PREVALENCE OF EMOTIONAL DISORDERS AMONG INSTITUITIONALIZED

CARE CHILDREN IN NAIROBI SURBURB SETTINGS(KENYA)

BY

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DECLARATION

The undersigned, declare that this dissertation entitled "PREVALENCE OF EMOTIONAL DISORDERS AMONG INSTITUITIONALIZED CARE CHILDREN IN SURBUBS" **is the result of my own work and that it has not been submitted either wholly or in part to this or any other university for the award of any degree.**

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DEDICATION

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LIST OF ABBREVIATION

APHRC	African Population and Health Research Centre
CCIs	Charitable Children's Institutions
DSM 5	Diagnostic Statistical Manual for Mental Disorders version five revise
GAD	General Anxiety Disorder
ICD-10	International Classification of Diseases Version10
ILA	International institute for legislative affairs
KNH	Kenyatta National Hospital
KNH/UON ERC	KenyattaNational Hospital/University of Nairobi Ethics Review Committee
K-NAMHS	Kenya National Adolescent Mental Health Survey
M.I.N.I. KID	MiniInternational Neuropsychiatric Interview for Children and Adolescents English Version 7.0.2
MDD	Major Depression Disorder
NCPWD	National Council for Persons with Disabilities
NACOSTI	National Commission For Science and Technology and Innovation
OCD	Obsessive Compulsive Disorder
SAD	Separation Anxiety Disorder
SPSS	Statistical Package for Social Sciences
UN	United Nations

UNCR	United Nation Convention on Rights of Children
SDQ	Strength and Difficulty Questionnaire
WHO	World Health Organization

OPERATIONAL DEFINITIONS

Anxiety disorders: presents with excessive fear and anxious behavioural disturbances, as response to external stimuli

A Borstal institution: is a penal facility for youthful offenders who have been convicted of crime punishable by imprisonment and who have been confirmed by the court to be between 15-17 years of age at the time of offence.

Emotion : psychological state that arises spontaneously rather than through conscious effort and is sometimes accompanied by physiological changes

Emotion: an affective state of consciousness in which joy, sorrow, fear, hate, or the like, is experienced, as distinguished from cognitive and volitional state of consciousness.

Emotional disorder: manifests in form of anxiety disorders, depression, stress disorders or post-traumatic stress disorder.

ICD-10: denotes five anxiety syndromes specific to this period of life under 16 yrs as separation anxiety; phobic anxiety; social anxiety, sibling rivalry disorder; and generalized anxiety disorder.

Juvenile Offender: It is a person below 18 years who has committed a crime (Dictionary Com's 21st century Lexicon copy right of 2000 – 2011) is in conflict with law in Kenya and is committed to Borstal Institution for rehabilitation

Post-Traumatic Stress Disorder (PTSD):is classified under anxiety disorders in both ICD-10 post exposer to a traumatic event, such as an actual or near-death experience or serious injury, and their response include intense fear, helplessness, or horror. The event must be persistently remembered and 'revive concomitant distress, particularly (but not exclusively) when current encounters are reflections of the original event.

Statutory institutions: are government institutions offering safe custody to childrenwho are in need of Protection and Care (destitute and orphans) as well asthose who are in conflict with the law with minor crimes as opposed to juvenile criminals sentenced for 3 years at Borstal institutions.

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ABSTRACT

Introduction

Studies show that whenever children exhibit emotional disorders, they are labelled as spoilt and are disciplined for showing their weaknesses, lowering their self-esteem. Qualitatively institutionalized children are needy, sensitive, and isolative with low confidence and self-esteem.In other observations they often lacked love, poorly equipped with first rank physiological needs(food, water,shelter) , had large poor backgrounds and limited resources, stigmatized and frequently relocated due to inadequate resources and therefore are less studied.

Objective

A study to determine the prevalence and variation of various emotional disorders among institutionalized care children in the suburb

Materials and Methods .

Sampling method: a purposive sampling (non probability sampling, convenience sampling. Design :.Descriptive cross-sectional study .

Study site: The three statutory institutions.namely Juvenile Remand Home, Kabete Rehabilitation (approved) SchoolandGetathuru Reception Centre.

Study population .All institutionalized children in 3 institutions.

Study instruments.Socio-Demographic Questionnaire – Researcher Designed(M.I.N.I. KID) Mini International Neuropsychiatric Interview for Children and Adolescents English Version 7.0.2 For DSM-5 with 24 variables.

