

**PREVALENCE, CORRELATES AND PATTERN OF  
COMMON MENTAL HEALTH PROBLEMS AMONG  
ADOLESCENTS IN INSTITUTIONAL CARE IN  
AKWA IBOM STATE, NIGERIA**

By

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IBADAN**

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## **Declaration**

I hereby declare that this is my original work and was supervised by Dr. Jibril Abdulmalik, Dr Haleem Abdulrahman and Dr. Joshua Akinyemi of the centre for Child and Adolescent Mental Health, University of Ibadan, in partial fulfillment of the requirement for the award of the Degree of Master of Science in Child and Adolescent Mental Health of the University of Ibadan, and that it has not been submitted to any other institution for any award.

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## Certification

This is to certify that, the conduct of this study and preparation of the project were carried out by ANTIGHA Immaculata Orok a student of the center for Child and Adolescent Mental Health, University of Ibadan under my supervision.

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## **Dedication**

I dedicate this work to God Almighty for his exceeding grace and to my beloved mother of blessed memory, Mrs. Franca Antigha.

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## Key to Acronyms

BEIP	Bucharest Early Intervention project
CBCL	Child Behavioral Checklist
CDI	Child Behavioral Questionnaire
CEDC	Children in Exceptional Difficult Circumstances
DAWABA	Development and well being
MDGs	Millennium Development Goals
OR	Odds Ratio
OVC	Orphan and Vulnerable Children
SDGs	Sustainable Development Goal
SDQ	Strength and Difficulties Questionnaire
SPPS	Statistical Package for Social Sciences
UNICEF	United Nations International Children's Emergency Fund
USA	United State of America
WHO	World Health Organization
YSR	Youth Self Report Questionnaire

## ABSTRACT

**Background:** Globally, the prevalence of child and adolescent mental health is alarming, affecting 10-20% of children worldwide. This value is even higher among children living in institutions and orphanages. According to Merikangas et al (2009) three of the ten leading causes of disability in people between the ages of 15 and 44 are mental disorders, and the other causes are often associated with mental disorders (Ries Merikangas et al., 2009). The populations of children living in residential homes have constantly increased over the last 20 years. These children are very vulnerable in terms of psychological disturbances due to histories of child abuse and neglect, separation from their parents or placement instability. But there is currently no existing data on the prevalence, correlates or patterns of mental disorders among children and adolescents living in orphanages in Nigeria. We therefore sought to determine the prevalence and correlates of mental health problem of children living in this exceptional circumstance in this region.

**Methodology:** A cross sectional study was carried out to assess the mental health of 160 adolescents aged 10-19 years residing in orphanage homes by convenient sampling method. The study was conducted in 9 selected orphanage homes in Akwa Ibom state, Nigeria. Tools used in data collection were the self-report version of the Strength and Difficulties Questionnaires (SDQ) and Short Mood and Feelings Questionnaire (SMF). Data were analyzed using the IBM SPSS software for Windows Version 23. Descriptive statistics such as frequency and proportions and inferential statistics including Chi square test to test association between categorical variables were used. A significance level was set at 5%.

**Results:** A total of 160 children and adolescents, aged 10-19 years, with a mean age of 14.4 years participated in the study. Majority 105 (65.6%) were aged 14-19 years and there were more females 88 (55.0%) than males. Three quarters were secondary level education, and

71.3% were Pentecostals. One hundred and five participants (65.6%) were orphans and majorities were originally from monogamous families.

Prevalence of depressive symptoms was 69.5%, as measured by the Short Mood and Feelings Questionnaire. None of the socio-demographic factors were associated with having depressive symptoms. Fifty seven adolescents (35.6%) had mental health problem as measured by SDQ. Conduct problems were the commonest (45.0%) followed by emotional problems (41.3%). Of the individual subscales, age was associated with having conduct problems ( $p=0.002$ ), gender was associated with having emotional problems ( $p=0.013$ ).

Furthermore, verbal abuse was reported by 60.9%, sexual abuse by 20.9%, and neglect by 52.7%. In addition, corporal punishment was reported by 56.4%.

More than half of participants (52.5%) had stayed in the current homes for 5 years and more.

**Conclusion:** This study provided evidence that mental health problems are high, especially depressive, conduct and emotional problems. These observed behavioral anomalies might have led the community to label most of these children as witches. Children and adolescents in residential care are therefore a neglected high risk population.

However, there is need for further research and subsequently, more intervention study to reduce the high prevalence of mental health problems for adolescents in this situation. This study had some strengths and limitations. This is the first ever study to determine the prevalence, correlates and patterns of mental health problems among institutionalized adolescents in Akwa Ibom community.

## CHAPTER ONE

### INTRODUCTION

## 1.1 Background

Child and adolescent mental health is defined as the ability to achieve and maintain optimal psychological functioning and well-being and is directly related to the level reached and competence achieved in psychological and social functioning (World Health Organization, 2005). A child with good mental health has a sense of identity and self-worth, sound family and peer relationships, an ability to be productive and learn, and a capacity to use developmental challenges and cultural resources to maximize development (Dawes et al., 1997). Mental disorder is defined as a pattern of signs and symptoms that is associated with impairment of psychological and social functioning, and that meets criteria for disorder under an accepted system of classification such as the Diagnostic and Statistical Manual Version four (DSM-IV) (World Health Organization, 2005).

Mental health problems constitute a major burden of disease in children and adolescents worldwide (WHO, 2017). At least one in every five youth aged 9-17 years has a diagnosable mental health problem which causes some degree of impairment with 10% of them having significant impairment (Green et al. 2004). In addition, half of all these mental health problems start before the age of 14 years but most of the cases go undetected and are only treated until late adolescent (Kessler et al; 2005). These disorders are however amenable to treatment and/or interventions if diagnosed early. Adolescence is a critical and formative period in which individuals begin their transition from childhood to adulthood. Ensuring that adolescents are fully supported in all facets of life is critical for fostering this transition and laying a foundation of healthy and productive lives.

The prevalence of mental disorders is even higher among children and adolescents in institutionalized settings when compared to general population of adolescence (Bronsard et

al., 2016). A study carried out in Missouri, USA among 17 year old foster care youths showed that the prevalence of psychiatric disorders was 32% (McMillien et al., 2005). The study also found out that the youths in foster homes had increased psychiatric prevalence of depression and post-traumatic stress disorder compared to their peers in the community (McMillen et al., 2005). Similarly, a country-wide study by Garland and colleagues in San Deigo, Brazil that examined the prevalence of psychiatric disorders among children living in public sectors of care found that 50% of them met criteria for at least one mental health disorder. Attention deficit hyperactive disorder and disruptive behavior disorder were much more common than mood and anxiety disorders (Garland et al., 2001). However, the prevalence of psychopathology in institutionalized children seems to be even higher in non-western countries. Bella and colleagues in Nigeria recorded a prevalence of up to 97% with anxiety, suicidal and depressive symptoms being the most commonly elucidated (Bella, Atilola, & Omigbodun, 2010).

Institutional care is defined as a living arrangement for more than ten children, without parents or surrogate parents, in which care is focused on the children and there are people hired to act as care takers for the children in the institution. Approximately 2.7 million children between the ages of 0-17 years could be living in residential care globally (Petrowski et al., 2017). A study contained in the 2008 situation analysis of orphans and vulnerable children (OVC) in Nigeria revealed that there was no more than 17.5 million children classified as OVC (Nwaneri & Omuemu, 2013). Orphans face both maternal and emotional deprivation as well as psychological stress (UNICEF, 2008). The transition from biological families or primary care givers to foster care is a traumatic experience for most children. Moreover, this traumatic experience usually occurs after these children might have gone through some kind of



maltreatment necessitating the foster care (Brukas, 2010). This maltreatment and consequent severe psychosocial strains are well known factors for developing mental disorder (Green et al., 2010). UNICEF has therefore proffered that institutional care could be a breeding ground for mental health problems, and has recommended that countries move towards the de-institutionalization of children (WHO, 2017).

In Africa many studies have been carried out on orphaned and institutionalized children's health and nutritional status but few studies have been conducted on associated psychological aspects. Furthermore, to the best of the authors' knowledge, no prior representative study has obtained detailed assessments of mental health problems among institutionalized children and adolescents in Akwa Ibom and Cross River States which are both in South-South region of Nigeria. Moreover, in this part of the country, there is an emerging problem with many children been labeled witches and sent out of their homes. Some of these children have found refuge in institutionalized settings. It is therefore important to find out if some of the symptoms they manifested, that led to their being labeled as witches were, in fact, indicative of the presence of mental health problems.

## **1.2 Problem statement**

According to a study carried out by Bella et al. (2010) in the South west region of Nigeria, the prevalence of mental health problems in institutionalised children is high. Nine out of every 10 child resident within a juvenile justice home was diagnosed with a psychopathology (Bella et al., 2010). Also in recent years, Akwa Ibom State, in Southern Nigeria, has witnessed dangerous rising trends of diabolical child abuse practices. Innocent and defenseless children are accused of witchcraft and subsequently labeled child witches, by self-proclaimed prophets, clergy and parents as well as adult relatives in the local communities. These labeled witch children are subjected to varying forms of physical torture and extreme inhumane treatment under the guise of witchcraft exorcism, in some cases these children are outrightly murdered. These children could be suffering from mental health problems like conduct disorder, anxiety which people of this locality are ignorant about it (Chineywmba, 2014).

There is however need to protect these children, according to United Nations Convention on the Rights of the Child, Article 19 ‘Right to be protected from all forms of physical or mental violence, injury maltreatment or exploitation (Convention on the Rights of the Child, 2010).

## **1.3 Justification of the study**

Determining the prevalence, identifying the patterns and correlates of mental health problems is very important. Adolescents in residential institutions may be particularly at risk of abnormal mental development, this can seriously affect further development and thus hamper adaptation to adult life (Witold, 2018).

