankan showed that healthcare providers' had higher level of social distance towards the mentally ill. Other surveys conducted in UK and Germany indicated that patients experienced stigmatizing attitude by healthcare providers (Gaebel et al 2002). Another study by Ayidin, et al (2003) revealed that while Academics in the University hospital, Resident Doctors and Registered Nurses have sufficient knowledge about mental illness, such as, schizophrenia, anxiety and depression; they had higher negative attitudes towards people with mental illness more than the less educated hospital employees.

Most the current literature on stigmatization of mental illness focuses on the general population as source and also on the consequences of stigma for patients and their families who provide care for them (Hinshaw 2005). However, not much emphasis is placed on those who are entrusted with the responsibilities of providing care for people with mental disorders, not forgetting the very services provided for their care, are those contributing to the negative attitudes and practices (Wahl, 1999). Although professional stigma cuts across the age span over the years (Servais, 2007), the focus of this study is on child and adolescent mental health. Understanding the psychopathology from early childhood, creates more insight that majority of mental disorders in adulthood have their beginning from childhood or adolescence. Therefore, developmental predisposing factors (malaria, HIV/AIDS, trauma to the head, used of herbal concoction) are highly likely to be evident especially in low and middle income countries. Thus, early detection, assessment, and intervention are of value importance; and if at all stigma precludes such assessment, diagnosis and treatment, the

results may be felt for years to come in the community and general society (Hinshaw 2005; Heflinger and Hinshaw 2010). In the past, background research included surveys on a large numbers of general medical practitioners who had decent knowledge about mental illness, their attitudes were negative as compare to the general public (Ayidin et al 2003; Adewuya et al 2007). More robust studies conducted in the U.S by Wahl (1999) revealed that a large number of adults with serious mental disorders experience hurtful and demeaning attitude from mental health care providers, and perceived them as the main source of stigmatization. It is important to note here that, health care providers are important and they serve as the main gatekeepers and service providers for most children and adolescents with mental health problems (Brown et al, 2007). Hinshaw (2005) noted that with respect to child and adolescent mental health, recent exposures of harshly abusive practices in special educational and juvenile facilities visually portray shocking stories in which there was neglect and even abuse occurring daily from staff.

**Justification of the Study**:

In Liberia, the MOHSW in her 10 year Essential Package for Health Services (EPHS) phase 1 strategy, has integrated general mental health into the PHC delivery services (MOHSW, 2011). The lack of knowledge of mental disorders in children from LMICs is a challenged. Therefore, the purpose of this study is to determine Health care providers' knowledge of child and adolescent mental illness, their attitude towards affected children and adolescents and their ability to recognize a child with mental health problems and offer appropriate help.

Information obtained will play a significant role in helping health care Stakeholders in the planning of services for young people with mental illness.

# CHAPTER TWO

## Literature Review

**Mental Health Problems in Children: Problem with definition:**

According to the World Health Organization, children and adolescents are uniquely positioned in the society as the pivot for the future (WHO, 2001).

The problem of mental health disorder in children and adolescents can have their origins from both society and dysfunctional family settings (Omigbodun 2004; Flisher 2009). There are many socio-economic, political and cultural factors that have direct and indirect implications on the physical, mental and social health of children.

Omigbodun (2004) outlined many psychosocial stressors in children being referred to the clinic, such as, separation from parents in live with relatives, dysfunctional family, abandonment by the mother, parent with mental illness as well as disruptive behaviours and anxiety. The realities of poor resource in developing countries and coupled with other competing problems such as HIV/AIDS, Malaria may reduce the attention of policy makers towards child mental health. However, there is good evidence such as from Ethiopia that where resources are put into the training healthcare providers, conditions such as, depression, psychosis, anxiety and mania can be identified and treated (Tadesse et al 1999).

The knowledge about solution being found in the health care setting regarding child and adolescent mental illness by many people in the community is limited thus alternative places, such as, prayer houses, traditional herbalists, drugs stores, are being patronized by many families without any improvement in the health status of patient thereby increasing the burden of the illness on the patient, family and the larger society as well as leading to increase social distance by the relations or neighbours (Adewuya et al 2011; Gureje et al 2005).Social distance was seen to be higher in response to hypothetical scenarios proposing

higher level of intimacy such as marrying someone with mental illness in South-western Nigeria.

A primary care study by WHO showed that many children seeking care had mental disorders and their communities had knowledge of the problem (WHO 2003). Omigbodun (2004) reported that 62.2% of Nigerian children and adolescents that were referred to the clinic had significant psychosocial stressors. Another studied conducted in western Ethiopia revealed childhood behavioural disorder prevalence of 17.7% (Tadesse et al 1999). Moreover, Johnson et al (2008) conducted a survey in post-conflict Liberia and discovered that about 40% of adolescents met the criteria of major depressive disorder and 43% met symptoms criteria of post-traumatic stress disorder.

**Epidemiological surveys on the knowledge and attitude to child and adolescent mental health difficulties:**

The knowledge of children and adolescent mental problems by both professionals and the general public as revealed in various studies indicates that there is a need for advocacy to influence leaders towards the unmet need of CAMH services in most region of the world. Flisher et al (1997) and Burns et al (2004) reported the unmet need of CAMHs as 17.1% in Africa and 50% in USA respectively in population sampled, with only 25% them actually accessing mental health care. In Europe, it is reported that mental health services for children are less developed as compared to adults (Ford et al 2005).

The recognition of mental disorders does not depend on the level of educational exposure an individual has had. A longitudinal Study conducted in Australia over the period of 16 years from 1995 to 2011, found that there was improvement in the recognition of depression and other disorders between the general public and mental health professionals from the initial survey conducted in 1995. Recognition from the public had moved closer to that of the professionals and more positive ratings for large range of interventions, including help from mental health professionals (Reavley et al 2011).

The WHO Report on Mental Health (2001) reported that the prevalence of mental disorders among children ranges from 10-20% in different countries. For example, in the USA, one in ten young people suffer from mental illness that is severe enough to cause cognitive, social and physical impairment, yet only few of them receives the needed treatment (US Department of Health and Human Services, 1999). Similar prevalence has been reported in low and middle-income countries as such Nigeria, Sudan, Philippines, India, Arab Emirate and Colombia (Fayyah et al 2001).

The economic burden of children and adolescents disorders, such as depression, ADHD, conduct disorders presenting with somatic symptoms account for higher health care utilization. This imposes a cost to the society in terms absenteeism from school and youths involvement in criminal activities, increase social services and spending by Governments, with associated higher risk taking behaviour. The impact includes loss in economic productivity and possible destabilization of communities (Egger et al 1999; Tyano et al 2007).

The burden of Children and Adolescent mental health in low and middle-income countries (LMIC) are many and from very few research conducted it revealed that more than 200 million children under 5 years of age in LMIC do not reach their developmental potential because of several risk factors, such as, stunting, poor and inadequate early childhood and home stimulation, iodine and iron deficiency, exposure to violence, HIV/AIDS, malaria, Intrauterine growth retardation, or heavy mental exposure (Grantham-McGregor, 2007; Walker et al 2007). It is estimated that the burden from depression alone is most likely to increase the overall health condition by the year 2030 and sub-Sahara Africa will share most of the burden (WHO, 2007).

Moreover, increase in maternal mental health as well as family history of mental problem (with the increase social distance experienced) and the lack of adequate child care are additional risk factors experienced by children living in LMIC (Omigbodun, 2004; Heymann, 2006). Importantly, these risk factors are modifiable and with appropriate measures towards mental health education, there can be improvement in the health status of children and

adolescents suffering from mental illness and reduction in the stigma, thereby increasing access to health care and service utilization.

The attitude regarding mental illness in general by most people around the world is stigmatizing in the academic setting, hospital setting and the community setting (Ayidin et al 2003; Gureje et al 2005; Adewuya et al 2007; Fernando et al 2010).

The way mental illness is viewed by people can determine the outcome of the problem and the attitude that is showed towards the mentally ill. This affects early diagnosis and treatment as well as rehabilitation process of the patient. Findings from Ayidin et al (2003) showed that academics, resident doctors and nurses with sufficient knowledge about mental illness had negative attitude than less educated hospital staff. Similar findings were reported in Zambia by Kapungwe et al (2011) with widespread stigmatizing and discriminatory attitude among primary health care providers towards people with mental illness and those who suffer from it. Moreover, spiritual explanation, such as, spirit possession and or punishment from God, have been attributed in most African context to mental illness and treatment preference will be outside regular healthcare system through traditional herbalist or faith healers in most cases (Adebowale et al 1999; Adewuya et al 2008; Barke et al 2011). Adewuya et al (2007) found overall prevalence of 61.4% high social distance by doctors' towards the mentally ill and 10.3% of them would be ashamed if people knew someone in their family had mental illness,while another studied conducted in Lagos in (2011) have stigmatization prevalence of 21.6% from the general public and hospital workers.

In Malawi, Crabb et al (2012) attributed mental disorders to psychoactive substances (alcohol, illicit drug) accounting for (95.7%) and organic brain disease (92.8%) while spirit possession (82.8%), psychological trauma (76.1%). The experience of stigma in most situation of mental illness is characterised by shame, blame, family secrecy, being isolated, social exclusion and discrimination in the home, school and community in general (Adewuya et al 2005; Crabb et al 2012). Most health care providers often talk less about the mental illness if a relation is affected by the problem. In Nigeria and other parts of Africa as well as Asia, 'supernatural' reasons have been the most popular explanations for mental illness by

most of the care givers and relations (Gureje et al 2005; Adewuya et al 2008; Kate et al 2012).

Religion and its framework may serve as protective or predisposing factors to mental illness. It has strong link with the individual's cultural, educational and social background. A study conducted by Cinnirella et al (1999) found that there was evidence of fear of being misunderstood by health professionals and also stigmatized by the community if symptoms of mental illness were reported, thus leading to preference for private coping strategies in the non-white groups, namely Afro-Caribbean Christian and Pakistani Muslim, which lead to reduced help seeking behaviour in the health system.

In most African societies, religion has been a coping strategy for many families who have family history of mental illness. In most cases, the family may seek the assistance of the spiritual healer and not the health care system because of being looked down upon by health care providers (Kapungwe et al 2011). Current studies show that religion play a central role and serve as a first resource for family and loved ones turn to when faced with serious health condition, especially mental illness. In one study involving Hindu family caring for patient with schizophrenia in a public hospital in India, 9.6% reportedly coped by praying to God, while others reported that religion is a source of solace, strength and guidance (Kate et al 2012). But about fourth to half of patients and family believed in ghost/evil spirit (26%) as the cause which can increase social distance within the community.