Results : A study to determine the prevalence and variation of various emotional disorders among 122 youths was undertaken in three statutory institutions in Nairobi, Kenya. Statutory institutions are government institutions which are offering safe custody to children who are in need of Protection and Care (destitute and orphans) as well as those who are in conflict with the law with minor crimes as opposed to juvenile criminals sentenced for 3 years at Borstal institutions

Total population was 700 from the statutory institutions. With 248 as sample size according to Krejcie&Morgans (1970). Those who met the inclusion criteria were 300.

All were allowed to be participants and were briefed on the nature of the study, informed consent was then sought and signed by those who were above 18yrs, and those below 18yrs signed the assent form.

Repatriation took place as cases of majority were either released or committed to other approved schools outside Nairobi

The study registered a 100% response rate, all from 3 statutory institutions as follows: 50 (41.8%) from Juvenile Remand Home (JRH); 28 (23.0%) from Getathuru Reception Centre (GRC); 43 (35.2%) from Kabete rehabilitation School (KRS).The mean prevalence of all the emotional disorders assessed was 22.6%, comprising 21.31% males and 24.30% females (n=122).

They were aged 12.83± 0.26 years (14.00+.48 for Getathuru; 12.45±.40 for JRM; and 12.56±.44 for Kabete); with 4.08±0.22 siblings (3.53±.52 for JRH; 4.37+.38 for Getathuru; and 4.18± .30 for Kabete RS); had completed 5.50±0.22 years in school (4.75±.33 for JRH; 6.75± .43 for Getathuru; 5.58± .36 for Kabete RS); and have been admitted since 2015.45± 0.44 (2016.13± .84 for IJR; 2015.58± .81 for Getathuru; and 2014.92± .67 for Kabete RS).

The overall prevalence of emotional disorders is 23.00%, with variations as follows: juvenile Remand home (12.9%), Kabete Rehabilitation (28.9%) andGetathuru Centre (30.5%) (n=122).

There is a relationship between specific phobia episode disorders (18.5% male and 51% female); generalized anxiety disorder (0% male and 2% female) and suicidality episode (24% male and 8% female).

All the difference in prevalence for these three is partly attributed to gender influences (include p-values).

There is a relationship between these five specific disorders and institutional affiliation: specific phobia episodes (X2=.039; n=117); post-trauma stress disorder (X2=.045; n=116); agoraphobia (X2=.008; n=119); suicidality (X2=.004; n=117); and major depression disorders (x2=.013; n=94), with a strong relation (Pearson's' R) exhibited by suicidality (R-0.32), Agoraphobia (R=0.321), and Post-traumatic stress disorders (R=0.25).

A total of 295/1274 respondents experienced mental episodes, distributed by age as follows: 24.1% for ≤ 10 years; 23.3% for the 11-14 year olds; 21.1% for the 15-17 year olds; and 10% for adults aged ≥18 years.

Age seemed a key factor in mental illness; as the two variables were inversely proportional.

There was no correlation between age and emotional disorders studied; this poor to no relationship is proved further by the low Pearson's R-values recorded (-0.021-0.178), all less than 0.2. Respondents exhibited emotional disorders as follows: 17.8% lower primary; 22.8% in upper primary; and 37.3% for secondary. The risk and prevalence seem directly proportional to the level of education (class reached)…as one matures, one is more likely to get a mental condition. Only specific phobia episode (X2=0.004; less than 0.05 bears a correlation with the respondents' level of education.

To qualify this further, an R-value of -0.362 is registered as the Pearson's R-value.

The registered prevalence of emotional disorders is 22.3%, varies with the state of parenthood of the respondents. Total orphans have registered a prevalence of 29.9%; those with both parents have a prevalence of 42.7%; 8.54% for those with only a father and 18.8% for those with only a mother. Mental disorders studied varied with schooling level as follows: 18.7% for lower primary; 22.6% in upper primary; and 28.7% for secondary.

The risk and prevalence is therefore directly proportional with class reached. In terms of level of education and mental disorder, it is established that the majority of the mental conditions are not related at all with the level of education. Only three mental conditions among those studied have a relationship with education level: suicidality episode (p=0.046, n=191); specific phobia episode (p=0.018; n=189), and obsessive compulsive disorder (p=0.009, n=143) exhibit a relationship with education level.

There is no statistical difference between specific emotional disorders and institution. Efforts should be put in to support both surviving parents is central to containing the emotional disorders. This is because families with both parents have lower prevalence of emotional disorders. Institutional management is a key factor in containing disorder; well managed institutions help stabilize children, thereby exposing them less to emotional disorders. With no significant relationship between institutional affiliation and prevalence of mental disorders, it's imperative that private centres also seem to do fairly well. The government should strengthen its institutions to make them superior to the private ones.