In recent years, Akwa Ibom State, in Southern Nigeria, has witnessed dangerous rising trends of diabolical child abuse practices, where innocent and defenseless children are being labeled as witches, by the self-proclaimed clergy, parents and adult relatives in the local communities. These children are sometimes subjected to varying forms of physical torture and extreme inhumane treatment under the guise of witchcraft.

There is paucity of data on prevalence on common psycho-pathologies among children in institutionalized care in Nigeria. Studies have shown that institutional care have negative effects , especially on young of children ( (Erol et al., 2010). This study will further look for possible factors that could be responsible for the high prevalence of mental health problem among institutionalized children and adolescents. There's need to protect this children, according to United Nations Convention on the Right of the Child, Article 19' Right to be protected from all forms of physical or mental violence, injury, maltreatment (Convention on the Rights of the Child, 2010).

### **1.3 Research Questions**

1. What is the prevalence of some specific mental health problems among adolescence in institutional care in Akwa Ibom, Nigeria?
2. What is the pattern of specific mental health problems among adolescence in institutional care in Akwa Ibom, Nigeria?
3. What are the correlates of mental health problems among adolescence in institutional care in Akwa Ibom, Nigeria?

### **1.4 Aim**

To determine prevalence, correlates and pattern of mental health problems among adolescents in institutional care in Akwa Ibom, Nigeria.

### **1.4 Specific objectives**

1. To determine prevalence of some specific mental health problems among adolescents living in institutional care in Akwa Ibom, Nigeria.
2. Describe the pattern of specific mental health problems among adolescents living in institutional care in Akwa Ibom, Nigeria.
3. To determine the correlates of mental health problems among adolescents in institutional care in Akwa Ibom, Nigeria.

## CHAPTER TWO

### 2.1 INTRODUCTION

The period of adolescence is a crucial stage, as changing needs of adolescents arises during this period, hence the need for assessing mental health problems, particularly among institutionalized adolescents. Children in institutional care are a group of children in a living arrangement without parental care or surrogate parents. A number of studies conducted in Nigeria have shown drastic increase in mental health problems of institutionalized children.

Research in recent years has prompted an increasing awareness of the impact of child mental health problems on the global burden of disease (Kieling et al, 2011). This is particularly true for low and middle income countries (LMICs), where children and adolescents constitute a high proportion of the overall population. Mental disorders in children and adolescents are influenced by combination of integrating factors such as psychosocial, biological and environmental risk factors which may have lasting effects on their development and mental well-being (Patel, 2008).

### 2.2 Institutionalized care - Children in Exceptionally Difficult Circumstances (CEDC)

All children are not fortunate enough to be groomed in an environment that is conducive to provide appropriate care and development. Children who are in institutional care are described as being in exceptionally difficult circumstances. There is need to protect some children more than others, due to their different socio-economic and political circumstances and geographical location. Children in exceptionally difficult circumstances (CEDC) are children whose basic needs are not met and problems such as social violence and disruption are very common among them. They are children with special needs and a unique group of

exceptionally vulnerable children with higher risks of physical and mental health problems. Children in exceptional difficult situations is a worldwide problem with a labyrinth of compartments (Ocampo, 1998).

### **2.2.1 Types of Children in Exceptionally Difficult Circumstance (CEDC)**

Over the years, based on the social conditions, economic involvement, family situation, conditions and standard of living, children have been categorized as those in difficult situations. These include children from poor homes, abandoned children, children in hard labor, orphaned children and street children (law explorer, 2016).

### **2.2.2 Orphanhood**

Orphanhood occurs as result of death of one or both parents of a child and is a sub-group under children with exceptional difficult circumstances (CEDC). Orphanhood leads to various problems such as reduced access to health and school services and are faced with challenges to their psychological needs along with other factors that can interfere with their future (Markos & Zikie, 2015). The impact on the psychological well-being of orphaned children affects virtually all aspects of their lives up until adulthood such as difficulty to relate with people in a healthy manner (Cluver et al., 2008). Statistics has shown that 140 million children are orphaned worldwide, 17 million due to AIDS and 90% of the orphan resides in sub-Saharan Africa (Lee et al., 2016).

However, attention given to orphans in the international child protection discourse is poor and reports suggest that orphanhood is a major, if not the major factor affecting child vulnerability in sub-Saharan Africa (Crivello & Nardos, 2012).

### **2.2.3 Historical Background of Orphanages and other residential homes/institutions**

Historically, an orphanage was a residential institution, or group home, devoted to care for orphans and other children who were separated from their biological families. There are reasons for which a child is placed in an orphanage; it could be as a result of death of one or both parents, or separated from biological family (Embleton et al., 2014). The use of government-run institutional homes has been phased out in the United States, Canada, the United Kingdom, and in the European Union member-states during the latter half of the 20<sup>th</sup> century but continue to operate in many other regions internationally. While the term “orphanage” is no longer typically used in the United States, nearly every US state continues to operate residential group homes for children in need of a safe place to live be supported in their educational and life-skills pursuits, for example homes like the Milton Hershey School (Charles, 1838).

The Romans formed their first orphanages around 400 AD. Jewish law prescribed care for the widow and the orphan, and Athenian law supported all orphans of those killed in military service until the age of eighteen. The care of orphans was referred to bishops and, during the middle ages, monasteries. As soon as they were old enough, children were often given as apprentices to households to ensure their support and to learn an occupation (MCKenna, 2018).

In the early nineteenth century, the problem of abandoned children in urban areas, especially London, began to be alarming. The workhouse system, instituted in 1834, although often brutal, was an attempt at the time to house orphans as well as vulnerable children. There was a clamor for change, which led to the birth of orphanage movement (Nelson et al., 2007). The movement took off in the mid-19<sup>th</sup> century although orphanages including the Orphan Working Home in 1758 and the Bristol Asylum for poor Orphan Girls

in 1795, had been set up earlier. However, there were private orphanages founded by private benefactors, which most of the times received royal patronage and government oversight (Charles, 1838). Orphanages, especially larger ones, have had some well publicized examples of poor care (Csaky, 2009). Children particularly babies, may not receive enough physical contact, eye contact in order to enhance proper social or cognitive development, and stimulation in large institutions. (Johnson, Browne, & Hamilton-Giachritsis, 2006). However, some Orphanages can be dangerous and unregulated places where children are subject to neglect and abuse (Csaky, 2009; Lewis, 2008).

A rapid assessment of orphans and vulnerable children conducted in 2004 with UNICEF support revealed there were about seven millions orphans in 2003 and that 800,00 more orphans were added that same year (Unicef, 2004). Also, the number of orphans and vulnerable children in Nigeria was estimated to be 17.5 million, out of which 7.3 million are orphaned by HIV/AIDS (Amby, 2010).

#### **2.2.4 Mental Health Outcomes of Institutional care in children and adolescents**

Although orphanages can provide a secure and positive alternative to abusive and unsafe family or community, yet they cannot provide individualized and family nurturing (Koumi et al., 2012). Research findings indicate that children in institutionalized homes have more behavioral problems such as aggressive behavior, higher levels of depression, anxiety and PTSD, compared to children reared in a family setting (Trout et al., 2009). Several studies have shown that institutional care have negative effects, especially on young children, however, few studies have shown prevalence rate of mental health problems among these group of children (Erol et al., 2010).



Research from the Bucharest Early Intervention Project (BEIP) is often cited as demonstrating that residential institutions negatively impact the wellbeing of children. The BEIP selected orphanages in Bucharest, Romania that raised abandoned children in socially and emotionally deprived environments in order to study the changes in development of infants and children after they had been placed with specially trained foster families in the local community ( Zeanah et al., 2003).

Studies in advanced countries have shown that children raised up in alternative care settings like institution orphanages etc. experience poorer mental health. Institutional care for orphaned children has become a central question for international aid policy affecting many low and middle-income countries. Research has clearly and convincingly showed that children raised in emotionally and socially deprived orphanages in Eastern Europe suffered significant cognitive delays with long term negative effects (Charles et al.,2003; Nelson et al., 2007; Rutter et al., 2007)

A meta-analysis of 42 studies in 19 countries also reported lower intelligence Quotient (IQ) values among institutionalized children compared to those in the normal family settings. Orphans in institution are perceived to be at higher risk of developing mental health problems (Gray et al., 2015).

In another study orphans were observed to be more depressed, anxious and less optimistic and irritable, accompanied with disruptive behaviors. However, studies have shown that orphaned children are at a brink of serious mental health problems (Atwine & Graae, 2005; Nyamukapa et al., 2008).

Currently, very few children residing in institution like orphanages have access to mental health treatment to address these problems; most of the institutionalized orphanages are not trained in identifying these problems and as such creating a substantial mental health treatment gap (Kohn et al; 2004). This gap is as high as 78% for adults and even greater in children with a median of 16% of children with mental health need receiving treatment (WHO, 2000).

### **2.3 Mental health problems in Children**

There have been considerable changes in the nature and pattern of child and adolescent health problems, mental disorders have been recognized as a source of childhood morbidity. Childhood mental disorders are also associated significant distress to the child and a major burden to the society (Palfrey et al., 2005). However, there is yet to be evidence that childhood mental disorders are relatively more prevalent in low- middle income countries, although there are indicators suggesting that globally childhood mental health problems is likely to be concentrated in low-and middle income countries, due to the fact that 85% of the World's child and adolescent population live in LMICs' (Bloom, Canning, & Fink, 2008). Children living in sub-Saharan Africa in particular face a lot of hardships like poverty, poor nutrition and little or no food and social problems which can impair their early life development as well as their mental health and well-being (Cortina et al., 2012).

Currently, epidemiological evidence shows a prevalence rate as high as 20% for childhood mental health problems in sub-Saharan Africa ( Cortina et al., 2012).