The stigma experienced by people with mental illness can be overwhelming both to the patient and the family directly. There is a lot of social distance within the community, at school, market places and at work. During these trying period, patient and family revealed that religion serves many functions, namely, meaning to life, comfort, self-respect, self-confidence, compassion, hope, love and acceptance (Kate et al 2012). Despite the comfort that religion gives, some individual with serious mental illness may also experienced alienation from their religious group or institution due to history of stigmatization or history of insecure attachment (Pargament et al 2013). In African settings, religiously minded individuals see religion and spirituality as protection from forces of darkness and demon

possession that lead to mental illness. Around the Sub-region in Africa and Asia, there are proliferations of churches or religious centres that claim to have extra ordinary healing power and are now providing sanctuary for many people with physical and mental problems (Pargament et al 2013). From this perspective, many people grappling with serious illness are often motivated to sustain a level of spiritually as well as psychological and social wellbeing that assist them in difficult times and life events such as loss of loved ones, joblessness, and major physical disability to mentioned a few.

A major factor to this is that many mental health care providers as well as those providing care for children and adolescents with disabilities, are employed in low-status, low paying position and are less valued by their colleagues and thus they are often received by the termed "courtesy stigma"- being close to or associated with a stigmatized out-group (Hinshaw, 2005). But when this is associated with child and adolescent mental health, this kind of stigma is double due to the low status of young people. In addition, most health care providers are very slow to agree that mental illness exist among their own colleagues. Thus, most health care providers who have received any form of treatment or therapy do not disclose this fact to their colleagues and many may not inform their spouse or partners, mainly because of being stigmatized especially in African cultures – where finger pointing and gossip are common and may even cause professional damage to career or being ostracised at the place of work or community (Goode 2003; Brown et al 2007; Adewuya and Oguntade 2007).

Furthermore, the hospital or health institution's policies and practices in some cases may reflect issues of stigma due to its sheer red-tape and bureaucratic bottom-neck in the systems as experienced by those providing care for mentally ill patients and their families. Adverse policies or strategic programmes add to the alienation and disenfranchisement on the part of the sufferers and health care providers (Hinshaw 2005).

In a recent research by Heflinger and Hinshaw (2010), the link between stigma and use of service by children and adolescents and their families were explored, namely, (a) stigma by association and (b) the link between stigma and service use. The phenomenon "stigma by

association" was introduced by far back in 1963 by Goffman when it was termed "courtesy stigma". The explanation is when stigma toward a mentally ill or devalued person extends to others who are association with that person – providers, family or caregivers. However, this term has being challenged by others who prefer the term, stigma by association (Hinshaw, 2005; Heflinger and Hinshaw 2010). There are several studies that had explored stigma by association with adult mental illness but direct exploration of stigma of association with families and children is very rare (Norvilities et al 2002). Recent efforts are being made to study stigma by association in the field of child and adolescent mental health but this has been well documented in adult studies (Yang et al, 2007). With regards to children, the link between stigma and service use depends on the help seeking behaviour of parents/guardians, who are the gatekeepers to the access and use of service (those who make and keep appointment and also they are the ones who give permission for treatment). Parents' attitude and perception to children and adolescents problem determines whether they will seek early intervention or keep it as a family secret. This is observed in most part of the African communities where parents and guardians are often blamed for bad parenting thereby leading to the emotional problems in their children and adolescents (Adewuya et al 2011, Gureje et al 2005; McBride Murry et al 2007) and causing barrier to services among rural families and caregivers. In view of the above, it is vital to understanding health care providers and their family perception as a key to accessing available services for child and adolescent mental health problems.

Even though there are inadequate empirical database in the study of child and adolescent mental health stigma, one can think of many examples of health care providers who may be too ashamed to seek assessment of their children or asked for school-based services and or accommodations (Heflinger and Hinshaw 2010). This may also affect whether they will seek for family therapy or medication treatment option in the health facility where colleagues may notice the problem (Hinshaw, 2005). In most cases, the problem of the child is often considered as bad parenting on the part of the family as mentioned earlier. The lack of evidence on the part of the stigmatizer increases the level of stigma experienced by the child and the family. This gives a logical sequence between stigma and service use as mentioned

by Hinshaw (2005), namely (a) not only do the children experience stigma but the caregivers as well (b) such stigma, serve as a powerful deterrent to help seeking behaviour and service utilization, or whether referrals are followed. This perspective creates questions as to the role of health care providers and the hospital stigmatization (Heflinger and Hinshaw 2010).

**Identification of Childhood Mental Disorders by Healthcare Providers:**

The health care providers serve as link between the patients and the utilizations of available services to child and adolescent with mental health problem and their family. As mentioned earlier, more research and attention has been given to adult stigma, little attention has been focused on health care providers who serves as the gatekeepers for those with mental health problem within their place of the work, serve as core sources of stigmatization, especially in child and adolescent mental health (Heflinger and Hinshaw 2010).

Professional and institution stigmatization are the worst form of stigma that a mental ill patient and their family can experienced (Fernando et al 2010). This is because, at the level of the health care system, the providers are solution to the problem but not an addition to it – adding avoidance and or delay of seeking for treatment (Heflinger and Hinshaw 2010).

Further review of literature on stigmatization noted that there are factors influencing stigma and this can being seen at three levels (Heflinger and Hinshaw 2010) namely, the individual, community and societal. These three areas can also be associated with what Phelan et al (2008) describes as areas of stigma and prejudice: *avoiding the disease – keeping people away*; *enforcing societal norms – keeping people in*; and *exploitation and devaluation – keeping people down.*

In the community, stigmatizers level of familiarity with mental illness, that is contact level, tend to be low. The idea of "us versus them" on the part of the health care providers further increases the level of stigma experience at the community level also (Gureje et al 2005; Hinshaw, 2005; Heflinger and Hinshaw 2010; Adewuya et al 2011).

**The role of Healthcare Providers towards Child and Adolescent Mental Health care in Africa:**

The health care providers and his/her place of work that deal with patients with mental illness, such as children and adolescents, are in a situation of being faced with double stigma level. Health care providers' role should be affirmative in relation to providing holistic care for children and adolescents with mental disorders. It is expected that health care providers who spent years of training and thousands of dollars and/or naira invested in this training should be in the good position to provide help. However, they could actually be the source of stigmatizing attitude (Heflinger and Hinshaw 2010). The health care providers and other hospital based workers should be a less likely source of blaming and stigmatizing attitudes in relation to child and adolescent mental health due to the key role they played in service deliveries.

In another related studies of stigma involving Sickle cell disorders by Ani et al (2012) in Port Harcourt, Southern Nigeria and AIDS-orphaned by Cluver et al (2007) in Cape Town, South Africa found that there was higher social distance experienced by sufferers or victims which predispose them to psychological stress, thereby leading to mental illness. Participants in both studies reported being teased, treated badly and gossiped about because of the illness of their family member. Being a victim of bullying and stigma was found to be associated with anxiety and depression and Peer problems (Ani et al 2012; Cluver et al 2007). These children who are rejected tend to experience negative treatment by peers, and they participate less in school activities, or avoid going to school, thus leading to school dropouts and underachievement later in life and becoming a burden to the family and society (Walker et al 2008).

Knowledge, attitude and practice in relation to child and adolescent mental health cut across lifespan of the individual. This has an intense effect on the parents, caregivers, and relatives due to the young age of the child (Heflinger and Hinshaw 2010). Public stigmatizers and health care providers use blaming technique, causing reduction in the help seeking behaviour

of the family who are involved in the care and decision making of the child and causing under utilization of the available health services (Ayidin et al 2003; Adewuya and Oguntade 2007; Hinshaw 2005; Gureje et al 2005).

The burden of child and adolescent mental health in developing countries is enormous and what this study is to understand the knowledge of and attitude to children with mental health as well as to understand their current practice and perception of health care providers in relation to child and adolescent mental health in Liberia. This will provide insight to all stakeholders involved in the planning and implementation of general health delivery services throughout the entire country in a way that it will impact the lives of all citizens with holistic health care.

# CHAPTER THREE

## Aim, Objectives and Research Questions

**Aim:**

- To examine the knowledge, attitude and practice of health care providers in relation to child and adolescent mental health in government hospitals of Monrovia, Liberia.

**Specific Objectives:**

- To examine the knowledge of health care providers about child and adolescent mental health disorders
- To examine the attitudes of health care providers towards children and adolescents with mental illness and explore the association between their attitude with their level of contact with children and adolescents having mental illness.
- To determine the association between health care Providers attitude in relation to children and adolescent mental illness and their religious reliefs and practice.
- To examine healthcare providers ability to recognize and offer appropriate advice for child and adolescent mental disorders
- To compare the level of knowledge about children and adolescent mental illness and related attitude and practices among Doctors and non-medical clinicians such as Nurses.

**Research Questions:**

1. What is the knowledge of health care providers' in relation to child and adolescent mental health?
2. What is the attitude of health care Providers towards children and adolescents with mental illness and what factors predict negative attitudes.
3. What is the common practice of health care providers when they notice a child or adolescent with mental illness?
4. Does Religion affect health care Providers' attitude and practice in regards to child and adolescent mental?

# CHAPTER FOUR

## Methodology

### 4.1 Study Location

The study was carried in Monrovia, the capital of Liberia, located on the Atlantic Coast and was founded in 1822. Monrovia was named after US President James Monroe, who as in favour of re-settling freed African-American slaves. It has an estimated population of 1,010,970 as of 2008 LIGIS census. It has 17 electoral districts.The study was conducted in two government health facilities in Monrovia, namely: John F. Kennedy Memorial Medical Centre, 20$^{th}$ Street, Sinkor and the Redemption Hospital, New Kru Town, Monrovia which serve as major Teaching Hospitals for training of Doctors, Physician Assistants, Nurses and Midwives as well as Laboratory and X-ray Technicians.

### 4.2 Study design

A cross sectional questionnaire study design was used to obtain information about health care providers' knowledge, attitude and practice in relation to child and adolescent mental health from two government hospitals in Monrovia, Liberia.