Conclusion

This study confirms the presence of emotional disorders with high levels of depression (51.6%) and PTSD (34%) among children in institutional care.

The study also highlights, that instutionalization, no matter the duration, contributes to the presence of the emotional disorders. Furthermore, the institutionalized children, who were total orphans, morevulnerable to these emotional disorders than the others.

These findings concur with documented negative effects of parental deprivation and institutionalization on children's wellbeing by John Bowlby and others.

Parental status as a protective factor underscored by the finding of statistically significant lower prevalence of emotional disorders, in those with two parents.

CHAPTER 1

1.0 Background of the Study

Institutionalization was practiced as a last resort to help destitute cope with life situations they found themselves in. This worked temporarily till repatriation was organized. Permanent institutionalization contradicts traditional models of care and exclude children from their families , culture and spirituality which are optimum to their social development and contribution to the society. Institutionalized youth develop emotional disorders with the real ailment in the ratio of 5 to1 and out of these only 20% out of 50 % have attention seeking attitudes (Gupta et al, 2008).

According to projection survey by 2020 childhood neuropsychiatric disorder will double to 50% resulting into either morbidity, mortality or disability among children (BMus, 2012). The institutionalization is commonly practiced among ethnic, cultural, and economic backgrounds, based on practical experiences environmentally. (Gupta et al, 2008).

There is no age discrimination as far as emotional disorders are concerned but common risk factors have been implicated like social, environmental and genetics. (BMus, 2012.)

1.1 Introduction

Cumulative expertise of regional and international groups working with children creating various program principles and models have mushroomed . In consensus, the first priority is to mobilise birth family and community's participation to support vulnerable children. This is because Institutional care give preference to destitutes, though costly and ineffective at ensuring a nurturing environment. (William et al, 2000).

Charitable Children's Institutions (CCIs) are part of the dominant model of care identified in Kenya because they are prioritized as the first steps towards adoption or foster care.United Nation Convention on Rights of Children (UNCRC) model of prioritizing family groups as the fundamental model of child development is idealistic at best yet in the third world countries where majority of the orphans and vulnerable children are concentrated, institutionalization is the only option as adoption and foster care are culturally unacceptable. (https//bettercarenetwork.org.2016)).

This led to Grandparent's sudden dilemma of parenting orphans , but were unable to provide not only effective socialization but even to address physiological needs (food, clothing, shelter and health care) (William et al, 2018).

It has been observed that the alternative to institutionalizations, experience burden from socioeconomic problems created at family levels by HIV/AIDS and the general situations in Africa where extended families are shrinking in size, families have to work harder, marriages are unstable, female supported households are increasing and male attachment to families is decreasing due to several socioeconomic variables like poverty, famine, road carnages making this ideal nearly impossible. (Hunter, 2000). Poverty sits at 46% and is the leading factor contributing to the institutionalization of children in Kenya. (Cembe et al (2016).

Lucrative adoption market in Kenya make institutional care a profitable endeavour and saviour mentality by donors helps to disguise actual circumstances. (Stephen et al (2016).

Institutions catering for vulnerable and orphaned children establishments are mainly concerned about the well-being, protection of children from harmful environmental pollution and the perversion from traumatic life experiences (Williams et al, 2018).

Some institutionalized children come from highly risky settings predisposing them to neglect or abuse thus committing them to institutions shortly after birth by permissive parenting. Majority of the children are social orphans rather than true orphans. (Zizmeck et al, 2008)

Most caregivers are non-skilled, receive minimal training, and therefore concentrate on health issues more than social interaction. They spend their hours on daily routine like feeding, etc. forgetting to interact and form a bond with the children. The common figures being invariably female, so children rarely see male. (Petrowski et al, 2017).

Whenever children exhibit behavioural problems, they are labelled as spoilt and are disciplined for showing their weaknesses, lowering their self-esteem (Mullica et al (2012)

Culturally adults cite children's ignorance as far from emotional problems leading to lack o

attention, hence psychopathology is not suspected (Mpango et al 2017). In another study, institutionalized children often displayed developmental delays followed by truancy, however it is to be verified whether deficits pre-existed before institutionalization or not(Ijzendoorn et al., 2014). This perception generalizes extended institutionalized care as always harmful and should be avoided if any other option is available which is often not applicable in 3rd world countries where large numbers of displacements are experienced and where adoption and foster care are culturally prohibited (Ijzendoorn et al, 2014).