#### **2.3.1 Burden of CAMH Problems in the general population**

Mental health problems represent the greatest global burden of disease among children and adolescents. There is however lack of policy development and implementation for child and adolescent mental health, particularly in low and middle income countries (Belfer, 2004) . Mental disorders pose a huge burden of disease in children. It affects 10% - 20% of children round the World, (Guilherme V. Polanczy, 2014). A recent study investigated potential barriers to implementation of the national mental health policy (Stein, 2013). These barriers include concerns about the feasibility and sustainability of policies, other activities and policies required to ensure full integration of mental health into the health system (Tomlinson et al., 2016). Lack of financial and human resources, the limited number of evidence-based psychosocial treatment protocols for disorders such as depression and anxiety, limited awareness and negative attitudes towards mental disorders, and the low level of health-system readiness to integrate mental health (Mokitimi et al., 2018).

The WHO profile on mental health and development in Sierra Leone identifies stigma as a major issue affecting mental health in Sierra Leone (Yoder et al., 2016) . Brief surveys done by an international NGO showed that most inhabitants of local communities believed mentally ill people to be evil, violent, lazy, stupid, unable to marry or have children even as individuals who were not fit to vote (Behnam N. 2011).

In South Africa various factors such as HIV infection, substance use and exposure to violence increase the risk for mental health problems in children and adolescents. However, despite the evidence on the burden of CAMH problems, the rate of unmet needs in CAMH is still high especially in low and middle-income countries (Prince et al., 2007).

Moreover, the burden of mental illness makes the need to create awareness and acceptance of persons in the population more urgent (Kessler et al., 2009). Stigma and discrimination have been seen as a major barrier to individuals with mental illness in seeking help (Rüsch et al., 2014).

### **2.3.2 An overview of International studies on prevalence and correlates of CAMH problems among institutionalized children compared with those in family settings**

At least one out of every four or five of young people in the general population will suffer from at least one mental disorder in any given year. Rates of mental disorder range from 8% to 57% in Netherlands. The Australian National Survey of mental health and well-being reported that at least 14% of adolescents younger than 18 years were diagnosable with mental or substance use disorder, and this figure increased to 27% (Patel et al., 2007).

The prevalence rate of mental health problems within the community has been estimated between 13-20% (Schowalter & Costello, 1989). Several studies round the world have shown high prevalence of mental health problems among institutionalized children. . As far back as the 20<sup>th</sup> century, studies showed that children who grew up within the family settings are mentally better compared to children raised in institutions (Bowlby, 1982).

A multi-site study was carried out in 20 German residential care institutions, with a total population of 689 children and adolescents aged 4-18 years. The study found that 59.9% of all children and adolescents fulfilled an ICD 10 diagnosis. Another interesting finding in this study was that the most prevalent disorder was conduct disorders and combined ADHD. Extremely high externalizing behavior on CBCL scores was indicative of high disruptive behavior associated with male compared to female peers. Female peers exhibited more of

internalizing disorders and high rates of co-morbidity were observed in this study; thus this study was indicative of severe burden of mental disorders among institutionalized children (Schmid et al., 2008).

A cross-sectional study was conducted among institutionalized children and adolescents in Turkey. The prevalence of problems behaviors by YSR, TRF CBCL were 47%, 15.1% and 20.5% respectively for the institutionalized sample versus 10.1%, 7.5% and 9.5% for the community samples. It is indicative that institutionalized children and adolescents had consistently higher rates in externalizing and internalizing problems as well as social problems, and attention problems when compared to the community samples (Erol et al., 2010).

Another study also found a prevalence of 70% and 45% for any psychiatric disorder among children in institutions, school and child welfare center in San Diego, California, USA (ANN et al., 2001). According to Rahman et al (2012) it was observed that orphans who grew up in residential institutions showed higher problem scores on the Achenbach Child Behavior Checklist and a higher frequency of post-traumatic stress disorder compared to orphans who grew up in the Iraqi traditional foster care system (Rahman et al., 2012).

Prevalence of mental health problems was evaluated among children in family foster care and residential homes in Denmark. This was a comparative study between 1072 children in residential care, and 1457 of the same age group. Using SDQ, it was indicative that 20% of children in-out of home care had at least one recognizable psychiatric disorder compared to 3% of the non-welfare children. However, a wide range of factors were associated with the tendency of being diagnosed of a psychiatric disorder. Boys were more vulnerable in

developing psychiatric disorder compared with girls, while single motherhood was associated with mental health problems in residential care when compared to non-welfare homes. It's indicative that the prevalence and correlates of mental health problems in foster or residential care is much higher than children in general family settings (Egelund & Lausten, 2009).

In a study conducted in two orphanages in Gaza, with a total number of 115 children, aged 9-16 years revealed that the prevalence of mental health problems using SDQ was found to be 43.7% and on child depression inventory scale, depression was 28.5% (Thabet & Thabet, 2007).

Furthermore, a study carried out in Kolkata to compare the prevalence of mental health problems in children under parental care and out of parental care (institutionalized children). It was found that institutionalized children had more conduct problems (84.3%), emotional problems (55.6%), peer problem (48.30%) and hyperactivity (32.30%). However, children in parental care had less problem; conduct problem(48.70%), emotional problem (33.70), peer problem (44.60%) and hyperactivity (26.70%.) and 48.70% children under parental care (Datta, Ganguly, & Roy, 2018).

. Depression in children and adolescents is increasing especially among the vulnerable children. A cross-sectional survey conducted in Sri Lanka with a population 891 adolescents, selected from one semi-urban and two urban schools, reported prevalence of depression to be 57.7%. Males had slightly higher prevalence of mental disorders than females., (Perera et al., 2006).

In a study carried out in high school children to investigate the prevalence of depression between those living with both parents versus single parent, depression rate for those students who live with both parents was (27.77%) which was significantly lower than those living with father alone (40%) (Daryanavard et al., 2011). In conclusion it's very evident that family status contributes and can also be a protective or risk factor for depressive symptoms among children and adolescents.

A review of 52 studies from all over the continents was carried out in an attempt to determine the overall prevalence of child and adolescent psychiatric disorders between 1970 and 1996 found a mean prevalence of 15.8%, range 1%- 51%. Prevalence by age group was reported to be 8% in preschools, 12% in preadolescents and 15% in adolescents and 18% in studies including wider age ranges (Roberts, Attkisson, & Rosenblatt, 1998). Papers published between 1985 and 2012 also reported a prevalence of 12% of psychiatry disorders and there is mounting evidence, that many, if not most, lifetime psychiatric disorders is likely to appear first in childhood or adolescents (Costello, Egger, & Angold, 2005).

### **2.3.3 Prevalence and correlates of mental health among institutionalized children in Africa**

Studies on prevalence and patterns of mental health problems is very limited on the African continent according to Cortina et al., in a review of studies in the sub-Saharan Africa region.

In a cross sectional study in economically disadvantaged rural schools in South Africa, 41% of the children had at least one mental disorder on the teacher-completed scales of SDQ, YRS and trauma symptom checklist. Child completed questionnaire revealed 14.1% had clinically significantly anxiety and depressive disorders while 23.9% had post-traumatic stress disorder (PTSD) and correlates of maternal education was found to be significant (Cortina et al., 2013).

A study conducted in four residential institutions for orphaned and vulnerable children in Eastern Kenya, used the Youth Self Report administered to 630 orphans and vulnerable children (OVCS) aged 10-18 years in four residential cares. The prevalence of internalizing problems was 36.8 and 12.3% for externalizing problems. It was observed that boys had higher prevalence rates in all of the conditions. There was also presence of multiple mental problems and 16.7% of the children had about three to eight comorbid syndromes, which is indicative of a high rate of comorbid disorders in institutionalized children (Mutiso et al., 2016).

A study carried out among children and adolescents in 4 residential institutions in Tanta, Egypt, among 84 boys and 30 girls, revealed 86.0% had emotional withdrawal, 73.7% had aggression, and 64.9 % had hyperactivity problems. . Another finding in the study was 87.7% had depression and there was a significant difference between gender and depression, with boys having a higher prevalence of depression compared to girls. In line with other studies, this study confirmed that length of stay is correlated with mental health problems (Elebiary et al., 2010). According to Harden, any amount of orphanage experience is harmful, and went further to confirm that the damage is even greatest during the initial stage of the child being incorporated into the home (Harden, 2004).

#### **2.3.4 Prevalence of child and adolescent mental health problems among institutionalized children in Nigeria**

A study by Bella et al, (2010) assessed a total number of 57 children in the Ibadan Remand Home over a period of one year and found a suicidal thoughts, depressive symptoms, learning disability, epilepsy, conduct disorder, physical abuse, hallucinations and anxiety. It was observed that majority (97%) showed significant psychopathology such as anxiety; whilst depressive symptoms and suicidal thoughts were the most commonly elicited. The



study showed that children with suicidal behaviors had depressive symptoms while children in need of care were more likely to have suffered physical abuse. Epilepsy and learning disability were common in children who were abandoned and in need of care and protection, and children with conduct disorder were described as being beyond parental control (Bella et al., 2010).

Conduct disorder (CD), among other psychiatric disorders, has assumed prominence in its association with Juvenile offenders and other institutionalised children. A study conducted among 147 inmates of a Borstal institution in Abeokuta South Western Nigeria recorded a high prevalence rate of conduct disorder of 56.3%. (Olashore et al., 2016).

Several cross-sectional studies have suggested that more than 60% of youth in detention and 50-90% of children and adolescents in various residential/foster care have a diagnosable psychiatry disorder compared to 15-25% of the general population (Teplin et al., 2002).

#### **2.4.3 Mental health problems among children and adolescents living in Institutions**

It is very unfortunate that a large proportion of children and adolescents in sub-Saharan Africa are being nurtured by caregiving or family arrangements that may not guarantee optimal social and mental development. About 55 million children in Sub-Saharan Africa and 140 million orphaned children worldwide are orphans; with about 17 million orphaned due to AIDS and all of whom live in different forms of alternate care (Central Statistical Agency and ICF International, 2011). Studies in advanced countries have shown that children raised up in alternative care settings like institution orphanages etc. experience poorer mental health Institutional care for orphaned children has become a central question for international aid policy affecting many low and middle-income countries. Research has

clearly and convincingly showed that children raised in emotionally and socially deprived orphanages in Eastern Europe suffered significant cognitive delays with long term negative effects (Zeanah et al., 2007) .