### 4.3 Study population, Inclusion and Exclusion criteria

Health care Providers (Medical Doctors, Physician Assistants, Registered Nurses and Certified Midwives) who are licensed to practice medicine and surgery under the Public Health Law in the Republic of Liberia will be randomly selected from the two hospitals. Exclusion criteria are those who are not licensed to assess and provide treatment to patients under the Public Health Laws of Liberia.

## 4.4 Sample size determination

As shown below, a sample size of 404 was calculated, based on a previous study in Nigeria that showed a prevalence of h stigmatization against mental illness of **61.4%** in Teaching Hospitals (Adewuya and Oguntade 2007).

## 4.5 Sampling Technique:

The questionnaire will be administered to the staff after signing consent document between December 2013 and February 2014. The computed sample size will be evenly distributed between the two hospitals i.e. **202** per site. This consists of a sample of 364 but oversampled to **404** to allow for attrition. The questionnaire will be administered using proportional distribution between the respondents within the two facilities.

**Using the sample size formula**

$$\mathbf{N=P\ (1\text{-}P)Z\partial^2 / D^2}$$

Where

**N**= sample size for the survey

**P**=prevalent rate which is 61.4%

**Z**= is the standard normal distribution set at 0.05

z $\partial 2 = (1.96)^2 = 3.8416$

$\mathbf{D^2}$ $= (0.05)^2 = 0.0025$ (degree of freedom)

**P**= 61.4% = 0.364

After all the estimation the sample size is: **N** = 364 respondents

Accounting for the attrition: 364/0.9 = **404**

### 4.6 Study Instruments (A copy of the questionnaire is enclosed as an Appendix)

A semi-structured questionnaire was used to obtain data from the respondents. The questionnaire is divided into five sections A to F. Section A. Obtained information on socio-demographic characteristics of the respondents; Section B. Examined knowledge and awareness of child and adolescent mental illness. Section. C. Looked at possible causes of Mental illness in Children and Adolescents. Section D examined Health Care Providers' Attitude to Children with Mental illness; Section E. Addressed Family Attitudes and Familiarity with children and adolescent with mental illness, while Section F. Examined Health Care Providers Practices in relation to child and adolescent mental illness.

**Socio-demographic information**

The questionnaire sought information about standard socio-demographic variables. Additional information was sought on respondent's professional roles and years of experience.

**Social distance and stigma scale**

The respondents social distance towards children and adolescents with mental illness was assessed with seven questions modelled after Bogardus Social Distance Scale (Bogardus, 1933). The original Bogardus scale has been widely adapted in different parts of the world including Nigeria (Adewuya & Oguntade 2007; Ani et al 2011).The seven questions (Questions 31-37 in the study questionnaire) assessed how concerned the respondent would

be in varying degrees of social interaction by themselves or close relatives with children and adolescents with mental illness. . Unlike previous studies, we avoided questions which portray very intimate associations (e.g. willingness to marry someone with a mental illness) as these may cause distress to respondents who may themselves have mental illness or have children with mental illness. Also, the active verbs in some of the vignettes were positively framed (e.g. "would" instead of "would not") for the same reason. The questions were coded as yes, no or unsure. As in previous Nigerian studies (e.g. Adewuya and Oguntade 2007), the respondents were classified as having low, medium or high social distance based on the following criteria. Respondents who answered no or unsure to all seven questions were classified as having low social distance, respondents with only one affirmative (yes) answer was classified as having medium social distance while those with two or more affirmative responses were classified as having high social distance.

In addition to the seven questions used to assess social distance (as above), six other questions assessed respondents negative attitudes and perceptions of children and adolescents with mental illness (e.g. that they can be as intelligent or as beautiful as other children) (Questions 38-43 in the study questionnaire). After reverse coding some items, the six questions were combined with the seven social distance questions to create a stigma scale such that higher scores indicate more negative attitudes. For purposes of bivariate and multivariate analyses, this continuous measure of stigma was used instead of the categorical classification of social distance described earlier. The reason is that continuous measures are analytically more powerful than categorical measures (Pallant 2007).

*Knowledge and awareness*

The questionnaire explored respondent's knowledge and awareness of child and adolescent mental health problems. The items included questions on signs and symptoms of mental illness in children and adolescent, types of mental disorders seen in children and adolescents, and possible causes of mental illness in children and adolescents. Due to ease of coding, the

14 items that assessed knowledge of causes of mental illness (Questions 17-30 in the questionnaire) were combined to create a composite Knowledge scale (higher scores indicating better knowledge).

*Level of personal contact with SCD*

The respondent's level of personal contact with children and adolescents with mental illness was assessed with the "level of contact report" (Holmes et al., 1999; Corrigan et al., 2001). The Level of Contact Report listednine situations of varying degrees of contact with people affected by mental illness. The situations varied from least level of personal contact (1="I have never heard of or know of any child or adolescent who suffers from mental illness", to medium personal contact (5="My child has a friend who suffers from mental illness"), to highest personal contact (9 ="I suffer or have suffered from mental illness"). The respondents were instructed to indicate all of the situations on the 9-item list that they have experienced. The measure of personal contact is the highest ranked (closest personal contact) indicated by the respondent. For example, a respondent who ticked two situations from the list "I have never heard of..." (Rank order score = 1), and "I have a child or adolescent who suffers from mental illness" (score = 8) will receive a score of8 because "I have a child or adolescent who suffers from mental illness" is a higher personal contact for this respondent.

*Practices in relation to child and adolescent mental illness*

The questionnaire sought information on respondents training on mental health education and on

Child and Adolescent Mental health, exposure to children or adolescents with mental illness in

their practice, awareness and confidence in supporting children and adolescents with obvious features of mental illness such as depressed, suicidal or hearing voices.

*Perceived family attitude*

Three questions adapted from a measure of perceived attitude which showed good reliability in a previous study in Nigeria (Ani et al 2011) were used to obtain the respondents perception of their family's attitude towards children and adolescents with mental illness. The three items were summed into a scale whereby a higher score indicates more perceived negative family attitude towards children and adolescents with mental illness. An example of the items in the scale is "People in my family think that having a child or adolescent with mental illness is something to be ashamed of".

*Religious beliefs and practices*

Religion was assessed with six questions – assessing frequency of prayers per day, frequency of attending religious activities per week, whether the respondents performed special role in church or mosque, and whether their religion teachers that children and adolescent with mental illness are dangerous, possessed or could be cured.

**4.7 Translation of protocol to the local language**: The questionnaire was administered in English, which is the official language of Liberia, used throughout the country for goods and services as well as official matters and educational purposes.

## 4.8 Ethical consideration

Ethical approval was obtained from the Ministry of Health and Social Welfare, Republic of Liberia Research Ethical Committeeand also permission was obtained from the Managements of John F. Kennedy Medical Centre and the Redemption Hospital, Monrovia, Liberia.

## 4.9 Data management and analysis

The study data was analysed using the Statistical Package for Social Sciences (SPSS) version 18.0. Univariate analysis computed frequencies (%), means and standard deviations (SD). Bivariate comparisons were conducted with chi-square for categorical variables, and t-tests and correlations for continuous measures. Significance was set at $p< 0.05$ for all tests. Variables significantly associated with outcome measures (i.e. knowledge, attitudes, and practice) were entered into a regression model to determine the independent predictors of the outcome measure (i.e. social distance / stigma scale).

**4.10 Confidentiality of data**: the data collected was properly handled and the analysis of interview kept confidential. Questionnaires were assigned with serial numbers instead of names so that participants' names are not connected with any outcome of the study.

**4.11 Benefit to participants**: The outcome of the study may help in determining the appropriate interventions in relation to mental health issues in children and adolescents and also help to develop child and adolescent mental health policy formulation, in order to promote, prevent, treat and adequately ensure proper rehabilitation of those affected.

**4.12 Right to decline from the study without loss of benefits**: Participants were free to decide whether or not to participate in the study and had the right to decline the questionnaire at anytime at their free will.

# CHAPTER FIVE

## Results and Analysis

**This chapter describes the collected data for this thesis and it is divided into three sections:**

- Section I provides a description of the variables in the study – univariate analysis
- Section II explores the bivariate relationship between stigma scale, knowledge scale and explanatory variables.
- Section III describes outcome of multivariate analysis using linear regression of stigma scales.

The results for each section will be presented as tables and or figures with accompanying text detailing the main findings in the relevant table.

**Section I:**

**Descriptive statistics**

This section provides a descriptive statistics under the following headings:

- Socio-demographic details
- Knowledge and awareness and attitude
- Religious beliefs and Practices of health care providers in relations to child and adolescent mental illness.

**Socio-demographic details**

Out of the 404 questionnaires that were administered among the health care providers in the two hospitals, only 379 were completed and used for analysis, giving a 94% response rate.

**Table 5.1.1 Socio-demographic**

| Variable | N (%) or Mean (SD) |
|---|---|
| Age – mean (SD) | 34.57 (6.86)<br>Range = 21 – 81 |
| **Gender** | |
| Males | 140 (36.94%) |
| Females | 239 (63.06%) |
| **Level of Education** | |
| College (Post High School) | 78 (20.58%) |
| University | 301(79.42%) |
| **Marital Status** | |
| Single | 169 (44.59%) |
| Married | 204 (53.83%) |
| Separated/Divorced | 6 (1.58%) |
| **Occupation** | |
| Medical Doctors–GP | 22 (5.80%) |
| Specialist Doctors | 2 (0.53%) |
| Registered Nurse | 212 (55.94%) |
| Physician Assistant | 79 (20.84%) |
| Certified Midwife | 64 (16.89%) |
| **Years of Clinical Experience** | 5.91 (6.61)<br>Range 5mons – 45yrs. |
| **Religion** | |
| Christianity | 265 (69.92%) |
| Islam | 108 (28.50%) |
| Traditional | 6 (1.58%) |

The mean age of the respondents was 34.57years (SD = 6.86) ranging from 21 – 81 years. There were 140 Males (36.94%) and 239 Females (63.06%). Seventy-eight (20.58%) were trained in the College and while 301 (79.42%) were University trained. One hundred and sixty-nine (44.59%) were single and 204 (53.83%) married while 6 (1.58%) were separated and divorced. The average clinical years of experience is 5.91 with SD = 6.61 ranging from 5 months to 45 years**.** There were 22 (5.80%) Doctors - General Practitioners & 2 Specialists (0.53%), 212 Registered Nurses (55.94%), 79 Physician Assistant (20.84%) and 64 Certified Midwives (16.89%). With regards to religion, there were 265 (69.92%) Christians, 108 (28.50%) were Muslims and with very few traditional worshipers comprising of 6 (1.58%).