Caregivers perform their duties, with neither affection, sensitivity, responsiveness to specialized individual children's emotional needs nor encouragement to experimentative developmental stages leading to poor bonding.Roles are therefore performed mechanically in a business-like manner (IJzendoorn et al., 2011). Studies confirm detriments of long-term institutionalization in early childhood as a higher rate of personality disorders recurrent, interpersonal relationship problems, and severe parenting difficulties later in life. (Belfer et al, 2013).

Some Institutionalized children presenting with physical symptoms may have underlying psychological distress or psychiatric disorder, for example recurrent abdominal pain in school-age children signifying emotional disorder. (McCall et al, 2015). professional services are necessary to help maintain vulnerable children in biological families . Adoption is likely the best alternative to biological families, but donor countries prefer foster parents to adoptive parents, even though both save the state the costs of institutionalization. (Tibu et al, 2014).

1.2 Problem statement

The increasing number of vulnerable children and orphans ushered into institutionalised care is evident but due to forced array of adjustments that they face like changes of acquaintances and environments, emotional disorders emerge. This symptomatology is expected to resonate among children considering they are at a crucial stage of identifying with their peers verses isolating themselves; hence are more concerned with peer relations and approval.

Adolescents become increasingly conscious of their vulnerabilities leading to feelings of defeat, hopelessness, withdrawal, and refusal to engage in any social activities and at times present with suicidal ideation.

The adolescents are also engaging in rampant use of substances, which complicates the situation. As such, knowing the magnitude of emotional disorders in institutionalized children will aid in heralding informative steps towards curtailing the condition.

1.3 StudyJustification

The ever increasing number of institutionalized care children and their inability to express themselves leads to their vulnerability.

Long term institutionalization from early childhood leads to psychological impairment and economically unproductive persons and so the findings could help to arrest the progress and brainstorm on the way forward.

Post institutionalization damage has been reported and so there is need to confirm the existence of emotional disorders. Studies done on institutionalized children have been performed on specific lines e.g. Orphans with HIV from HIV parents, Juvenile criminals of Borstal schools and we are yet to perform on normal institutionalized children.

Under the Children Act 2001, Cap 586, Laws of Kenya, orphans are to be taken care of by somebody or institution for care and protection and later integrated back to society.
The findings are vital in measuring the burden of emotional disorders among children, as well as, informing policy makers who may focus on implementing programs that seek to improve the well-being of this population.

The need for scholarly information regarding mental health amongst the institutionalized Kenyan population as this is one of the first studies that explore emotional disorders among the supposed to be normal population any deviation will be abnormal.

1.4 Research questions

1. What is the relationship between the socio-demographic characteristics and emotional disorders among institutionalized care children?
2. What are the ages, gender and education levels of the institutionalized children?
3. What are the trends of emotional disorders against the different socio demographic profiles?
4. What are the differences in emotional disorders in the 3 statutory institutions?

1.5 Broad objective

To determine the prevalence of emotional disorders among institutionalized care children.

1.6. Specific objectives

To scrutinize the socio/demographic profiles of the institutionalized care children in the suburb institutions in terms of age, gender, education.

To evaluate the relationship between the socio/demographic profile and emotional disorders.

To assess the nature of emotional disorders among institutionalized children in the institutions

1.7 Hypothesis

Nu.ll hypothesis: There are no emotional disorders among institutionalized care children.

Alternative hypothesis: There are emotional disorders among institutionalized care children.

CHAPTER 2

2.0 LITERATURE REVIEW

2.1 Introduction

The World Health Organization (WHO) defines health as "a state of complete mental , social physical well-being, and not merely the absence of illness or handicap". Mental health is defined as "a state of well-being whereby person recognizes and appreciates their abilities, are able to work productively and fruitfully make a contribution to their communities whilst coping with the normal stresses of life" (WHO:2003, cited in MOH (2015)). Positive mental health includes social functioning ,cognition, emotion and coherence (WHO: 2009, cited in MOH (2015)).

2.2 Global Perspective

In the early 19th century Institutionalization was acceptable in North America and whole of Europe and many types existed. They were named according to the purposes they served: as workhouses, destitute shelter in exchange for work, as orphanages for orphans, as unmarried mother's homes, homes for the aged and for mentally challenged as asylums for the insane (Julian, 2009).

The latter half of 19th century after Industrial Revolution institutions were places of people with intellectual disability also known as asylums for epileptics , the feeble-minded, imbecile, lunatics and idiots. Institutionalized care reached its peak in Ontario around 1974 operating 16 institutions of 8,000 each. This overcrowding led to specific phobias, general mistrust and associated complexes.