A meta-analysis of 42 studies in 19 countries also reported lower intelligence Quotient (IQ) values among institutionalized children compared to those in the normal family settings. Orphans in institution are perceived to be at higher risk of developing mental health problems (Gray et al., 2015).

In another study orphans were observed to be more depressed, anxious and less optimistic and irritable, accompanied with disruptive behaviors. However, studies have shown that orphaned children are at a brink of serious mental health problems (Bejamin Atwine, Elizabeth Cantor Graae, 2005; Nyamukapa et al., 2008).

Currently, very few children residing in institution like orphanages have access to mental health treatment to address these problems; most of the institutionalized orphanages are not trained in identifying these problems and as such creating a substantial mental health treatment gap (Kohn et al; 2004). This gap is as high as 78% for adults and even greater in children with a median of 16% of children with mental health need receiving treatment (WHO, 2000).

## **2.5 Correlates of mental health problems**

The identification of conditions or factors associated with high incidence of mental disorders in children and adolescents as well as protective factors is an important step in the development of national prevention strategies (Bronfenbrenner, 1979).

### **2.5.1 Biological correlates**

A number of biological correlates of mental disorders among children and adolescents have been described including genetic factors, temperament, gender, age and intelligence as well as family traits (Whitlock & Schantz, 2008). Significant genetic risk has been documented for developmental disorders (Purcell, Perlis, Mowry, & Thapar, 2013). A study found out that the same alleles that predispose to schizophrenia also predispose to the use of cannabis, a drug which has been associated with a risk for psychotic symptoms (Power et al., 2014).

A child's temperament, defined as biological constituted consistent individual differences in reactivity to internal or external stimulations in patterns of motor and attention regulation, which is strongly linked to the child's mental health (Prior, 1992). A child with easy temperament enjoys favorable interactions and relations which minimize stress and help in promoting mental health whereas a child with difficult temperament has a high probability of growing up under maladaptive parenting which predisposes to mental disorders (Laukkanen et al., 2014).

Although the overall prevalence of mental disorders in boys and girls is similar, prevalence of specific disorders varies by gender. Most adolescents depression and anxiety disorders are common in girls, whereas ADHD, autism, conduct and oppositional defiant disorders, speech and language disorders as far as substance abuse is commoner in boys (Hartung & Widiger, 1998). Therefore, gender is an important biological correlate of mental health problems.

### **2.5.2 Psychological correlates**

Intelligence and personality exert significant influence on mental health in children and adolescents through their impact on academic achievement, self-efficacy and future

optimism (Smrtnik-Vitulić & Maja, 2011). According to Carlo, higher social intelligence and coping positively predict empathy, which in turn mitigates disruptive behaviour disorders and promotes pro-social behaviour (Guinta et al., 2010).

### **2.5.3 Social correlates**

Multiple social stressors that increase the possibility of a child developing mental disorders have been published. Child-parent attachment security during early childhood and adolescence is significantly associated with child mental health and their interpersonal relationships throughout life. (Devito & Hopkins, 2001; Madigan et al., 2013; Obsuth et al., 2014). Social capital has been shown to be associated with mental health and behavior problems in young people, attempts made to consolidate the evidence in the form of a review have been limited. A meta-analysis of 55 studies was screened. Majority of the studies were cross-sectional surveys and were conducted in North America (n=33); seven were conducted in the UK. Samples ranged in size from 29 to 98,340. The synthesized results demonstrated that family and community social capital are associated with mental health/behavioral problems in children and adolescents. Positive parent-child relations, extended family support, social support networks, religiosity, neighborhood and school quality appear to be particularly important (McPherson et al., 2014).

Family and peers are the second most important influential factors, after individual disposition in the development of children and adolescents (Bronfenbrenner, 1979). Mental health of children is also influenced by the parenting style they experience (Calafat et al., 2014).

## **2.6 Abuse among institutionalized children**

Abuse or neglect of a child could be directly by inflicting harm or indirectly by failing to act to prevent harm. Children may be abuse in homes, institutional or community settings; by those known to them or more rarely by a stranger (Hart & Rubia, 2012). They may be abused by an adult or adults, or another child or children. The experience of childhood abuse do not only generates disturbance at a time but produces long-term deleterious effect on the victims and is a stressor that can lead to the development of behavioral (Hart & Rubia, 2012; Romans et al., 2003).

## **2.6 Types of abuse**

There are four (4) main types of abuse; emotional abuse, physical abuse, sexual abuse and neglect.

Emotional abuse is the persistent emotional maltreatment of a child that causes persistent adverse effects on their emotional development. According to Glaser (2011), emotional abuse can be termed as psychological abuse which includes emotional neglect (Glaser, 2011). Two elements are involved in emotional abuse; passive and active abuse. Passive emotional abuse consists of depriving a child of the love or cared needed to lead a happy healthy life. Active emotional abuse is premeditated act; an individual scares, demeans or verbally abuses another. It could be rejecting, exploiting, corrupting or even terrorizing (Romans et al., 2003). Emotional abuse is often difficult to measure, as some are not visible and easily go unnoticed. However, some visible emotional signs are; sulking hair twisting being unable to play, fear of making mistakes, self-harm (Romans et al., 2003).

Child neglect can be a difficult to recognize in a child, yet can have lasting and damaging effects on children. Some of the signs can be constant hunger, stealing food from friends,

taking classmates writing materials, constantly dirty, looked malnourished often times and inappropriate clothing abuse (Euser et al 2013).

Sexual abuse involves forcing or enticing a child or youth into taking parts in sexual activities, weather the child knows what is going on or not. These activities may involve physical contact, assault by penetration or non-penetration act such as kissing touching and masturbation. They may also include non-physical contact examples, looking at a production of sexual images, watching of pornography movies or encouraging children to behave in sexually inappropriate ways or grooming child in perpetuation to abuse. Sexual abuse is not only perpetrated by adults males alone, women and children also commits sexual acts (Euser et al.,2013). There is high rates of sexual abuse in child sexual abuse for the general population and for children with disabilities because of their impaired communicative skills and dependence ( Westcott & Jones 1999; Stoltenborgh et al., 2011). Also increase rates of sexual abuse has been found among children without disabilities but are placed in out-of-home children (Rosenberg & Robinson 2004; Ligthfoot et al. 2011). A study carried out in a residential home, out of 6,281 children and adolescents, 329 on their own reported their experiences of child sexual abuse (Euser et al 2013).

In a Singaporean cross sectional study among institutionalized female youth aged 13-20 years, two thirds reported having experienced childhood abuse and a higher proportion reported having previously engaged in self-harming behaviours. Participants with multiple types of abuse reported being abused at a younger age, were more likely to be subjected to repeated physical abuse, to have overdosed on medication, and to have reported more health and sexual concerns and trauma symptomatology than those who reported either experiencing one or no previous types of abuse (Chi, Stuart & Vivienne, 2009).

In another study which was carried out among children in 82 out-of-home Dutch care facilities, which assessed both the staff working in the residential or foster care homes (n=264) and the adolescents themselves (n=329). It was found that 3.5 per 1,000 children had been victims of child sexual abuse based on staff reports and 58 per 1,000 adolescents reported having experienced child sexual abuse (Euser et al., 2013).

## **2.7 Relevance to CAMH**

Nigeria is the most populous sub-Saharan country with a high proportion of the population being less than 18 years of age. Although no research regarding the prevalence, correlates and patterns of mental problems in child and adolescents population of Akwa Ibom had been published to date, it was expected to be high due to findings from neighboring states. In addition, the impact of this study will honor and put in practical terms the United Nation's Goal Number Three (SDG 3) of the Sustainable Development Goals in the 2030 Agenda for Sustainable Development, UN (2015) which stresses the importance of health in its totality, 'Ensuring healthy lives and promote well-being for all at all ages', children included. Furthermore, the global vision, as stipulated in the Mental Health Action Plan (2013 – 2020) "A world in which mental health is valued, promoted, and protected, mental disorders are prevented and persons affected by these disorders are able to exercise the full range of human rights and to access high-quality, culturally appropriate health and social care in a timely way to promote recovery, all in order to attain the highest possible level of health and participate fully in society and at work free from stigmatization and discrimination"

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## CHAPTER THREE

### METHODOLOGY

#### 3.1 Study area

The study was carried out in selected institutional homes for children and adolescents in need of care in Akwa Ibom State, Nigeria. In 2015, there were 11,680 orphans and vulnerable children in Akwa Ibom State.

Akwa Ibom is one of Nigeria's 36 states, with a population of over five million people, and currently is the highest oil and gas producing state in the country. Akwa Ibom currently covers a total land area of 7,249 square kilometers. It's the 10<sup>th</sup> largest state in Nigeria. The state's capital is Uyo, with over 847,500 inhabitants. There is a total of 33 Local Government Areas. The state is located in the coastal Southern part of the country called the Niger Delta, located in the South-South geopolitical zone.

Nigeria accounts for 17.5 million Orphans and vulnerable children (OVC), of which approximately 22% of these OVC are in Akwa Ibom. The state had been seen as the second highest state in Nigeria with orphans and vulnerable children (OVC-care project, 2009). The main spoken languages are Ibibio, Annang, Eket and Oron. Information gathered from Ministry of Social Welfare reported that, Akwa Ibom State has five government institutional homes and 15 privates registered homes.

## **3.2 Study design**

This study is a cross-sectional descriptive study aimed at determining the prevalence, patterns and correlates of mental disorders among adolescents aged 10-19 years in Akwa Ibom State, Nigeria.

## **3.3 Study population`**

Our study was carried out on institutionalized adolescents aged 10-19 years.

### **3.3.1 Inclusion Criteria**

All adolescents aged between 10 to 19 years admitted into the selected institutions, and from whom we obtained a written consent or assent to participate in the study.

### **3.3.2 Exclusion criteria**

1. Adolescents who were unable to communicate in either English or Pidgin.
2. Adolescents with any disability which can impair communication.