**Table 5.1.2 – Knowledge and Awareness**

| Variable | N (%) |
|---|---|
| **How important is Child and Adolescent Mental illness?** | |
| Very important | 191 (50.40%) |
| Somewhat important | 120 (31.66%) |
| Not very important | 68 (17.94%) |
| **Signs and Symptoms of mental illness in Children and Adolescents** | |
| Crawling sensation | 63 (16.62%) |
| Talking aloud to self | 136 (35.88%) |
| Sitting quietly | 145 (38.25%) |
| Butterfly in the stomach | 89 (23.48%) |
| Crying to self | 68 (17.94%) |
| Urinating on self | 135 (35.62%) |
| Toileting on self | 129 (34.04%) |
| Lack of Concentration | 121 (31.92%) |
| Aggression | 125 (32.98%) |

| | |
|---|---|
| Poor eyes contact | 85 (22.42%) |
| Lack of sleep | 107 (28.23%) |
| Running away from home | 109 (28.75%) |
| School dropout | 85 (22.42%) |
| Thoughts about suicide | 127 (33.50%) |

191 (50.40%) said child and adolescent mental illness was very important, 120 (31.66%) said somewhat important and 68 (17.94%) and not very important.

Healthcare providers had knowledge of the signs and symptoms of mental illness in children and adolescents (Table 5.2) such as talking out aloud, sitting quietly, urinating on self, toileting on self, poor eyes contact, butterfly in the stomach, lack of concentration, aggression, lack of sleep, running away from home, school dropout and thoughts of suicide.

**Table 5.1.3: Awareness of Mental disorders in children and adolescents**

| Variable | N* (%) |
|---|---|
| Conduct Disorder** | 167 (44.06%) |
| ADHD | 125 (32.98%) |
| Autism | 93 (24.53%) |
| **Depression**** | 121 (31.92%) |
| Anxiety | 107 (28.32%) |
| Phobia | 101 (26.64%) |
| Tourette Syndrome | 90 (23.74%) |
| Schizophrenia | 109 (28.75%) |
| Bipolar Disorder | 103 (27.17%) |
| **Drug Addiction**** | 136 (35.88%) |
| **PTSD**** | 101 (26.64%) |
| Anorexia Nervosa | 91 (24.01%) |
| Attachment Disorder | 89 (23.48%) |

***Multiple options were chosen by respondents. **Most common in post-conflict countries**.

Most of the healthcare providers had knowledge about the following mental health conditions in children and adolescents are seen in Table 5.1.3. Importantly, conduct disorder 167 (44.06%), depression 121 (31.92%) and substance abuse 136 (35.88%) as well as PTSD were common identified especially in post-war countries.

**Table 5.1.4 – General Knowledge and Management of Mental Illness in Children/Adolescents**

| Variable | N (%) |
|---|---|
| **How can mental illness in children be prevented?** | |
| Through good nutrition | 142 (37.46%) |
| Stable family | 147 (38.78%) |
| Good parenting | 165 (43.53%) |
| Removing Witches from the community | 66 (17.41%) |
| **Do you believe that children with mental illness can be cured?** | |
| Yes | 244 (64.38%) |
| No and Not Sure | 135 (35.62%) |
| **Which of the following can help improve a child/adolescent with mental illness?** | |
| Native medicine | 109 (28.75%) |
| Prayers | 112 (29.55%) |
| Seeing a Doctor or Nurse in the hospital | 128 (33.77%) |
| Medicine from the hospital | 125 (32.98%) |
| Medicine from the drugs store | 67 (17.67%) |
| Using 'holy water' or 'holy oil' | 88 (23.21%) |
| Through Exorcism | 82 (21.63%) |
| Talking to a Counsellor | 114 (30.07%) |
| Psychotherapy | 89 (23.48%) |

| | |
|---|---|
| **In Your opinion, who can be affected by mental illnesses?** | |
| Anyone | 113 (29.81%) |
| Only poor people | 61 (16.09%) |
| People living in Slum | 86 (22.69%) |
| Rich people | 72 (18.99%) |
| Those who smoke marijuana/cocaine | 71 (18.73%) |
| Chronic drinkers | 69 (18.26%) |
| Homeless people | 64 (16.88%) |
| **Can Traditional medicine cure mental illness?** | |
| Yes | 96 (25.33%) |
| No and not sure | 283 (74.67%) |

**Table 5.1.4** reveals the general knowledge and perceived management of mental illness in children and adolescents.

**Table 5.1.5 Causes of mental illness in Children and Adolescents.**

| Variable | N* (%) | Rank |
|---|---|---|
| *Social factors:* | | |
| Loneliness | 140 (36.93%) | 4th |
| Shaking hands | 99 (26.12%) | 11th |
| Sharing a cup or spoon | 84 (22.16%) | 12th |
| Stress | 156 (41.16%) | 1st |
| Difficulty in school or work | 148 (39.05%) | 3rd |
| *Personal factors:* | | |
| Drugs, marijuana, Alcohol | 150 (39.57%) | 2nd |
| Failure in life | 128 (33.77%) | 5th |
| Lack of willpower | 110 (29.02%) | 9th |

| | | |
|---|---|---|
| *Supernatural factors:* | | |
| Divine punishment | 102 (26.91%) | 10th |
| Evil spirit, witchcraft | 81 (21.36%) | 13rd |
| Destiny or bad luck | 79 (20.84%) | 14th |
| *Biological factors:* | | |
| Hereditary | 125 (32.98%) | 6th |
| Brain Infection | 117 (30.87%) | 7th |
| 'Open mole'** | 113 (29.81%) | 8th |

*Multiple options were chosen by respondents. **Common term used in Liberia for depressed anterior fontanel in the under-fived caused by dehydration.

**Table 5.1.6 Attitude of Health Care Providers to children with mental illness (Modified Bogardus Social Distance score)**

| Variable | Yes n (%) | No & Not sure N (%) |
|---|---|---|
| '…Ashamed if people knew a child or adolescent in my family has mental illness?' | 108 (28.50%) | 271 (71.50%) |
| '…Not approve of my child or relative to maintain close friendship with or date a child/adolescent who has mental illness?' | 105 (27.70%) | 274 (72.30%) |
| '…be concerned about my child or relative sitting in class next to a child/adolescent who has mental illness?' | 103 (27.18%) | 276 (72.82%) |
| '… be concerned about my child or relative inviting a child or adolescent with mental illness to their birthday party' | 177 (46.70%) | 202 (53.30%) |
| '….be concerned about my child doing homework together with a child with mental illness?' | 104 (27.44%) | 275 (72.56%) |
| '…be concerned if I find my child or relative walking home from school together with a child or adolescent with mental illness' | 103 (27.18%) | 276 (78.82%) |
| '… be concerned if my child or relative receives a | 110 (29.02%) | |

| | | |
|---|---|---|
| Christmas/birthday Card from a child or adolescent with mental illness' | 147 (38.79%) | 269 (70.98%) |
| Children and adolescents with mental illness can be as handsome or beautiful as other children. | 120 (31.66%) | 232(61.21%) |
| Children and adolescents with mental illness can be as intelligent as other children. | 114 (30.08%) | 259 (68.34%) |
| Children and adolescents with mental illness can be as trustworthy as other children. | 193 (50.92%) | 265 (69.92%) |
| Children and adolescents with mental illness are unpredictable and dangerous. | 104 (27.44%) | 186 (49.08%) |
| '…be concerned if I found out that my child or relative's current teacher had mental illness when they were a child or adolescent.' | 184 (48.55%) | 275 (72.56%) |
| I will be afraid to have conversation with a child/adolescent who has mental illness. | | 195 (51.45%) |

**Table 5.1.6** outlined the social distance scale with most of the respondents endorsing the fear that children or adolescent with mental illness are dangerous and could be unpredictable 193 (50.92%), while 184 (48.55%) would be afraid to have conversation with a mentally ill child or adolescent. 108 (28.49%) respondents would be ashamed of their child or relative with mental illness while 177 (46.70%) would opposed of their child inviting a child with mental illness to his/her birthday party. Based on apriori set criteria, 23 respondents (6.1%) were classified as having low social distance, 77(20.3%) were classified as having moderate social distance and 219(68.7%) as having high social distance as seen below:

**Table 5.1.7 Social distance score**

**Social Distance**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Low | 23 | 6.1 | 7.2 | 7.2 |
| | Moderate | 77 | 20.3 | 24.1 | 31.3 |
| | High | 219 | 57.8 | 68.7 | 100.0 |
| | Total | 319 | 84.2 | 100.0 | |
| Missing | System | 60 | 15.8 | | |
| Total | | 379 | 100.0 | | |

**Table 5.1.8 Family Attitude**

| **Variable** | **Yes N (%)** | **No & Not sure N (%)** |
|---|---|---|
| People in my family think that having a child with mental illness is something to be ashamed of. | 166 (43.80%) | 213 (56.20%) |
| People in my family think that having a child or adolescent with mental illness is something that should be kept secret from others. | 108 (28.50%) | 271 (71.50%) |
| People in my family think that their children should avoid being friends with children and adolescents with mental illness | 131 (34.56%) | 248 (65.44%) |

Table 5.1.8 showed respondent's family's perception in relations to child and adolescent mental illness. Most respondents believed that their families see having a child with mental illness as shameful 166 (43.80%) and many thought child and adolescent mental illness

should be kept secret 108 (28.50%) and 131 (34.56%) respondents believe their families would be opposed to their children being friends with a mentally ill child or adolescent.