By the 1980, attitudes towards institutionalization were starting to change. The "community living movement" was spreading across North America. The initiatives were taken by affected family members who had visions for their sons and daughters living in institutions. At the same time, the physically challenged also began to advocate for their own rights to live as full citizens avoiding separation anxiety disorders and phobia disorders. (Julian, 2009).

Advocates of the communities spoke with one voice against institutionalization claiming citizens had the right to participate in community life, regardless of the degree of their disorders and that with the right community services and supports, people could live and participate in their own communities just like everyone else.

Institutionalization was doomed to fail psychologically due to maternal deprivation, despite good physical and social care because an orphanage was examined through problematic psychosocial function of children observed Anna Freud earliest child psychoanalyst. (Petro ski et al, 2017).

Above was reiterated by Psychologically trained psychiatrist John Bowlby who confirmed that any amount of orphanage experience was dangerous and greatest during infantry and increased dramatically with length of stay in an institution. The Government passed the Support and Services to encourage the Social Inclusion of destitute and Persons with Developmental Disabilities (Act, 2008).This became a direct resolution to discourage institutionalization in the western world as emotional disorders became apparent.

WHO estimated around 153 million vulnerable children and orphans worldwide – (USAIDS, UNICEF, 2004) (Williams et al., 2018b).The study conducted post-Gulf War among institutionalized youth between the ages of 8years to 12 years manifested with behavioural symptoms of anxiety and phobias, from 13years and above displayed more signs of cognitive concerns and interest in occurrences. It concluded that trauma was the emotional and psychological impact of acts that burden on the self, that is, the effects of violence.

Studies done in the Iraq/Turkish border in Kurdistan where displaced 4 million people half of which were instutionalised children developed emotional disorders with specifications as follows: PTSD 61%, anxiety 54%, depression 53%. (Ahmed et al, 1998).

Institutionalization of children were as a result of poverty, neglect and dysfunctional families and that parental deprivation resulted into higher percentage of separation anxiety however some showed resilience and did well in adulthood (Rutter et al 2008). In another study done in Syria with a population of 4 million people, amongst them 2 million institutionalized children post internal conflicts revealed, Post-traumatic stress disorder 61%, Anxiety 53% and Depression 54%.

2.3 RegionalPerspective

The Sub-Saharan Africa is a home to 95% of the world's 13 million destitute children as a result of HIV/AIDS. Their unmet psychosocial needs lead to recurrent psychological trauma, brought in by parental morbidity and subsequent mortality, poverty, stigma, exploitation, malnutrition and often sexual abuse. (Matshalagaet et al, 2002). Study done in Zimbabwe revealed that in the country's 45 registered institutions approximately 4,000 out of 800,000 orphans were accommodated. But no emotional disorder studied amongst them so far. (Hunter, 2000)

Study done in Dhaka among institutionalized 342 orphans revealed 40.35% with psychiatric disorders as follows comorbidity 3.2%. emotional disorders 10.2% (specific phobia were more frequent then PTSD and separation anxiety disorder) and behavioural disorders 26.9%. (Rahman et al, 2012). In another study, it was concluded that increased exposure to inadequate environment had long-term effects . Not all children influence outcomes. Second, a poor environment had accumulative effects up to a point at which some genes were triggered. (McCall &Groark, 2015)

A study conducted in Sierra Leone in institutionalized 315 children ranging from age groups 8 to 18 years after 9 to 10 months post the war in which children saw family members tortured, revealed Intrusion in 95%, Avoidance in 71%, and Arousal in 76%. It concluded that many children with elevated symptoms after natural disasters were temporary, with 30% symptoms of PTSD (Williams et al., 2018a).

Extended internal conflict and war in Sudan since 1983 where over 2.5 million civilians had been displaced, resulted in thousands becoming institutionalized and studies show marked emotional disorders among the affected people and seriously affected were the children. (Roberts et al 2009).

WHO estimated that approximately 13% of Ghanaians suffered from a mental disorder: of those, 3% a severe mental disorder and 10% moderate to mild mental disorder (WHO, 2007, cited in Sheena et al (2016).It concluded that Mental disorders were a leading cause of years lived with defficiency in Ghana behind iron-deficient anaemia (IHME, 2013a, cited in Sheena et al (2016).

Among mental health issues mood disorders , substance abuse, and schizophrenia are the top 3 diagnoses, although a large percentage of people had no specific diagnosis (Sheena et al (2016). Young people rarely accessed mental health services because they were poor at detecting mental illness, ignorant of the condition and were stigma conscious(Otieno, (2018)). Their predicaments were further worsened by mental health policies that focused more on the senior groups at the expense of the youth (Otieno, (2018)).