## **3.4 Sample size calculation**

Sample size was calculated using this formula:

$N = (1.96)^2 p (1-p) / d^2$  where:

d =level of precision in the estimate which is typically taken as 5% (0.05).

p was estimated based on a previous study carried out in Nigeria which found that the prevalence of depression among children within the juvenile system in Ibadan was 17.5% (Bella et al., 2010).

Calculations give:

$$N = (1.96)^2 \times 0.175 \times (1 - 0.175) / 0.05^2 = 3.8416 \times 0.175 \times 0.825 / 0.0025$$

$$N = 222$$

Anticipating a non-response rate of 10%, the adjusted sample size:

$$N = \frac{222 \times 100}{100 - 10} = 244$$

Therefore, a total of 244 respondents were recruited for the study.

### **3.5 Sampling technique**

Convenience sampling method was used to select residential homes that were available and accessible as some centers refused me access to the homes, we decided to use total population of eligible adolescents.

#### **3.5.1 Selection of children and adolescents**

The caregivers were contacted in each accessible homes, one day was set aside for each homes in order to brief them about the study before the actual data collection. The caregivers brought out a register of adolescents and only adolescents who met inclusion criteria were selected. It was the caregivers who assisted in identifying adolescents who had difficulty in communication and any other disability that could impair communication.

### **3.6 Study instruments**

Three instruments were used for this study. These consist of, School Health Questionnaire, Strength and Difficulties Questionnaire and the Short Mood and Feelings Questionnaire.

### **3.6.1 Adapted Socio-demographic and School Health Questionnaires**

This instrument was used to collect information on gender, school, age, religion, family type, occupation and educational attainment of parents and guardians of the adolescents and the reason for admission into the home. This is a 44-item questionnaire designed to collect information regarding personal, family and school life of the respondents. It was developed by World Health and Center for Disease Control for Global School Based Health Surveillance system and has been used in a Nigerian study of child and adolescent mental health (Omigbodun, 2008). We have adapted the instrument by adding some items in order to fit with our population.

### **3.6.2 The Strength and Difficulties Questionnaire (SDQ)**

The SDQ is a brief behavioral questionnaire which asks about 25 behavioral and psychological attributes, to assess children at high risk of mental health problems (Goodman et al., 2010). The Strength and Difficulties Questionnaire assesses negative attributes in four subscales of mental symptoms (peer problems, conduct problems, emotional symptoms, and hyperactivity-inattention) and positive attributes in terms of pro-social behavior in previous 6 months (Muris, 2003). It also enquires whether the informant thinks the child has emotional or behavioral problems, and if they think so, it asks about the degree of stress of impairment in social competence. The reliability and validity of this instrument has been shown to be acceptable (Muris, 2003). This instrument is widely used in many developing countries (Cortina et al., 2013). The instrument performs at least as

well as CBCL, its brief, better coverage of inattention, peer relationship and pro-social behavior, and its focus on strength (Klasen et al., 2000).

### **3.6.3 Short Mood and Feelings Questionnaire (SMFQ)**

The SMFQ is a 13-item rated screening questionnaire for depression in children between the ages of 7 and 18, more specifically to assess the presence of affective and cognitive symptoms of depression that have been experienced in the past 2 weeks. Items include 'I felt miserable or unhappy' and 'I cried a lot'. Scores are calculated by summing the point values on each item response. This instrument was developed by (Angold et al., 1995). Total SMFQ scores range from 0-26 with a cut off score of 8 and above is abnormal. It has been shown to be valid in several developing countries (Rhew et al., 2010), it has also been used in a Nigerian study conducted by Bella et al (2016).. Statements are rated on a 3-point scale ranging from not true (0), sometimes true (1), true (2). Scores of 11 and above are suggestive for depression. The SMFQ has also been shown to be a useful measurement of clinical remission (Alison et al., 1995).

### **3.7 Study procedure**

Three research assistants were trained in the administrations of the instruments. Each item was read out to the child in English and options were chosen by the participant, which were then marked on the instrument by the author or research assistant.

Interviews were conducted on an individualized basis (face to face interviews). Privacy and confidentiality were guaranteed. There were no names or other identifying markers on the questionnaire, so as to ensure anonymity.

#### **3.7.1 Training of research assistants**

Three research assistants who had previous work experiences in field research, and were given one day training in the use of the interview instruments: Socio-demographic, School Health questionnaire, SDQ and the Short Mood and Feelings Questionnaire. The training was conducted by the Researcher, who had also been trained by her Supervisors.

### **3.7.2 Pretesting the instruments**

A one-day pre-test study was conducted on a small sample (n=15) of adolescents attending church Sunday school in a different study site, to field test the general feasibility of the procedures in terms of time, ease of understanding of the contents and level of proficiency of the assistants and to identify problems ahead of the main study. A neighboring state was selected for the pretesting. During this day, each research assistant completed interviews for 4 persons, this was important, to measure their speed and accuracy in administering the questionnaire.

On the average, it took 46 minutes to complete each interview and scoring of age group 10-13 years whereas it took 40 minutes for the age group 14-18 years. Based on that, it was agreed up on that it would take 45 to 50 minutes to complete each interview and scoring during the actual data collection process. Interviewers were comfortable using the instruments; level of proficiency was quite good, and only a few questions were modified to make them easier to understand.

### **3.8 Data collection process**

The interview was conducted after school hours for some homes while other homes preferred weekends. Time used for each home was dependent on the population of each home; on the average, 4- 5 hours was used in completing the interviews per home; the data

collection was completed in 7 weeks between February 1 and March 20, 2019. The questionnaires were distributed by the researcher and research assistants and they could provide clarifications where needed. For those who were unable to fill their questionnaires by themselves, they were assisted by the researcher and assistants.

### **3.9 Data Management**

All data gathered were entered into Statistical Package for Social Science (SPSS) version 21 for analysis. Participants' socio-demographic characteristics were presented in percentages and frequencies. The overall prevalence of mental health problems and the prevalence of mental health problems by age and gender were presented in frequencies and percentages. Prevalence from the SDQS was analyzed. Associations of the disorders with selected socio-demographic characteristics were examined using Chi-squared test at a significance value of 5%. For all significant bivariate relationships, binary logistic regression at significance level of 5% and 95% confidence interval was carried out.

### **3.10 Ethical considerations**

#### **3.10.1 Ethical Approval**

Ethical approval was obtained from Ministry of Health, Akwa Ibom State, Nigeria.

#### **3.10.2 Informed Consent**

Written consent was obtained from the carers and guardians of every adolescent, while voluntary verbal assent was obtained from every child or adolescent participant. This was

done after detailed information about the study had been provided with the help of a consent letter.

### **3.10.3 Voluntariness**

Every participant was clearly informed that participation was fully voluntary and decision not to participate had no negative consequences. Every participant was also informed of their right to withdraw at any time of the research interviews with no consequences.

### **3.10.4 Beneficence**

Adolescents participating in this study did not get any direct and immediate benefits from the study. The benefits to residential homes, community and thereby the children, that result from the information from this study may help to inform public health policy for better child and adolescent mental health service

### **3.10.5 Non- maleficence**

This study did not pose any threat to the participants.

### **3.10.6 Confidentiality**

To every participant anonymous index numbers were used. The collected data were kept confidential and were accessible only to the researcher and the analysis team.



## CHAPTER FOUR

### RESULTS

#### 4.1 Personal and family characteristics of participants

One hundred and five participants (65.6%) were of the age range 14-19 years, and 55 (34.4%) were aged between 10-14 years, with a mean age of 14.4 years (SD =2.24). More than half (55.0%) were females, and three quarters were of secondary level education. Majority 114 (71.3%) were from a Pentecostal denomination. One hundred and five participants (65.6%) were orphans and majority (60.6%) were originally from a monogamous family (See Table 4.1).

**Table 4.1 Personal and family socio-demographic characteristics of participants****(N=160)**

<b>Socio-demographic variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age group (years)</b>		
10-14	55	34.4
15-19	105	65.6
<b>Gender</b>		
Female	88	55.0
Male	72	45.0
<b>Educational level</b>		
<6 years of primary education	40	25.0
>= 6 years of education	120	75
<b>Type of religion</b>		
Orthodox Christian	46	28.8
Pentecostal	114	71.3
<b>Family type</b>		
Monogamous	97	60.6
Polygamous	63	39.4
<b>Parental status</b>		
Married	23	14.4
Separated/divorced	32	20.0
One/both dead	105	65.6
<b>Whether works to earn money before or after school</b>		
Yes	8	5.0
No	152	95.0

#### **4.2 Personal related institutional characteristics of participants**

More than half of the participants (52.5%) had stayed in the current institution for 5 years and above. Most of them (91.3%) liked their current home and one hundred and forty two (88.8%) believed that they could achieve their dreams in the current home (See Table 4.2).

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**Table 4. 2 Institutional characteristics of participants (N=160)**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Whether the child likes their current home</b>		
Yes	146	91.3
No	14	8.7
<b>Whether the child thinks they can achieve their dreams in the current home</b>		
Yes	142	88.8
No	18	11.2
<b>Length of stay in the current home</b>		
1-4years	76	47.5
5 years and above	84	52.5

### **4.3 Mental health problems among study participants**

#### **4.3.1 Prevalence of depressive symptoms as measured by Short Mood and Feelings (SMF) questionnaire**

Prevalence of depressive symptoms among study participants was found to be 69.4% (n=111).

#### **4.3.2 Association between socio-demographic characteristics and depressive symptoms**

Table 4.9 shows that socio-demographic factors were not related to having depressive symptoms.