**Table 5.1.9 Religion and Mental Illness**

| Variable | Yes n (%) | No n (%) |
|---|---|---|
| My religion teaches that children with mental illness are dangerous and should be avoided | 58 (15.30%) | 321 (84.70%) |
| My religion believes that children with mental illness are possessed | 80 (21.10%) | 299 (78.90%) |
| My religion believes that mental illness can be cured | 134 (35.36%) | 245 (64.64%) |

**Table 5.1.10 Health Care Providers Practices in relation to child and adolescent mental illness**

| Variable | Yes n (%) | No n (%) |
|---|---|---|
| Have you ever received training on providing mental health education | 162 (42.74%) | 217 (57.26%) |
| Is providing health education part of your duty at the Unit? | 120 (31.66%) | 259 (68.34%) |
| Have you ever received training in child and adolescent mental health? | 127 (33.50%) | 252 (66.50%) |
| Have you ever seen a child or adolescent in your clinic that appears to have a mental illness? | 157 (41.42%) | 222 (58.58%) |

| | | |
|---|---|---|
| If you come across a child or adolescent in your clinic who is tearful and feeling very sad and depressed, would you know how to assist the child to get help? | 178 (46.97%) | 201(53.03%) |
| If you saw a child in your unit who is talking about killing himself/herself, would you know what to do to assist the child to get help? | 144 (37.99%) | 235(62.01%) |
| If you saw a child in your unit who says he is hearing voices telling him to kill his parents, would you know what to do to assist the child to get help? | 143 (37.73%) | 236 (62.27%) |
| Do you believe all health care providers have a responsibility to identify and or treat a child or adolescent with mental illness to the best of their ability? | 302 (79.68%) | 77 (20.32%) |
| Over all, how would you rate your confidence in recognizing when a child or adolescent is mentally ill? | Very Good 141(37.20%) | Good 170(44.86%) Limited 68 (17.94%) |
| Over all, how would you rate your confidence in being about to help a child or adolescent who is mentally ill? | Very Good 186(49.07%) | Good 124(32.72%) Limited 69(18.21%) |

**Table 5.1.10** deals with healthcare providers' practices in relation to children and adolescents with mental illness and their level of exposure and ability to provide appropriate helpinclinical practice.

**Section II – Explores the bivariate relationship between stigma and knowledge scales with socio-demographic and other explanatory variables.**

For purposes of these analyses, the composite stigma and knowledge scales were used instead of the individual items as the scales have more analytical power and reduce the risk of false positive findings which can arise from multiple bivariate comparisons.

**Table 5.2.1 Relationship between stigma and gender.**

## T-Test

**Group Statistics**

| | Gender | N | Mean | Std. Deviation | T (df), p |
|---|---|---|---|---|---|
| Stigma | Male | 100 | 21.73 | 2.25 | T=1.39<br>df =(300)<br>p = 0.16 |
| | Female | 202 | 21.34 | 2.29 | |

There was no statistically significant difference in mean stigma scale scores between males and females (t = 1.39, df = 300, p = 0.16).

## Table 5.2.2 – Comparison Stigma scale scores between Doctors and Non-Doctors

## T-Test

**Group Statistics**

| | Doctors vs others | N | Mean | Std. Deviation | T T, df, p |
|---|---|---|---|---|---|
| Stigma scale | Doctors | 21 | 21.33 | 2.22 | T = - 0.31<br>df = 301<br>p = 0.76 |
| | nurses-midwives-physician asst | 282 | 21.49 | 2.29 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Stigma | Equal variances assumed | .000 | .990 | -.308 | 301 | .758 | -.15957 | .51843 |

The t-test shows that there is no statistically significant difference in stigmatization scores between doctors and other hospital staff (t = - 0.31, df 301, p = 0.76).

**Table 5.2.3 – Knowledge between Doctors and Non-Doctors on the cause of mental illness.**

**T-Test**

**Group Statistics**

| | Doctors vs others | N | Mean | Std. Deviation | t, df, p |
|---|---|---|---|---|---|
| Knowledge scale | Doctors | 19 | 19.57 | 2.56 | T = 0.12<br>Df = 266<br>P = 0.90 |
| | nurses-midwives-physician asst | 249 | 19.49 | 2.94 | |

The t test shows no statistically significant difference in knowledge on cause of mental illness between doctors and other hospital staff (t = 0.12, df, 266, p = 0.90).

**Table 5.2.4 – Knowledge between male and female on child and adolescent mental illness.**

**T-Test**

**Group Statistics**

| | Gender | N | Mean | Std. Deviation | t, df, p |
|---|---|---|---|---|---|
| Knowledge scale | Male | 96 | 19.6771 | 2.87 | T = 0.69,<br>Df = 265<br>P = 0.49 |
| | Female | 171 | 19.4211 | 2.93 | |

Similarly, knowledge between genders was not significantly different (t = 0.69, df = 265, p 0.49). In addition to comparisons based on the knowledge scale, further comparisons were made on three questions that tested high degree of misinformation.

**Table 5.2.5: Comparing doctors and non-doctors on whether mental illness can be transmitted by shaking hands with an affected person**

**Count**

| | Shaking hands | | Total | |
|---|---|---|---|---|
| | Yes | No | | |
| Doctors | 14 | 7 | 21 | Chi-square = 0.5, df = 1, P = 0.82 |
| Doctors vs others | | | | |
| Nurses-midwives-Physician Asst | 205 | 92 | 297 | |
| Total | 219 | 99 | 318 | |

This table shows no significant difference in the proportion of doctors and non-doctors who believe that mental illness could be transmitted by shaking of hands with an affected person.

**Table 5.2.6: Comparing doctors and non-doctors on whether mental illness can be caused by lack of will power.**

**Count**

| | Will power | | Total | |
|---|---|---|---|---|
| | Yes | No | | |
| Doctors | 12 | 9 | 21 | Chi-square = 0.64, df = 1, P = 0.42 |
| Doctors vs others | | | | |
| Nurses-midwives-Physician Asst | 194 | 101 | 295 | |
| Total | 206 | 110 | 316 | |

T here was no statistically significant difference in the proportion of doctors and non-doctors who believe that mental illness can be caused by lack of willpower. Belief with Pearson Chi-Square of 0.64 and P = 0.42.

**Table 5.2.7 Comparison of Doctors vs non doctors on whether mental illness can be transmitted through sharing cups or spoon with an affected person**

| | | Sharing cups or spoon | | Total | |
|---|---|---|---|---|---|
| | | Yes | No | | |
| Doctors vs others | Doctors | 13 | 8 | 21 | Chi-square = 1.55, df 1, p = 0.21 |
| | nurses-midwives-physician asst | 220 | 76 | 296 | |
| | Total | 233 | 84 | 317 | |

There was no statistically significant difference in the proportion of doctors and non-doctors who believed that mental illness can be caused by sharing cups and spoon with affected persons Pearson Chi-Square of 1.55 and p = 0.21.

**Correlations**

As part of the bivariate analyses, Pearson correlations were conducted between the stigma and knowledge scales and other continuous socio-demographic and explanatory variables

## Table 5.2.8 Correlations

| | Stigma scale | Knowledge | Family attitude scale | Freq or church or mosque attendance | Freq of prayer | Yrs of work in the hospital | Age | Familiarity Rank |
|---|---|---|---|---|---|---|---|---|
| **Stigma** Pearson Correlation | 1 | -.520** | .435** | -.078 | .092 | -.039 | -.02 | .010 |
| Sig.(2-tailed) | | .000 | .000 | .301 | .224 | .511 | .687 | .861 |
| N | 303 | 262 | 300 | 176 | 176 | 287 | 297 | 291 |
| **Knowledge Scale** Pearson Correlation | - .520** | 1 | -.508** | -.093 | -.112 | -.065 | -.061 | -.110 |
| Sig.(2-tailed) | .000 | | .000 | .226 | .144 | .300 | .322 | .081 |
| N | 262 | 268 | 259 | 172 | 172 | 255 | 266 | 354 |
| **Family Attitude Scale** Pearson Correlation | .435** | -.508** | 1 | .106 | .169* | .046 | .063 | .009 |
| Sig.(2-tailed) | .000 | .000 | | .163 | .025 | .438 | .275 | .879 |
| N | 300 | 259 | 304 | 175 | 175 | 288 | 298 | 293 |
| **Freq of church or mosque Scale** Pearson Correlation | -.078 | -.093 | .106 | 1 | .222** | .005 | .036 | .204** |
| Sig.(2-tailed) | .301 | .226 | .163 | | .003 | .953 | .635 | .007 |
| N | 176 | 172 | 175 | 176 | 175 | 174 | 176 | 172 |
| **Freq of Prayer Scale** Pearson Correlation | .092 | -.112 | .169* | .222** | 1 | .039 | .003 | .133 |
| Sig.(2-tailed) | .224 | .144 | .025 | .003 | | .612 | .965 | .082 |
| N | 176 | 172 | 175 | 175 | 176 | 174 | 176 | 172 |
| **Yrs of work in the Hospital Scale** Pearson Correlation | -.039 | -.065 | .046 | .005 | .039 | 1 | .344** | -.103 |
| Sig.(2-tailed) | .511 | .300 | .438 | .953 | .612 | | .000 | .083 |
| N | 287 | 255 | 288 | 174 | 174 | 357 | 354 | 284 |
| **Age** Pearson Correlation | -.023 | -.061 | .063 | .036 | .003 | .344** | 1 | -.093 |
| Sig.(2-tailed) | .687 | .322 | .275 | .635 | .965 | .000 | | .110 |
| N | 297 | 297 | 298 | 176 | 176 | 354 | 373 | 294 |
| **Familiarity rank** Pearson Correlation | .010 | -.110 | .009 | .204** | .133 | -.103 | -.093 | 1 |
| Sig.(2-tailed) | .861 | .081** | .879** | .007 | .082 | .083 | .110 | |
| N | 291 | 254 | 293 | 172 | 172 | 284 | 294 | 300 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Pearson correlations (r values) show that there is a moderate negative correlation between the stigma scale and knowledge scale (r = - 52, p = 0.0001). This shows that those with more limited knowledge of the causes of mental illness were more likely to have higher stigma scores.

There is a moderate positive correlation between stigma scale and family attitude scale (r = .44, p = 0001). This indicates that those who believe their families have negative attitudes to mental illness were more likely as individuals to also hold stigmatising views of mental illness.

There is a moderate negative correlation between knowledge scale and family attitude scale (r = -.51, p = 0001). This indicates that those who believe their families have negative attitudes to mental illness were more likely as individuals to have poorer knowledge of the causes of mental illness.

**Section III. Multivariate analysis.**

One of the objectives of this study is to identify the variables that predict stigma. In order to achieve this objective, a hierarchical multi-variate linear regression analysis was conducted using the stigma scale as the dependent variable. The two variables that showed significant association with stigma scale in bivariate analyses (knowledge scale and family attitude scale) were included as predictors. Hierarchical regression was adopted so that the specific contributions of the predictors can be easily delineated. Age and gender were included in step 1 of the model to control their effects. This Model was not significant F (2, 254) = 1.86, p = 0.16 and explained only 1.4% of the variance in stigma scores.