African Population and Health Research Centre (APHRC) conducted the Kenya National Adolescent Mental Health Survey (K-NAMHS), a three-year study (APHRC, 2015). This determined the prevalence of mental health conditions among adolescents aged between 10-17 years.Iconcluded that "Mental health was the foundation of human capability that mar`ked each life worthwhile and meaningful and there could be no sustainable development without attention to mental health," (Otieno, (2018)).

Youth affected behaved as if having physical disorder affecting voluntary motor or sensory functioning, etiologically, the disorder was believed to arise largely unconsciously and to represent an escape from an unbearable personal conflict.It was assumed that children developed conversion disorders as an unconscious means of escaping a situation with which they couldnot cope. (Nicole et al, 2017).

To others it was a disabling physical fatigue of over 6 months' duration, unexplained by primary physical or psychiatric causes and other unexplained somatic symptoms and a strong belief by the children or family that the aetiology was physical. (Kinyanda et al 2012).It could be considered as one of the somatoform disorders, as they share similarities with chronic fatigue syndrome (Petrowski et al, 2017).

Depressive mood changes were common in this age group , but depressive disorder was only found in one-third of cases.

Children differed from adults in cognition, language, physiology, and emotions: 'Such maturational differences impacted their abilities to experience.The manner in which symptoms were expressed differed over the course of development. Adults were often ignorant about the nature and dept of the children's subjective distress and only sympathized but direct questioning exposed the full spectrum of symptomatology. (Garber et al, 2008).

Study on 2000 institutionalized children in Uganda revealed the following emotional disorders. Suicide behaviour disorder 24.4%, depression 22.8%, substance abuse 21%, generalized anxiety disorders 8.8%, adjustment disorder 7%, deliberate self-harm 5.6% and panic disorder 1.8%. (Magoba et al, 2010).

2.3.1 Comorbidity in Emotional Disorders

High rates of non-depressive concurrent disorders had consistently been reported in both clinical and community surveys of child and adolescent with major depression between 50 and 80% with depression had a non-depressive comorbid disorder.

Between 30 and 50% of non-depressive disorders were anxiety syndromes. In addition to non-depressive comorbidities, 30% of the patients report pre-existing and concurrent dysthymia.The implications of such high rates of comorbid disorders were unclear. (Magoba et al, 2010).

Adjustments to changes and manifestations differed at different age groups. The onset of trauma and violence in communities, most often was as a result of poverty, poor socioeconomic conditions, unemployment, poor or no social security.Cognitive and emotional state of a child influenced child response to traumatic events occurring at different stages of development exhibiting different ways of understanding situations depending on socialization whilst dealing with complex emotions (Ronen 2002). (Matshalaga, 2002).

2.4 National perspective

There are around 1200 institutions in Kenya with approximately 30,000 - 200,000 children. (National Children's Welfare, 2016). Among them majority are supported within non-formal kinship arrangements like Community Based orphansupport women groups, MaendeleoyaWanawake. (Ucembe, 2016).

Nairobi County had a total of 135 institutions among which 68 were registered and 67 unregistered with a total of 7318 among whom .3721 are girls and3597 are boys. (Ucembe, 2016).

In Kenya mental health care system faced many obstacles including access to quality health care in general worserned by "corruption ,poverty , and rapid population increase" (Marangu et al., 2014, p. 2, cited in Sheena et al (2016)). Mental health as a key determinant of overall health and socio-economic development influenced a variety of outcomes for individuals and communities such as better physical health; healthier lifestyles; more social cohesion and engagement; higher education attainment; greater productivity; improved recovery from illness; fewer limitations in daily living;;, employment and earnings; better relationships with adults and with children; and improved quality of life (WHO: 2009), cited in MOH (2015)).

Some of the implicated events predisposing to institutionalization were family conflicts, poverty, divorce, HIV/AIDS problem, road carnage, rendering living and schooling impossible. These problems lead to, loss of lives, increased number of destitute, early marriages

A study done in Kenya slums among 408 institutionalized orphans revealed below results (Mutiso et al, (2008), Depression 44%, GAD 44.7%, OCD 55%, Panic-disorders 44% and Social phobia 50%.CNN's Locked Up and Forgotten topic creating awareness prompted audit by the Kenya National Commission on Human Rights (KNCHR). The commission's report: "Silenced Minds; The Systematic Neglect of the Mental Health System in Kenya," released in November 2011 painted a grim picture of the sub-sector and International institute for legislative affairs(ILA (2011) Progress was hampered by lack of sufficient data aggregated by age and gender. The new evidence on the burden would lead to improved ability to design and implement effective and age-appropriate mental health services in Kenya that would improve the quality of life of youth. (African Population and Health Research Centre (APHRC), 2015).