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**Table 4.9 Association between socio demographic factors and depressive symptoms****(N=160)**

<b>Variables</b>	<b>Depressive symptoms</b>		$\chi^2$	<b>p-value</b>
	<b>Present</b>	<b>Absent</b>		
<b>Age (in years)</b>				
10-14	18(32.7%)	37(67.3%)	0.174	0.679
15-19	31(29.5)	74(70.5%)		
<b>Gender</b>				
Female	22 (25.0%)	66 (75.0%)	2.912	0.088
Male	27 (37.5%)	45 (62.5%)		
<b>Educational level</b>				
< 6 years of primary education	12(30.0%)	28(70.0%)	0.010	0.921
>=6 years of education	37(30.8%)	83(69.1%)		
<b>Length of stay in current home</b>				
1-4 years	26(34.2%)	50(65.8%)	0.876	0.349
5-8 years	23(27.4%)	61(72.6%)		
<b>Whether child likes their current home</b>				
No	3(21.4%)	11(78.6)	0.611	0.435
Yes	46(31.5%)	100(68.5%)		

### **4.3.3 Frequency distribution of mental health problems as measured by the Strength and Difficulties Questionnaire (SDQ)**

Out of 160 participants, 57 (35.6%) had mental health problems while 103 screened normal on SDQ.

About the same number of participants (34.5% for those aged 10-14 years and 36.2% of those aged 15-19 years) had mental health problems.

More females (40.3%) had mental health problems as compared to males 29.2%.

Thirty two percent of participants from monogamous families had mental health problems as compared to 50.0% of those from polygamous homes (See Table 4.3.1)

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**Table 4.3.3 Frequency distribution of mental health problems by socio-demographic characteristics of participants**

Socio-demographic variables	Mental health problems on SDQ Frequency (%)		
	Absent	Present	Total
<b>Age (in years)</b>			
10-14	36(65.5)	19(34.5)	55 (100.0)
15-19	67(63.8)	38(36.2)	105(100.0)
<b>Gender</b>			
Female	52(59.11)	36(40.9)	88(100.0)
Male	51(70.8)	21(29.2)	72(100.0)
<b>Educational level</b>			
>6 years of primary education	28(70.0)	12(30.0)	40(100.0)
>=6 years of education	75(62.5)	45(37.5)	120(100.0)
<b>Family type</b>			
Monogamous	66(68.0)	31(32.0)	97(100.0)
Polygamous	37(50.0)	37(50.0)	74(100.0)
<b>Number of persons lived with</b>			
3 and less	97(65.1)	52(34.9)	149(100.0)
4 and above	6(54.5)	5(45.5)	11(100.0)
<b>Length of stay in the current home</b>			
1-4 years	46(60.5)	30(39.5)	76(100.0)
5 and above	57(67.9)	27(32.1)	84(100.0)



#### **4.3.4 Association between socio-demographic characteristics and mental health problems on the total SDQ scores**

Table 4.3.4 show that none of the socio-demographic factors were significantly associated with having mental health problems as measured by total SDQ scores.

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**Table 4.3.4 Association between socio-demographic characteristics and mental health problems of participants as measured by the SDQ (N=160)**

Socio-demographic variables	Mental health problems on SDQ Frequency (%)		X <sup>2</sup>	p-value
	Absent	Present		
<b>Age (in years)</b>				
10-14	36(65.5)	19(34.5)	4.89	0.087
15-19	67(63.8)	38(36.2)		
<b>Gender</b>				
Female	52(59.11)	36(40.9)	2.38	0.123
Male	51(70.8)	21(29.2)		
<b>Educational level</b>				
>6 years of primary education	28(70.0)	12(30.0)	0.736	0.391
>=6 years of education	75(62.5)	45(37.5)		
<b>Family type</b>				
Monogamous	66(68.0)	31(32.0)	1.444	0.230
Polygamous	37(58.7)	37(58.0)		
<b>Number of persons lived with</b>				
3 and less	97(65.1)	52(34.9)	0.498	0.481
4 and above	6(54.5)	5(45.5)		
<b>Length of stay in the current home</b>				
1-4 years	46(60.5)	30(39.5)	0.935	0.334
5 and above	57(67.9)	27(32.1)		

#### **4.4 Distribution of mental health problems as measured by the individual subscales of the Strength and Difficulties Questionnaire**

Table 4.4 below depicts that conduct problems were the most common mental health problems in this study 72 (45.0%) closely followed by emotional problems 66 (41.3%) whereas hyperactivity problems were the least 23 (14.4%).

The overall prevalence of mental health problems in this study as measured by the SDQ was 35.6% (n=57).

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**Table 4.4 Frequency distribution of mental health problems among participants (N=160)**

<b>Mental health problems on SDQ subscales</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Emotional problems</b>		
Normal/Borderline	94	58.7
Abnormal	66	41.3
<b>Conduct problems</b>		
Normal/Borderline	88	55.0
Abnormal	72	45.0
<b>Hyperactivity</b>		
Normal/Borderline	137	85.6
Abnormal	23	14.4
<b>Peer problem</b>		
Normal/Borderline	128	80.0
Abnormal	32	20.0
<b>Total difficulty score</b>		
Normal/Borderline	103	64.8
Abnormal	57	35.2

Note: Due to the possibility of a participant having more than one type of problem, the total n (%) will be >100%

#### **4.5 Association between socio-demographic characteristics and conduct problems**

Among the socio-demographic factors, age was found to be significantly associated with conduct problems ( $p=0.002$ ) with a higher proportion of children aged 10-14 years (61.8%) compared to those aged 15-19 years (36.0% (See table 4.5).

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**Table 4.5 Association between socio-demographic characteristics and conduct problems (N = 160)**

Variables	Conduct problems		X <sup>2</sup>	p-value
	Absent	Present		
<b>Age</b>				
10-14	21 (38.2%)	34 (61.8%)	9.58	*0.002
15-19	67(63.8%)	38(36.0%)		
<b>Gender</b>				
Female	54 (61.4%)	34 (38.6%)	3.20	0.074
Male	34 (47.2%)	38 (52.8%)		
<b>Educational level</b>				
<6 years of primary education	21(52.5%)	19(47.5%)	0.14	0.714
>=6 years of education	67(55.8 %)	53(42.2%)		
<b>Family type</b>				
Monogamous	58(59.8%)	39 (40.2%)	2.29	0.130
Polygamous	30 (47.6%)	33 (52.4%)		
<b>Number of persons lived with</b>				
3 and less	85(57.0%)	64 (45.0%)	3.67	0.055
4 and above	3 (27.3%)	8 (72.7%)		
<b>Length of stay in current home</b>				
1-4 years	37(48.7)	39(51.3%)	2.32	0.127
5 years and above	51(60.7%)	33(39.3%)		

\* p value <0.05

#### **4.6 Association between socio-demographic characteristics and emotional problems**

Table 4.6 shows being female (51.1%) was significantly associated with having emotional problem when compared to males (29.2%),  $p=0.005$ .

With regards to religion type, being an Orthodox Christian 26 (56.5%) was also significantly associated with having emotional problems ( $p=0.013$ ) when compared being Pentecostal (35.1%).

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**Table 4. 6 Socio-demographic characteristics associated with Emotional problems (N=160)**

	Emotional problems		X <sup>2</sup>	p-value
	Absent	Present		
<b>Age</b>				
10-14	35 (63.3%)	20 (36.4%)	0.83	0.364
15-19	59 (56.2%)	46 (43.8%)		
<b>Gender</b>				
Female	43(48.9%)	45(51.1%)	7.89	*0.005
Male	51 (70.8%)	21 (29.2%)		
<b>Educational level</b>				
<6 years of primary education	25 (62.5%)	15 (37.5%)	2.02	0.396
>=6 years of education	69 (57.5%)	51(42.5%)		
<b>Family type</b>				
Monogamous	57 (58.8%)	40 (41.2%)	0.00	0.997
Polygamous	37 (58.7%)	26 (41.3%)		
<b>Place of worship</b>				
Orthodox Christian	20(43.5%)	26 (56.5%)	6.21	*0.013
Pentecostal	74(64.9%)	40 (35.1%)		
<b>Length of stay in current home</b>				
1-4years	44 (57.9%)	32 (42.1%)	0.04	0.834
5 years and above	50 (59.5%)	34(40.5%)		
<b>Number of persons lived with</b>				
3 and less	89(59.7%)	60 (90.9%)	0.86	0.353
4 and above	5 (45.5%)	6 (54.5%)		

\* p value <0.05



#### **4.7 Association between socio-demographic factors and hyperactivity problems**

Regarding age, 12(21.8%) of participants within age group of 10-14 years had hyperactivity problems compared to those aged 15-19 years (11,10.5%) although this was not statistically significant ( $p=0.052$ ) (See table 4.7).

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**Table 4.7 Association between participants socio-demographic characteristics with hyperactivity problems (N=160)**

	Hyperactivity Problems		X <sup>2</sup>	p-value
	Absent	Present		
<b>Age</b>				
10-14	43 (78.2%)	12 (21.8%)	3.772	0.052
15-19	94 (89.5%)	11(10.5%)		
<b>Gender</b>				
Female	79 (89.8%)	9 (10.2%)	2.733	0.098
Male	58 (80.6%)	14 (19.4%)		
<b>Educational level</b>				
Less than six years of primary education	32 (80.0%)	8 (20.0%)	4.415	0.293
greater than or equal to 6yrs of education	105 (87.5%)	15(12.5%)	1.371	0.242

#### **4.8 Association between socio demographic characteristics and peer problems**

Participants within age range 10-14 had 7(12.7%) with peer problems compared to participants within 15-19 years 21(23.8%). However, there was no association between age and peer problems ( $p=0.096$ ).

Those who had education level of six years or more 28(23.3%) had peer problems as compared to 4(10.2%) of those within less than six years of education.

More females 21(23.9%) showed symptoms on peer problems scale when compared to males 11(15.3%)  $p=0.057$ .

Participants who reported not to have liked their current home had more peer problems (35%), when compared to those who liked their home (18.5%) respectively, and there was no statistically significant association (See Table 4.8).