The knowledge scale was included in Step 2. The Model was significant and knowledge scores alone explained 28.3% of the variance in stigma scores F3, 253) = 35.78, p = 0.0001).Family attitude was included in the final step. The Model was significant F(4, 252) = 32.07, p = 0001 and family attitude alone explained 3.9% of the variance in stigma scores. The normal probability plot of residuals (Figure 5.3.1) shows that the regression assumption of normality was not violated.

**Table 5.3.1 – Predictors of stigmatising attitude**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |
|---|---|---|---|---|---|
| | | | | | R Square Change |
| 1 | .120[a] | .014 | .007 | 2.34683 | .014 |
| 2 | .546[b] | .298 | .290 | 1.98475 | .283 |
| 3 | .581[c] | .337 | .327 | 1.93200 | .039 |

a. Predictors: (Constant), Gender, Age

b. Predictors: (Constant), Gender, Age, Knowledge

c. Predictors: (Constant), Gender, Age, Knowledge, Famattide

d. Dependent Variable: stigma

**Table 5.3.2** **ANOVA[a]**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 20.537 | 2 | 10.269 | 1.864 | .157[b] |
| | Residual | 1398.933 | 254 | 5.508 | | |
| | Total | 1419.471 | 256 | | | |
| 2 | Regression | 422.841 | 3 | 140.947 | 35.780 | .000[c] |
| | Residual | 996.630 | 253 | 3.939 | | |
| | Total | 1419.471 | 256 | | | |
| 3 | Regression | 478.845 | 4 | 119.711 | 32.071 | .000[d] |
| | Residual | 940.626 | 252 | 3.733 | | |
| | Total | 1419.471 | 256 | | | |

a. Dependent Variable: stigma

b. Predictors: (Constant), Gender, Age

c. Predictors: (Constant), Gender, Age, Knowledge

d. Predictors: (Constant), Gender, Age, Knowledge, Famattide

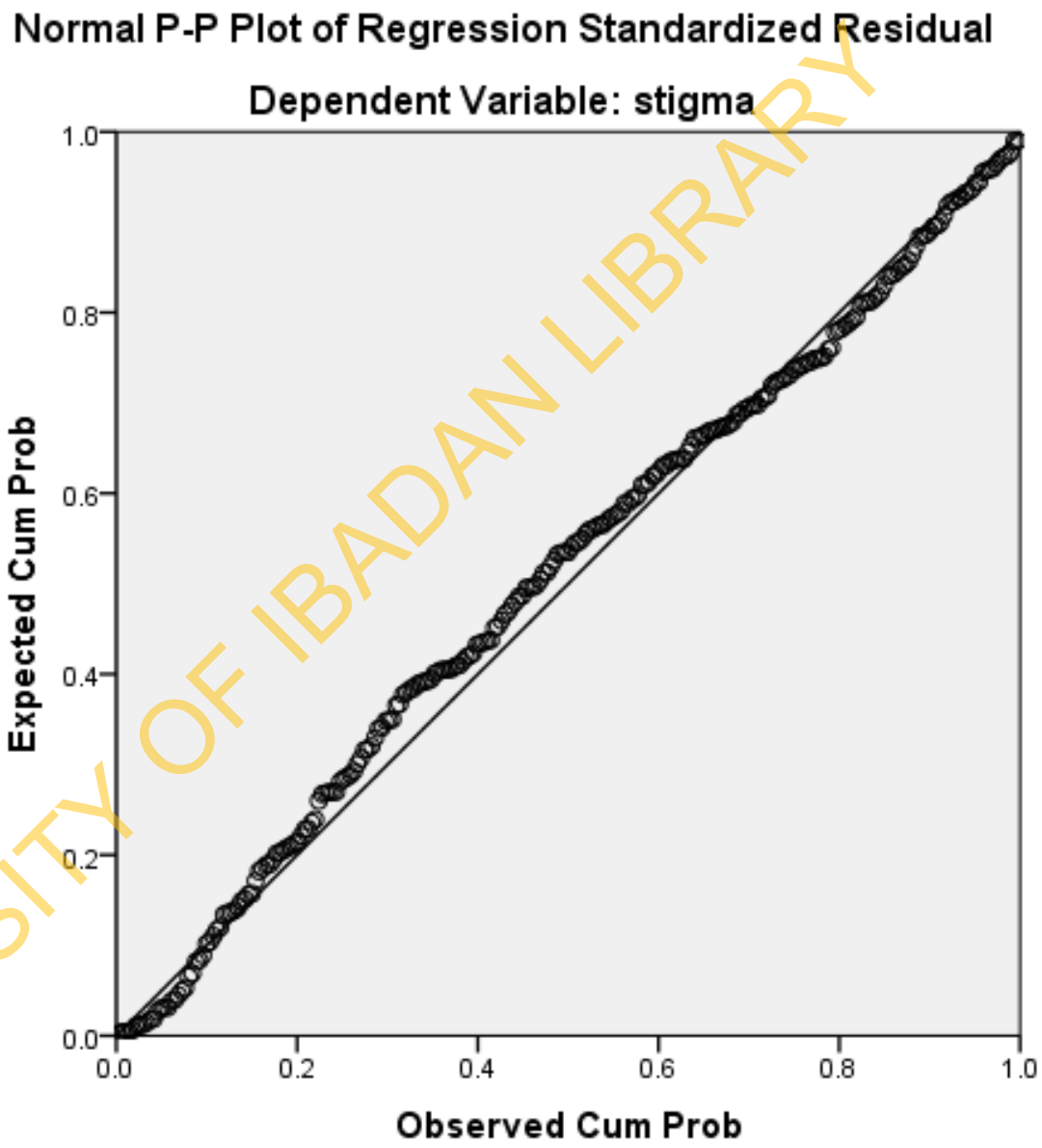
**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 22.987 | .987 | | 23.282 | .000 |
| | Age | -.023 | .023 | -.063 | -1.001 | .318 |
| | Gender | -.536 | .308 | -.109 | -1.739 | .083 |
| 2 | (Constant) | 32.047 | 1.225 | | 26.158 | .000 |
| | Age | -.037 | .019 | -.102 | -1.915 | .057 |
| | Gender | -.659 | .261 | -.134 | -2.525 | .012 |
| | Knowledge | -.428 | .042 | -.534 | -10.106 | .000 |
| 3 | (Constant) | 27.903 | 1.602 | | 17.416 | .000 |
| | Age | -.040 | .019 | -.109 | -2.107 | .036 |
| | Gender | -.711 | .254 | -.144 | -2.794 | .006 |
| | Knowledge | -.336 | .048 | -.419 | -7.045 | .000 |
| | Famattide | .547 | .141 | .230 | 3.873 | .000 |

a. Dependent Variable: stigma

**Fig 5.3.1**

**Charts**



# CHAPTER SIX

## Discussion

The study focused on the level of knowledge, attitude and practices of health care providers working in the general out-patient and in-patients departments in two of the government Teaching Hospitals in Monrovia, Liberia in relation to child and adolescent mental health. The Ministry of Health and Social Welfare has integrated general mental health into the essential package of health services (EPHS), primary health care community level, thus this study was important for post-conflict Liberia where there is very little knowledge of child and adolescent mental disorders/illnesses and with few mental health workers.

The overall response rate of respondents 94% indicates that healthcare providers were keen in participating in the study. A self-administered questionnaire was used.

The first goal of the study was to identify the prevalence of high social distance towards children and adolescents with mental illness among this sample of hospital workers. The study found that 68% of the respondents were classified as having high social distance. This is similar to the proportion of 65% found by Adewuya and Oguntade (2007) among hospital doctors in Western Nigeria. It is a concern that such a high proportion of health workers have high social distance towards children and adolescents with mental illness. This could have negative impact on the health workers ability and willingness to help affected children in their care. Similar studies conducted in Zambia (Kapungwe et al 2011) reported stigma amongst health care providers was a major obstacle preventing adequate mental health and primary health care integration. Helflinger and Hinshaw (2010) identified similar obstacle when the stigmatizers are health care providers who are involved in service delivery.

Good parenting (44%), family stability (39%) and proper nutrition (37%) were believed to help in the prevention of mental illness in children. 63% of healthcare providers believed that mental illness in children and adolescents can be cured. Healthcare providers believed that mental illness in children and adolescents can be cured through: native medicine (28.75%), prayers (29.55%), seeing a Doctor or Nurse in the hospital (33.77%), taking medicine from

hospital (32.98%) and talking to a counsellor (30.07%). Regarding the vulnerability of mental illness in children and adolescents in the society, about 29.81% believed that anyone can be affected by mental illnesses while others believed that people living in slum, homeless people and those who smoke marijuana or cocaine can also be affected. These findings indicate that a significant proportion of the respondents identified relevant knowledge about child mental health but an even larger did not endorse good knowledge. This indicates possible need for more education on child and adolescent mental health.

**Knowledge and Causal attribution:**

The study found that 191 (50.40%) of Health Care Providers endorsed that child and adolescent mental health is very important with (31.66%) said somewhat important but (17.94%) said that it is not important. Most of the respondents were able to recognize some signs and symptoms of mental disorders in children and adolescents such as talking out aloud, sitting quietly, urinating on self, toileting on self, lack of concentration, aggression, lack of sleep, running away from home and thoughts of suicide. Importantly also, many of the health care providers were able to identify some of the mental disorders that affect children and adolescents such as conduct disorder, depression, substance abuse. These conditions have been reported as more prevalent in studies conducted in post-conflict countries like Liberia (Panter-Brick et al 2007; Johnson et al 2008; Mel C. et al 2010). The most common factors endorsed as possible causes of mental illness include - stress 156 (41.16%), misuse of drugs 150 (39.59%), difficulty in school or work 148 (39.05%), loneliness 140 (36.93%) and failure in school/life 128 (33.77%), Other less commonly endorsed causes were hereditary 125 (32.98%), brain infection 117(30.87%), open mole 113 (29.81%), lack of willpower 110 (29.02%) and Divine punishment 102 (26.91%).Previous studies in Nigeria (Adewuya and Oguntade 2007; Ani et el 2011) also identified evil spirit and bad luck as commonly endorsed causes for mental illness. However, it is worthy to note that some respondents endorsed that mental illness can be caused by shaking of hands and sharing of cups or spoons with a mentally ill person. Those with lower knowledge of the

causes of mental illness had higher stigma ( r = - 52, p = 0.0001). This illustrates the importance of more education to challenge myths about child and adolescent mental health as a way to reduce stigma.