This study catalyses the launch of the Kenya Mental Health Policy 2015-2030 which seeks to destigmatize, decriminalize and deinstitutionalize mental health concerns. Kenyans hope the findings of the study would be easier to adapt and operationalize into programs for child and adolescent mental health (African Population and Health Research Centre(APHRC), 2015).

2.5 Conceptual frame work

Moderators/modifiers are factors that influence the development of emotional disorders in the institutionalized care e.g. the younger the age separation disorder becomes a reality.

In terms of age and education the higher a child's cognitive ability, the greater the capacity to deal with complex problem situations and the emotional state attached to the event.

Confounders are the factors that independently can also lead to emotional disorders e.g. genetic defects, like turners syndrome in females leading to failure of secondary signs of reproduction to develop leading to depression, anxiety disorders, Kleinifers syndrome causing same in male. In both conditions sex chromosomes are affected and so secondary sex characteristics don't manifest.

Alcoholics due to disinhibition perform regrettable actions but are depressed when sober. HIV as a viral sexually transmitted disease unless cross transmitted from mother to child is incurable although HAART works to moderate the severity. This contributes to anxiety and/or depression.

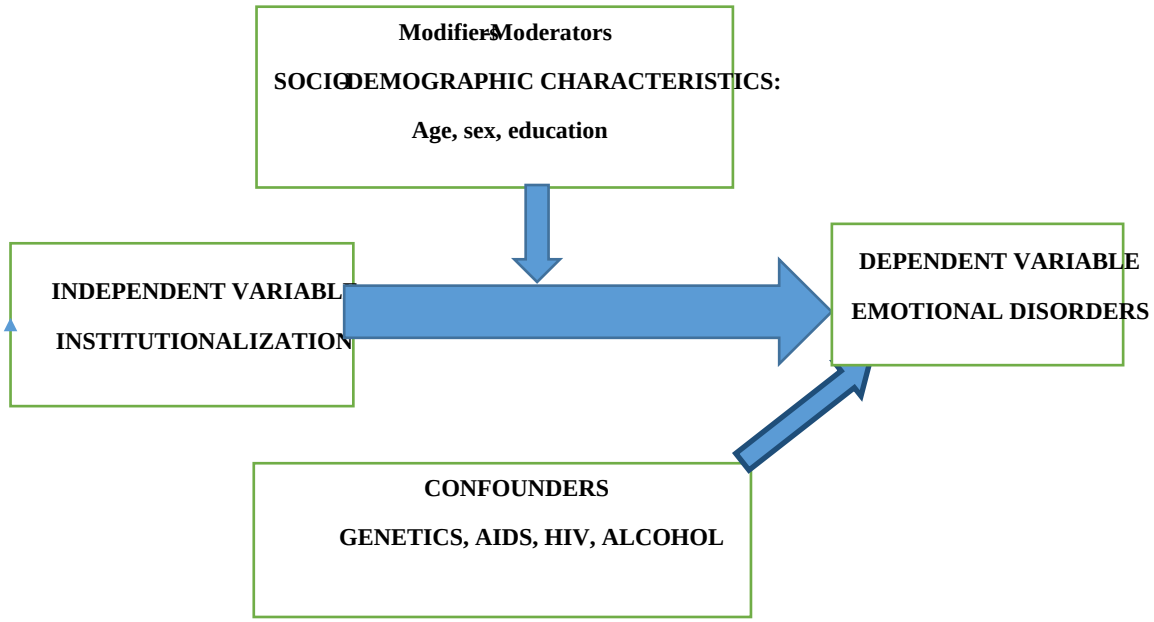


Figure 1*:* Conceptual Framework(researcher generated 2019)

CHAPTER 3

3.0 METHODOLOGY

3.1 Study Design

A cross-sectional descriptive study with a purposive sampling.

3.2 Study Areas

Three(3) statutory institutions

3.2.1Nairobi Children's Remand Home(NCRH)

NCRH was established in the year l957. Currently its under the Department of Children's Services at the Ministry of East African Community, Labour and Social Services,constituted under section 50 of the Children Act No.8 of 2001 Laws of Kenya.

NCR H is amongst fourteen(14) Children,s Remand Homes spread country wide. It acts as a place of safe custody for children who are in need of Protection and Care as well as those who are in conflict with the law between the age groups from 7 to 17 years.

It caters for cases referred from the Nairobi High Court, Nairobi Children's Court, Nairobi City Court, Law CourtsofKibera, Makadara,Machakos, Kajiado and Kangundo These three (3) approaches guide the administration: Restorative - Includes all CounselingAnd Therapy Programs, Health Care Provision Rehabilitative - includes all awareness and life-skills training programs.