**Table 4.8 Association between socio demographic characteristics and peer problems**

(N=160)

	Peer problem		X <sup>2</sup>	p-value
	Absent	Present		
<b>Age</b>				
10-14	48(87.3%)	7(12.7%)	2.77	0.096
15-19	80(76.2%)	25(23.8%)		
<b>Gender</b>				
Female	67(76.1%)	21(23.9%)	1.82	0.177
Male	61(84.7%)	11(15.3%)		
<b>Educational level</b>				
<6 years of primary education	36 (90.0%)	4(10.0%)	3.33	0.068
>=6years of education	92(76.7%)	28(23.3%)		
<b>Do you like your current home</b>				
No	9(64.3%)	5(35.7%)	2.367	0.124
Yes	119(81.5%)	27(18.5%)		

#### **4.11 Living circumstances and history of abuse among institutionalized children**

Regarding their sleeping arrangement, 75.0 % of participants reported sleeping in a room with more than ten persons; also 29.1% reported sleeping on a mat or the floor. Two thirds (64.5%) of participants reported family members not having had visited them.

Sexual abuse was reported by 20.9% of participants, verbal abuse by 60.9%, and neglect by 52.7% and corporal punishment by 56.4% (See table 4.11).

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#### 4.11 Living circumstances and history of abuse among institutionalized children

(N=110)

Variables	Frequency	Percentage
<b>Age (in years)</b>		
10-14	41	37.3
15-19	69	62.7
<b>Number of persons sleeping in a room</b>		
Less than 10	83	75.5
Above 10	27	24.5
<b>Where child sleeps</b>		
Bed/mattress	78	70.9
Mat/floor	32	29.1
<b>Number of times family visits</b>		
Often	9	8.2
Seldom	30	27.3
Not all	71	64.5
<b>Sexual abuse</b>		
Yes	23	20.9
No	87	79.1
<b>Verbal abuse</b>		
Yes	67	60.9
No	43	39.9
<b>History of neglect</b>		
Yes	58	52.7
No	52	45.2
<b>Corporal punishment</b>		
Yes	62	56.4
No	48	43.6

#### **4.12 Pro-social characteristics of participants on SDQ**

On the pro-social subscale of the SDQ, 91.9% of the participants were within normal range.

There was no statistically significant association between socio-demographic characteristics and pro-social subscale variables.

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## CHAPTER 5

### DISCUSSION

#### 5.1 Introduction

This study is a cross-sectional study conducted to determine prevalence, correlates and patterns of mental disorders in children and adolescents in orphanages. To the best of the authors knowledge, this is the first study to be conducted on the mental health of children adolescents living in residential care in Akwa Ibom community.

This section will be described under the following headings: socio-demographic characteristics of participants, prevalence of mental health problems, socio-demographic correlates of mental health problems and prevalence of abuse among participants.

#### 5.2 Socio-demographic Characteristics of participants

The mean age of participants in this study was 14.4 years with age ranging from 10-19 years with more than half being females (55%). This finding is consistent with study conducted in India which also showed the proportion of females were more than males (Thabet & Thabet, 2007). Our finding is however not in line with study carried out by Bella et al in the South west region of Nigeria. They found out that a majority of the children in an institutionalized setting (60%) were males. The reason for the difference could be that, Bella et al conducted their study in juvenile justice residential home. Males are more likely to show externalizing behaviors and symptoms such as delinquency, aggression and conduct disorder which will led to them being placed in this setting (Omigbodun, 2018).

More than half of the participants reported to be orphans (65%), either by loss of one parents or both parents. The reason for this finding could be because the extended family system in



under pressure is rapidly failing to fulfill its primary role of socialization (Mawusi, 2013). In urban areas for example, the nuclear family is prominently cropping up. There is no cohesion: it's just individual family and his work. Currently in Nigeria, family brings up children in their estates and in view of this when problems arise in such communities, nobody cares and families are destroyed as a result of this. Such children may therefore find refuge in residential homes (Mawusi, 2013). Enrol et al (2010) also recorded a similar finding in Turkey. They found out that about 70% of adolescence in residential homes were orphans (Erol et al., 2010).

In this study, all the participants had formal education. This is contrary to a study conducted by Sibogani (2017) among Juvenile offenders in Zambia, which showed that 7% of the participants had no formal education. The plausible reason for this finding could be that administrators of the residential homes explained that the homes offers free education to every child in the institution.

#### **5.4 Institutionalized characteristics of participants**

Length of stay in this study was not statistically significant, although participants who stayed less than 4 years had a high prevalence of developing mental health problems. This could be due to the fact that children, who had stayed longer in the homes, probably have developed a coping mechanism and become adapted to the environment whereas those who stayed lesser years are still detached struggling to cope with their new environment and the residential settings (Mutiso et al., 2016). This is in line with study conducted which Bangladesh showed that longer duration of stay in residential homes was associated with more disorders than shorter duration of stay (Datta et al., 2018). Also, Data argues that any

amount of orphanage experience is harmful , the damage is greatest during the first year of stay and increases dramatically with length of stay (Datta et al., 2018).

### **5.5 Prevalence of mental health problems**

The prevalence of mental health problems amongst children and adolescence in this study was 35.6% of SDQ. This findings is close to 40.5% recorded by Rahman et al in Bangladesh in a study conducted among orphans in residential care in Bangladesh (Rahman et al., 2012). Our finding is however lower than 97% recorded by Bella et al in South west region of Nigeria among adolescence living in a juvenile correctional facility (Bella et al., 2010). The higher prevalence recorded by Bella et al could be due to the difference in instruments used in the study. Bella et al used the KSADs which is a diagnostic interview designed to assess past and current episodes of psychopathology in children and adolescents according to DSM-III-R and DSM-IV criteria (Bella et al., 2010). This could have led to increase in precision and therefore accurate identification of psychopathology in the participants. Also the KSADS screens for a wider range of psychopathology than the SDQ which was used in the current study. This could have increased the number of participants diagnosed with mental health problems in their study.

The most prevalent mental health problem after assessment using the SDQ was conduct disorder with a prevalence of 45%, which was followed by emotional problem (41%). This finding is consistent with study carried out by Gearing et al in amongst Jordanian adolescents in residential homes where Forty-nine percent (49%) of the adolescence were diagnosed with conduct problem and the second most prevalent mental health problem was anxiety disorder (23%). Bronsard et al also recorded similar findings in a systematic review which reviewed eight (8) studies in high income countries (Bronsard et al., 2016). They also

recorded that the most common mental disorders in adolescence in the child welfare systems were disruptive disorders including conduct disorders and oppositional defiant disorders. This finding could be due to the fact that several adverse experiences (such as maltreatment and multiple placements) during the time of placement may contribute to the worsening of externalizing symptoms that are already present or promote emergence of such disorders (Bronsard et al., 2016)

### **5.6 Prevalence of Depressive symptoms using short mood and feelings screening tool**

This study, found higher prevalence of (69%) depressive symptom among institutionalized children. Ibrahim and El-bilsha (2015) however found lower prevalence (45%) rates of depression among children in residential home, Jordan (Ibrahim, El-bilsha, El-Gilany, & Khater, 2015). The one difference in the current study, is the finding of higher depressive symptoms, which maybe because the present study used a screening tool while the aforementioned study used a diagnostic tool.

A study conducted among school going children in Sri-Lanka, reported a prevalence of depressive symptoms to be 57.7%, (Perera et al., 2006) this is indicative that children and adolescents whether at home or in residential care are highly vulnerable to depressive symptoms. However, the prevalence found in this study differs from finding of study conducted in Egypt, which is most similar to the population of this study. Ibrahim et al (2015) reported a prevalence of 20% depression among adolescents in Dakahila orphanage (Ibrahim et al., 2015). This finding may be attributed to differences in study design, instruments used. This difference may accounts for considerable chronological difference between the conduct of the study and current study.

Gender-wise prevalence findings of the current study are similar to the findings of Daryanavard et al (2011) among adolescents in residential home, showed that depression is higher among girls when compared to boys, (39.855% vs. 23.11% respectively) in (Daryanavard et al., 2011). This may be attributed to the fact that girls are preparing to become women during the adolescence period and they face a number of burdens in everyday life. It could also be as a result of more feelings of frustration among the girls due to prevalent culture preference of boys and discrimination among girls (Omigodun et al). Religion could be a perpetuating factor for girls developing more depressive symptoms compared to boys. There are more restrictions, social limitations, especially for girls in the African context.

In a study conducted in Philippines students, prevalence of depression among girls was 2 times than the boys. Epidemiologic catchments area strongly suggested a gender difference in the prevalence of depression (Datta et al., 2018).

### **5.7 Socio-demographic correlates of mental health problems.**

In this current study, age was significantly associated with conduct problems. Participants in the younger children (10-14 years) were 3 times more likely to be diagnosed of conduct problem compared with older participants aged (15-19 years). Similarly, study conducted in Eastern province of Kenya in four residential homes on psychopathology of orphan and vulnerable children, reported that externalizing behavior such as conduct problems had increased likelihood among participants aged 10-13 when compared with aged 14-18 years (Mutiso et al., 2016).

Some authors have proffered that, child detachment from parents at an early age could predispose a child to psychological problems, such as conduct problems (Koumi et al., 2012). Also poor institutional home conditions such as limited resources, inadequate food, neglect from caregivers which may predispose to developing externalizing behaviors (Datta et al., 2018).

As concerns gender, prevalence of conduct problems was higher among boys when compared with girls in this study, though it was not statistically significant. Jozefiak et al (2015) had similar findings in a study conducted in Norway. Males had higher odds of having conduct diagnosis compared to females (Jozefiak et al., 2015). This is also in keeping with a study carried out by Rahman et al (2012) in Bangladesh which found out that conduct problems were more in girls than boys (Rahman et al., 2012). This is probably because males are prone to developing externalizing behaviors such as conduct problem, compared to female peers. On the other hand female adolescents suffer from internalizing problems which is a trend in general population (Omigbodun, 2018).