Johnson et al (2008) reported that open mole syndrome is relatively a common disorder in Liberia and it's found mostly in women. It is a cultural bound anxiety depressive disorder with associated frontal headache, palpitations, lack of sleep and appetite and burning sensation around the body with the frontal region of the scalp open. The fact that some respondents link this to child and adolescent mental illness indicates need for further education on this subject.

Interview conducted by the Author on April 7, 2014 at the John F. Kennedy E.S. Grant Mental Health Hospital revealed that between January 1st and March 31st 2014, a total of 23 patients were admitted aged 15 – 24 with substance misused, depression and psychosis. Johnson et al (2008) reported that 40% of ex-combatants (aged 18) met the criteria for major depressive disorder, 43% for post-traumatic stress disorder as well as substance misused (36%) are common in post-conflict countries for example, Liberia.

Moreover, participants had broader knowledge about factors that could prevent mental illness in children with 44% indicating that good parenting style, 39% family stability and 37% proper nutrition as being a key to the prevention of mental illness in children. This is in line with previous findings by Omigbodun (2004) that family instability and lack of proper care are predisposing factors to mental illness in Children.

A large proportion (63.06%) of respondents reported that mental illness in children can be cured. This optimism is encouraging and is supported by the fact that most respondents indicated that mental illness can be improved by seeing a doctor in the hospital (34%), taking medicine from the hospital (33%) and through counselling and psychotherapy (30% and 23%) respectively.

It is interesting that (25.32%) endorsed the used of traditional medicine to treat mental illness while 29.55% believed in divine intervention such as prayers. This type of response is not

peculiar to Liberia as other studies in Low and Middle Income countries have shown that a significant proportion of people believe and access traditional medicine (including prayer houses or spiritual homes) for mental health treatment (Adewuya and Oguntade, 2007; Adewuya and Makanjuola, 2008; Crabb et al 2012; ). Incidentally, studies have also shown that such traditional interventions can be helpful for emotional problems but less so for psychosis and bipolar disorder (Abbo, C. 2011), as 80% of patients with psychosis used both orthodox and traditional healing systems seemed to have a better outcome. However, some traditional healing practices such as beating the mentally ill person can also be harmful and need to be discouraged.

There were no statistically significant difference in the knowledge of causes of mental illness in children between doctors and non-doctors. Also there was no statistically significant association between the respondents' age and their knowledge of the causes of child and adolescent mental illness. These findings are similar to those reported in other studies in the region (Adewuya and Oguntade 2007; Ukpong and Abasiubong 2010).

**Association between knowledge about causes of mental illness and stigma**

Although the level of knowledge of possible causes of mental illness is high among the respondents, a significant proportion indicated poor knowledge such as endorsing that shaking of hands and sharing of cup with mentally ill patient could cause mental illness. This shows that even among well educated professionals, there are still some that hold onto unusual beliefs about causes of mental illness.

Not surprising, the regression analysis showed that poor knowledge was a predictor of higher scores on the stigma scale. In fact knowledge scores alone explained 28.3% of the variance in stigma scores.

So while the level of knowledge about causation is encouraging, some of the health workers would benefit from being provided more accurate information through leaflets and posters specifically addressing the myths about causes of mental illness. It is well recognised that

improving knowledge to dispel myths about stigmatising conditions are generally helpful in reducing negative attitudes (Hebl et al 2000).

In further support of the potential role of using improved knowledge to reduce stigma, Smith and Cashwell (2011) reported that professional mental health providers endorsed less degree of restrictions to adults with mental illness compared with other professionals probably due to their increase in knowledge and clinical experience. This is also similar to findings from another study that showed that older doctors who were more senior in their career and therefore likely to be more knowledgeable appeared to be less stigmatizing towards mental illness than younger doctors (Gureje et al 2005).

Therefore interventions are required to use improved knowledge about child and adolescent mental health to reduce social distance by health workers towards these vulnerable children and adolescents. The interventions could start with including modules on child and adolescent mental health in the training curriculum of the health workers. Incidentally, with the high proportion of the hospital staff interest in mental illnesses in children and adolescents suggest that it would be appropriate to incorporate mental health concepts relating to children and adolescents into their professional development in line with the integration of mental health at the primary health care level during phase I of EPHS.

**Perceived family attitudes and stigma**

Many health care providers believed that their families had negative attitude towards children and adolescents with mental illness. These negative family held beliefs appear to influence the health care workers own attitudes towards child and adolescents with mental illness. Thus higher score on the family attitude scale was a significant predictor of higher stigma scores in the regression analysis.

A strong negative personal and family perception of child and adolescent mental illness can have negative implications for integrating mental health into the primary health care level, given that children would need the support of their families to access such care and the fact

that this group of staff play a centre role in the delivery of health services in the community level. It is believed that family values and norms have a major role in the shaping of their children's social and psychological attitudes (Belsky 2005). In most African societies, a child or adolescent is often perceived as a 'spectacle' of the family in the community, therefore, any act of deviation from the norms, could be perceived as hereditary – runs in the family!, and this can stigmatise the whole family and affect their standing in the community including opportunities for marriage. This highlights the importance of including families and whole communities in interventions to reduce stigmatising attitude towards children and adolescents with mental illness.

**Practice in Relation to Mental illness in Children**

About 162 (42.74%) said they had received training in general mental health but 217 (57.26%) have not. It is interesting to know that 127 (33.50%) respondents have received training in child and adolescent mental health but 252 (66.50%) have not been trained. The experience with regards to clinical practice, about 157 (41.42%) had seen a child or adolescent with mental illness in clinic but 58.58% haven't. Notwithstanding, about 178 (46.97%) stated that they would know what to do if they saw a depressed child in clinical practice and importantly, about 38% of health care providers stated they would know what to do about a child presenting with suicidal thoughts. It is worthy to note that about 80% of health care providers stated that they have a sense of responsibility to identify and provide treatment for a child or adolescent presenting with mental illness. However, there are those with limited confidence (17%) when it comes to recognizing a child or adolescent with mental illness and being able to provide appropriate assistance but on the average, about 40% of health care providers would recognized a child or adolescent with mental illness and are able to provide appropriate assistance.

This shows the importance of providing training and exposure to child and adolescent mental health to all health care workers given that they may come across children with serious mental health problems irrespective of their actual clinical role. This finding partly agrees

with another study that reported more doctors who are 40 years and above felt the responsibility of caring for people with mental illness as compared to Nurses whose proportion decreased with age (Ndetei et al 2010).

**Religion and stigma**

Religion plays a centre role in the lives of individuals and has major effect on the social and psychological development and also adds to the values and norms that people holds on to. 245 (64.64%) of respondents affirmed that their religion teaches that mental illness cannot be cured. This type of belief can reduce help-seeking behaviour in relation to a child or adolescents who are mentally ill. A supernatural belief that mental illness cannot be cured implies that orthodox medical care would be contraindicated as compared to seeking religious help (prayers) and or native medicine (spiritualist) as endorsed by 30% and 29% respectively by respondents which is similar to findings in previous studies (Gureje et al 1995). Despite the high level of religiosity as seeing in Table 5.1.1 among the respondents between the Christian and Muslim, in Table 5.1.8, about 58 (15.30%) believe that their religion teaches that children with mental illness are dangerous and should be avoided while 80 (21.10%) said their religion teaches that they are possessed. However, it is noteworthy to mention that 134 (35.36%) believed their religion teaches that mentally ill children can be cured although 245 (64.64%) do not share the same believe. This implies that orthodox medical care may not be taken up even if available (Adewuya et al, 2011). But Abbo (2011) find out that the combination of biomedical and traditional treatment was helpful for mentally ill patients in Uganda.

# CHAPTER SEVEN

## Conclusion

This study identified a high prevalence of social distance towards children and adolescents with mental illness among hospital workers in Monrovia. The two predictors of high stigma scores were poor knowledge about causes of mental illness and perception that the workers own families have high negative attitude towards children and adolescents with mental illness.

There is need for interventions to reduce stigmatizing attitudes towards children and adolescents with mental illness among doctors and non-doctors in Liberia. Health Care Providers were selected for this study because any negative attitude by these individuals and their families can have serious implications for the provision of care to children and adolescents with mental illness in hospitals and in primary care.

The interventions to reduce stigma need to include accurate information to correct myths about causes of mental illness. It also need to include changing religious beliefs that discourage help-seeking for mental illness.

The anti-stigma campaign interventions could be embedded in the curriculum of institutions that train the health workers and success in that Module of study could be made mandatory before trainees can graduate to ensure it is taken seriously. Moreover, regular in-service capacity building at the primary, secondary and tertiary hospital levels will help to reduce stigma in children and adolescents with mental illness. While increasing and improving the knowledge of health care providers in child and adolescent mental health can be helpful, an effective anti-campaign programmes need to be initiated at the country health team level, to include the ministries of health and social welfare and of education. Legislation may also be required to make it illegal to discriminate or maltreat children and adolescents with mental illness.

# CHAPTER EIGHT

## Limitations

To our knowledge, this is the first study to explore the knowledge, attitudes and practices of Health Workers in Liberia in relation to Child and Adolescent Mental Health. However, the findings should be interpreted in the light of some limitations. First, like all measure of attitude, the social distance scale in this study could be subjected to systematic bias either positive or negative. Secondly, further research is needed to include other hospital workers and thirdly, most of the respondents were working during shift hours and getting the questionnaire was a problem. The scope was only limited to two government hospitals in Monrovia and not private hospitals and to the entire country. Thus, opinion expressed by the respondents may not reflect the attitude and practices of the generality of health care providers in the city.

Finally, given that this is a cross-sectional study, no causal inferences are implied by any of the association found between social distance and other variables. In this light, a qualitative design might allow researchers to gain a deeper understanding of desired social distance among hospital workers towards children and adolescents with mental illness.

# CHAPTER NINE

## Recommendations

We recommend the followings:

1. Anti-stigma campaign should target clinicians and administrators in hospitals.
2. The anti-stigma campaign needs to include strategies to correct myths about mental illness.
3. Curriculum for medical and nursing schools should include topics with educational materials to address stigma against mentally ill patients and their families and promoting mental health in school health programs.
4. Training of professional staff at the county level in the assessment and recognition of mental disorders in children and adolescent
5. Quarterly supportive supervision for professionals trained in child and adolescent mental disorders.
6. Research to guide policy making at the ministry of health and social welfare and Ministry of Education on the subject of child and adolescent mental health.
7. Development of a National Policy on Child and Adolescent Mental Health.