Gender was seen to be significantly associated with emotional problems. Being male was protective for developing an emotional problem. Similarly, Kaur et al (2018) in a study carried out in India found that majority of the female children felt emotionally weak compared with male children( Kaur et al., 2018). Another study conducted in Hyderabad also reported high prevalence of emotional problems in girls when compared to boys (Sushma, Padmaja, & Agarwal, 2016). It could be explained by the fact that females internalize their problems more, and are biologically prone to be emotional compared to the males (Omigbodun, 2018). According to Omigbodun, hormonal changes and imbalances in the cycle of females could also make them prone to emotional problems as this can lead to

mood swings. Contrary to this, study conducted in selected orphanages in Dahka city reported that boys had more likelihood of having emotional problems compared to girls (Rahman et al., 2012).

The age of participants was associated with diagnosis of hyperactivity problem. Participants' aged 10-14 years were 3 times more likely to develop hyperactivity compared to those aged 15-19 years. It has been postulated by some authors younger children are at increased risk of developing hyperactivity symptoms because they are at a transition stage, and their frontal lobes are less developed.

### **5.8 Prevalence of Abuse among adolescents living in Institutional Care**

The most prevalent form of abuse in this study was verbal abuse (60.9%), followed by corporal punishment (56.4%) while sexual abuse was the least prevalent with a prevalence of 20%. This is contrary to study carried out by Hobbs et al (1999) in England which showed that the most prevalent form of abuse was sexual abuse with verbal abuse being the least prevalent (Hobbs et al., 1999).

### **5.9 Conclusion**

There is high prevalence of mental health problem, especially conduct disorder and depression, which could be responsible for the abnormal behaviors of adolescents in these settings. These observed behavioral anomalies might have led the community to label most of these children as witches. Children and adolescents in residential care are therefore a neglected high risk population.

However, there is need for further research and subsequently, more intervention study to reduce the high prevalence of mental health problems for adolescents in this situation. This

study had some strengths and limitations. This is the first ever study to determine the prevalence, correlates and patterns of mental health problems among institutionalized adolescents in Akwa Ibom community.

#### **5.10 Limitations:**

The following are some limitations from this study:

1. The sample size for this study was small, which may not allow for generalization to the overall population of children in institutionalized settings in Akwa Ibom.
2. Furthermore, the full spectrum of child and adolescent mental health conditions were not screened for.

#### **5.11 Recommendations**

1. Child and adolescent mental health needs of children and adolescents living in institutional homes needs to be provided for. The high prevalence of mental health problems found in this population calls for early identification and treatment.
2. Public awareness campaigns across the state should be carried out to promote awareness and better understanding of mental health conditions. This would reduce stigma and hopefully discourage the sending of children out to live on the streets on account of behavioral problems.
3. School mental health campaigns and provision of effective support and social services for those children and adolescents already living in homes, should be advocated for.
4. Awareness about the Child Rights Act (CRA) and the consequences of violating them should be promoted, as a means of deterring perpetrators.

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## APPENDIX 1

### SCHOOL HEALTH QUESTIONNAIRE IN ENGLISH

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

#### SECTION I

##### Personal Information

1. Name of School
2. Class
3. Where do you live? (Address of Present Abode):
4. How old are you?
5. Are you a boy or a girl? (a) boy (b) girl
6. Do you practice any religion? No Yes
7. Please write down the exact place you attend for worship \_\_\_\_\_ (a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (e) Other
8. How much does the teaching of your religion guide your behavior?  
(a) Very much (b) much (c) Just a little (d) Not at all
9. How much does the teaching of your religion guide your family life?  
(a) Very much (b) much (c) Just a little (d) Not at all

##### Family Information

10. Family Type: (a) Monogamous (b) Polygamous
11. Number of Mother's Children:
12. Number of Father's Children:
13. What is your position among your father's children?
14. What is your position among your mother's children?
15. Marital Status of Parents: (a) Married (b) Separated/Divorced (c) Father is dead (d) Mother is dead (e) Mother & Father are dead
16. How many husbands has your mother had?

17. Who do you live with presently? (a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother (f) Grandfather (g) Other [please specify]

18. Who brought you up from your childhood? (a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother (f) Grandfather (g) other [please specify] \_\_\_\_\_

19. How many different people have you left your parents to live with from your childhood? \_\_\_\_\_

20a. If more than one person, list the people, time spent and whether experience was good or bad?

Person lived with from which age to which age and whether the experience was good or bad:

\_\_\_\_\_  
\_\_\_\_\_

20b. Do you do any kind of work to earn money before or after school? Yes No

21. If yes, please describe what you do \_\_\_\_\_

22. Level of Father's Education (a) No Formal Education (b) Primary School (c) Secondary School (e) Post-Secondary (Non-University) (f) University Degree and above (e) I do not know

23. Occupation of Father: [Write the exact occupation \_\_\_\_\_] I do not know

24. Level of Mother's Education (a) No Formal Education (b) Primary School (c) Secondary School (e) Post-Secondary (Non-University) (f) University Degree and above (e) I do not know

24. Occupation of Mother: [Write in the exact occupation \_\_\_\_\_] I do not know

25. Do you like your family? Yes No

26a. If Yes, Why? \_\_\_\_\_

26b. If No, Why? \_\_\_\_\_

**School-Related Questions**

- 27. Do you like your school? Yes/ No
- 28. How many children are there in your class? \_\_\_\_
- 29. Do you do well academically? Yes No
- 30a. If Yes,explain\_\_\_\_\_
- 31b. If No, explain\_\_\_\_\_
- 32. Are you having difficulties with your teachers? Yes No
- 33. If yes, what sort of difficulties? \_\_\_\_\_
- 34. Do you have guidance counselors in your school? Yes No
- 35. Have you ever gone to see them? Yes No
- 36. If yes, what did you go to see them for? \_\_\_\_\_
- 37. If you have a problem at school would you go to the guidance counselor for help? A. Yes or No
- 38a. If yes, why would you go?
- 38b. If no, why not?

**Institutionalized Questions**

- 39. Do you know where your parents currently live? Yes or no  
If yes where? -----
- 40. Do you like your current home? Yes or no
- 41a. If yes, why? \_\_\_\_\_
- 42b. If no, why? \_\_\_\_\_
- 43. What are your biggest worries currently?
- 44. What three most important things would you like to change about your life?  
\_\_\_\_\_  
1.  
2.  
3.
- 45. Do you think you can still achieve your dreams, while in your current home? Yes or no
- 45a. If yes, explain\_\_\_\_\_
- 45b. If no, explain \_\_\_\_\_

## Appendix II:

### Strengths and Difficulties Questionnaire

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

S/N	ITEMS	VERY TRUE	SOMETIMES TRUE	NOT TRUE
1.	I try to be nice to other people. I care about their feelings			
2.	I am restless, I cannot stay still for long			
3.	I get a lot of headaches, stomach-aches or sickness			
4.	I usually share with others (food, games, pens etc.)			
5.	I get very angry and often lose my temper			
6.	Am usually on my own. I generally play alone or keep to myself			
7.	I usually do as I am told			
8.	I worry a lot			
9.	I am helpful if someone is hurt, upset or feeling ill			
10.	I am unable to seat at one place for long			
11.	I have one good friend or more			
12.	I fight a lot. I can make other people do what I want			
13.	I am often unhappy, down-hearted or tearful			
14.	Other people my age generally like me			
15.	I am easily distracted, I find it difficult to concentrate.			
16.	I am nervous in new situations. I easily lose confidence.			
17.	I am kind to younger children			
18.	I am often accused of lying or cheating			
19.	Other children or young people pick on me or bully me.			
20.	I often volunteer to help others (parents, teachers, children)			
21.	I think before I do things.			
22.	I take things that are not mine from home, school or elsewhere.			
23.	I get on better with adults than with people of my own age.			
24.	I have many fears, I am easily scared			
25.	I finish the work I'm doing. My attention is good			

### Appendix III

#### SHORT MOOD AND FEELINGS QUESTIONNAIRE

This form is about how you might have been feeling or acting recently.

For each question, please check how much you have felt or acted this way *in the past two weeks*.

If a sentence was true about you most of the time, check TRUE.

If it was only sometimes true, check SOMETIMES.

If a sentence was not true about you, check NOT TRUE.

S/N	ITEMS	VERY TRUE	SOMETIMES TRUE	NOT TRUE
1.	I felt miserable or unhappy			
2.	I didn't enjoy anything at all			
3.	I felt so tired I just sat around and did nothing			
4.	I was very restless			
5.	I felt I was no good any more			
6.	I cried a lot			
7.	I found it hard to think properly or concentrate			
8.	I hated myself			
9.	I was a bad person			
10.	S/he felt lonely			
11.	S/he thought nobody really loved him/her			
12.	S/he thought s/he could never be as good as other kids'			
13.	S/he felt s/he did everything wrong			

## **Appendix IV**

### **INFORMED CONSENT FORM**

**TOPIC: Prevalence, Correlates and Pattern of common Mental Health Problems among Adolescents in Institutional care in Akwa Ibom State, Nigeria.**

This study is being conducted by ANTIGHA Immaculata. A Master of Science student at the Centre for Child and Adolescent Mental Health, University of Ibadan, Nigeria. This study aims to determine the prevalence of some specific mental health problems, and to describe the patterns of these mental health problems. This study will also try to identify factors associated with mental health problems among adolescents living in institutional care.

This study will take place in institutional care. It will involve interview of the young person or care giver as may be necessitated. The interview will be answering to some questions asked and the duration of the interview will be 45mins to 1hr. However, any participant that needs further intervention will be referred to visit the nearest Child and Adolescent Mental health Clinic for necessary interventions.

Participation in this study is very voluntary and you are free to participate or refuse to participate. You can withdraw from the study at any time without any consequences. Your participation is however encouraged as it will help to improve knowledge that will help provide better care for young people with mental health challenges. Your identity is kept anonymous as codes of numbers instead of names are used. The information given in this study will be handled very confidentially by the researcher and the Centre for Child and Adolescent Mental Health and important findings will be published for future plans and policy making.

You are encouraged to give honest answers to the questions asked.

Kindly sign below if you agree to participate in the study.



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