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## Appendix A: Informed Consent – deleted.

## Appendix B: Instrument of data collection

***Instructions: Please put an X, Tick or circle as appropriate for the selected answer(s) that best apply.***

**A. Socio-demographic Characteristics of Respondents**

1. How old are you? _____years old.
2. Your gender?
   1. [ ] Male 2. [ ] Female

3 What is the highest level of education you have completed? Please circle. 1. Professional Institution: a. College (Post High School) [ ] b. University [ ]

4 Marital status 1 [ ] Single. 2 [ ] Married. 3 [ ] Separated. 4 [ ] Divorced

5 Your occupation. Please check and cycle as appropriate.

   1. [ ] Medical Doctor - General Practitioner: Dept.: A. Peds B. Medical C. Surgery, D. OB/Gyn.
   2. [ ] Specialist Doctor: A. Internist, B. Surgeon, C. Paediatrician D. Psychiatrist. E. Obstetrician/Gynecologist.
   3. [ ] Registered Nurse : Choose appropriate: A. B.Sc Nurse B. Diploma Nurse
   4. [ ] Physician Assistant
   5. [ ] Certified Midwife

6 Number of months/years you have been working as a health care provider? _____Months or _____years

7 Religion? 1. Christianity [ ] 2. Islam [ ] 3. Traditional [ ] 4. Other _____

**B. Child and Adolescent Mental Health Knowledge and Awareness**

8 Where did you first learn about mental illness in Children and Adolescents? (check all that apply)

A. [ ] Newspapers and magazines B. [ ] Radio C. [ ] TV D. [ ] home E. [ ] Billboards F. [ ] University or College of Nursing G. [ ] Brochures, posters and other printer materials H. [ ] Community I. [ ] Religious leaders J. [ ] Family, friends, neighbours and colleagues K. [ ] Teachers L. [ ] Other (please explain)_____

9 In your opinion, how important is mental illness in children and adolescents? (check one)

1. [ ] Very important 2. [ ] Somewhat important 3. [ ] Not very important

10 Which of the following may be signs and symptoms of mental illness in children and adolescents? (please check all that apply): 1. [ ] Crawling sensation 2. [ ] Talking aloud to self 3. [ ] Sitting quietly in the corner of the room 4. [ ] butterfly in the stomach 5. [ ] crying to self 6. [ ] Urinating on self 7. [ ] Toileting on self 8. [ ] lack of concentration 9. [ ] aggression 10. [ ] poor eye contact 11. [ ] lack of sleep. 12. [ ] Running away from home 13. [ ] School dropout 14. [ ] thoughts of killing or harming oneself.

11 What are the mental health problems in children and adolescents you have heard about? (check all that apply) 1. [ ] Conduct disorder 2. [ ] Attention deficit hyperactive disorder 3. [ ] Autism 4. [ ] Depression 5. [ ] Anxiety 6. [ ] Phobia 7. [ ] Tourette syndrome 8. [ ] Schizophrenia 9. [ ] Bipolar disorder 10. [ ] drug Addition 11. [ ] post traumatic stress disorder 12. [ ] anorexia nervosa 13. [ ] attachment disorder.

12 How can mental illness in children be prevented? (check all that apply)

1. [ ] Through good nutrition 2. [ ] Stable family 3. [ ] Good parenting 4. [ ] Removing Witches from the community

13 Do you believe that children with mental illness can be cured? 1. [ ] Yes 2. [ ] No

14 Which of the following can help a child or adolescent with mental illness to improve? (check all that apply).

1. [ ] Through native medicine 2. [ ] Prayers 3. [ ] Seeing a Doctor or Nurse in the hospital 4. [ ] Through medicine from the hospital 5. [ ] Through medicine from the drug store 6. [ ] Using 'holy water' or 'holy oil' 7. [ ] Through exorcism 8. [ ] Talking to a Counsellor 9. [ ] psychotherapy 10. [ ] Other (explain)_____

15 In your opinion, who can be affected by mental illnesses (please check all that apply)

1. [ ] Anyone 2. [ ] Only poor people 3. [ ] Only people living in the slum 4. [ ] Only rich people living in nice houses with cars 5. [ ] Only those who

smoke marijuana/cocaine 6. [ ] only chronic drinkers 7. [ ] Only homeless people 8. [ ] Other (please explain)_____

16 Can traditional medicine can cure mental illness? Please circle 1. Yes 2. No 3. Not sure

**C. Possible causes of Mental illness in Children and Adolescents. Please put Y for yes or N for No in each box**

| | **Causes** | **Y (for yes) or N (for No)** |
|---|---|---|
| 17 | Loneliness | |
| 18 | Stress - personal, financial or marital | |
| 19 | Difficulty at school or work | |
| 20 | Drugs, Marijuana, Alcohol abuse | |
| 21 | Shaking hands with another child with mental illness | |
| 22 | Failure in school/life | |
| 23 | Lack of willpower | |
| 24 | Divine punishment/God's Will | |
| 25 | Evil spirit/witchcraft/sorcery | |
| 26 | Sharing a cup or spoon with another child with mental illness | |
| 27 | Destiny/bad luck | |
| 28 | Hereditary (from parents, grandparents or relatives) | |
| 29 | Brain injury/infection of the brain | |
| 30 | Childbirth (open mole) depressed anterior fontanel | |

D. **Health Care Providers' Attitude to Children with mental illness (Please tick the appropriate answer in the column):**

| S/n | | 1.YES | 2.NO | 3.NOT SURE |
|---|---|---|---|---|
| 31 | I will be ashamed if people knew a child or adolescent in my family has mental illness? | | | |
| 32 | I would not approve of my child or relative to maintain close friendship with or date a child/adolescent who has mental illness? | | | |

| | | | | |
|---|---|---|---|---|
| 33 | I would be concerned about my child or relative sitting in class next to a child/adolescent who has mental illness? | | | |
| 34 | I would be concerned about my child or relative inviting a child or adolescent with mental illness to their birthday party | | | |
| 35 | I would be concerned about my child or relative doing home work together with a child or adolescent with mental illness. | | | |
| 36 | I would be concerned if I find my child or relative walking home from school together with a child or adolescent with mental illness. | | | |
| 37 | I would be concerned if my child or relative receives a Christmas or birthday card from a child or adolescent with a mental illness. | | | |
| 38 | Children and adolescents with mental illness can be as handsome or beautiful as other children. | | | |
| 39 | Children and adolescents with mental illness can be as intelligent as other children. | | | |
| 41 | Children and adolescents with mental illness can be as trustworthy as other children. | | | |
| 42 | Children and adolescents with mental illness are unpredictable and dangerous | | | |
| 43 | I would be concerned if I found out that my child or relative's current teacher had mental illness when they were a child or adolescent. | | | |
| 44 | I will be afraid to have conversation with a child/adolescent who has mental illness? | | | |

| **E.** | **Family attitudes (*please indicate in the bracket with an X how people in your family think about children and adolescents with mental illness*)** | 1.YES | 2.NO | 3.NOT SURE |
|---|---|---|---|---|
| 45 | People in my family think that having a child or adolescent with mental illness is something to be ashamed of. | | | |
| 46 | People in my family think that having a child or adolescent with mental illness is something that should be kept secret from others. | | | |
| 47 | People in my family think that their children should avoid being friends with children and adolescent with mental illness. | | | |

| F. | Familiarity with children and adolescent with mental illness. | Put an X in the bracket if the statement applies to you |
|---|---|---|
| 48 | I suffer or have suffered from mental illness | [ ] |
| 49 | I have a child or adolescent who suffers from mental illness | [ ] |
| 50 | My father or mother or brother or sister suffers from mental illness | [ ] |
| 51 | My brother or sister has a child or adolescent who suffers from a mental illness | [ ] |
| 52 | My child has a friend who suffers from mental illness | [ ] |
| 53 | My nephew or niece has a friend who suffers from mental illness | [ ] |
| 54 | I know a child or adolescent who is not a relative and who suffers from mental illness | [ ] |
| 55 | I have heard of a child or adolescent who suffers from mental illness | [ ] |
| 56 | I have never heard of or know of any child or adolescent who suffers from mental illness | [ ] |

57. How many times do you say prayers alone or with your family in a day? _____ times.

58. How many times do you go to church or mosque for prayer or religious meetings in a week?

_____ times.

59. Do you perform a special duty in your church or mosque (for example helping the Priest, Pastor, Reverent or Imam?) 1. Yes 2. No

60. My religion teaches that children with mental illness are dangerous and should be avoided 1. Yes 2. No

61. My religion believes that children with mental illness are possessed 1. Yes 2. No

62. My religion believes that mental illness can be cured 1. Yes 2. No

**G. Health Care Providers Practices in relation to child and adolescent mental illness (Please circle or briefly explain if yes).**

63 Have you ever received training on providing mental health education? 1. Yes 2. No

64 Is providing health education part of your duty at the unit? 1. Yes 2. No

65 Have you ever received training on Child and Adolescent Mental Health 1. Yes 2. No

66 Have you ever seen a child or adolescent in your clinic that appears to have a mental illness? 1. Yes 2. No

67 If you come across a child or adolescent in your clinic who is tearful and feeling very sad and depressed, would you know how to assist the child to get help? 1. Yes 2. No.
If Yes, please write down what you would do_____

68 If you saw a child in your unit who is talking about killing himself/herself, would you know what to do to assist the child to get help? 1. Yes 2. No
If Yes, please write down what you would do_____

69 If you saw a child in your unit who says he is hearing voices telling him to kill his parents, would you know what to do to assist the child to get help? 1. Yes 2. No
If Yes, please write down what you would do_____

70 Over all, how would you rate your confidence in recognizing when a child or adolescent is mentally ill 1. Very good 2. Good 3. Limited

71 Over all, how would you rate your confidence in being about to help a child or adolescent who is mentally ill? 1. Very good 2. Good 3. Limited

72 Do you believe all health care providers have a responsibility to identify and or treat a children or adolescents with mental illness to the best of their ability? 1. Yes 2. No

**Appendix C – Ethical Approval Letter – deleted.**