Re/integrative - Execution of court orders mainly through tracing and reintegration of children withfamily, community and society at large.

Location The institution is located 11 kilometres from Nairobi City Centre, in Westlands Division along Kapenguria road off Lower Kabete Road.

Capacity

Originally 80 children both boys and girls. Since 2008 a new building was constructed increased to 300.

3.2.2 Getathuru National Reception Centre.(GNRC)

GNRC is an Assessment and Classification Center,a government institution under the Ministry of Labour and Social Protection and in the department of Children's Services.

GNRC was established in 1959 government as a reception and discharge Centre for all rehabilitation schools within the republic. It directly receives children, specifically committed from law courts all over the country. The children stay for a period of three months (3 months) where they are later assessed and transferred to various rehabilitation schools

Cases admitted here are of two categories: -

Child offenders (Age 10-17)

Care and Protection (Age 10-17)

Location

GNRC is located within Nairobi County, Westland Division, and Lower Kabete area. It is about 11kms from Nairobi town Centre.

Capacity

The institution has a capacity for eighty (80) children but we normally by bypass this figure.

3.2.3 Kabete Children,s Rehabilitation School (KCRC)

KCRC formerly known as Kabete Approved School is a boys government institution established in the year 1910 to 1912 by an act of parliament to carter for youths who ignored to register themselves or carry the identitycard(" kipande") by the colonial government. The youth offenders were trained on black smith,carpentry,tractor driving or plant operation, tailoring,masonary sign writing and painting.

KCRC Currently is a children's statutory institution under the Department of Children's Services at the Ministry of East African Community, Labour and Social Services, constituted under section 47 of the Children Act No.8 of 2001 Laws of Kenya.

Changes

Incorporation of academic education from standard 4 in 1980 and from form 1 in 1981 to impact academic knowledge alongside trainings.

In 2004, the secondary school was faced out owing to the implementation of the National standards which categorized the institution as one offering primary and vocational training courses .various trade tests are also given and registrations done according to children's capacities

Location.

KCRC is located 12 kilometers from Nairobi City Centre, in Westlands Division along Kapenguria road off Lower Kabete Road.

Cases

KCRC carters for children who are in conflict with the law or as enshrined in the children's act 2001 chapter586 of the laws of Kenya.

Today it also caters for street children, orphans and destitute in need of Protection and Care as well as those who are in conflict with the law.

Activitis

The institution's activities and programs are structured around the Mission 'to provide psychosocial Rehabilitation and Character formation besides academics and skills training to the children services for the welfare of the child, through direct delivery and facilitation, supervision, coordination and collaboration with stakeholders.'The figure changes daily as we keep on admitting new children.

3.3 Study population

Accessible Population is 700 children from the3 statutory institutions between the age groups 8 yrs to 23 yrs.

3.4 Study size

The study used Morgan's table to determine the sample size, which was 300. N./B .Table attatched in page 53.

3.5 Sampling Procedure

A non-probability, purposive sampling was used. The 300 children were consented(150 Remand,75Kabete,75 Getathuru) through the administrators and managers who were conversant with their abilities. The younger children with communication problems, did not meet the inclusion criteria were left out after being thanked.

3.6 Research Instrument

Researcher designed Socio-demographicquestionnaire

Mini Neuropsychiatry International(M.I.N.I.KID 7.0.2 version) covering areas on Depression, Social anxiety Disorders, general anxiety disorders, Separation anxiety disorders, Specific anxiety disorders,and Panic disorders, Agora Phobia, Post-Traumatic Stress Disorders, and Suicide Behaviour Disorders were assessed.

3.7 Inclusion criteria

Respondents aged between 8 to 23 years were eligible and were included after consent from administrators and assent from above 18 yrs.Respondents who gave assent to the study.

3.8 Exclusion criteria

Respondents below8years and above 23 years. Those who were sick during the period of study. Those who did not assent to the study were left out.

Respondents above 18 years who did not give their consent.

3.9 Recruitment strategy

Request was extended to Administrator and Manager at verbal and written explanation of what the study entailed. The researcher requested for written approval which the administrators did willingly. Respondents were consented.

Upon approval and clearance from the manager, administrator, the researcher was allocated 30 minutes to explain to staff of the institutions who were care takers of children aged between 8 years to 23 years which were purposively selected so as to increase chances of getting the desired sample size and decrease chances of coming up with results. After explanation, the researcher responded to questions which were generally financial. When all were satisfied with the consent explanation a date was set for data collection.

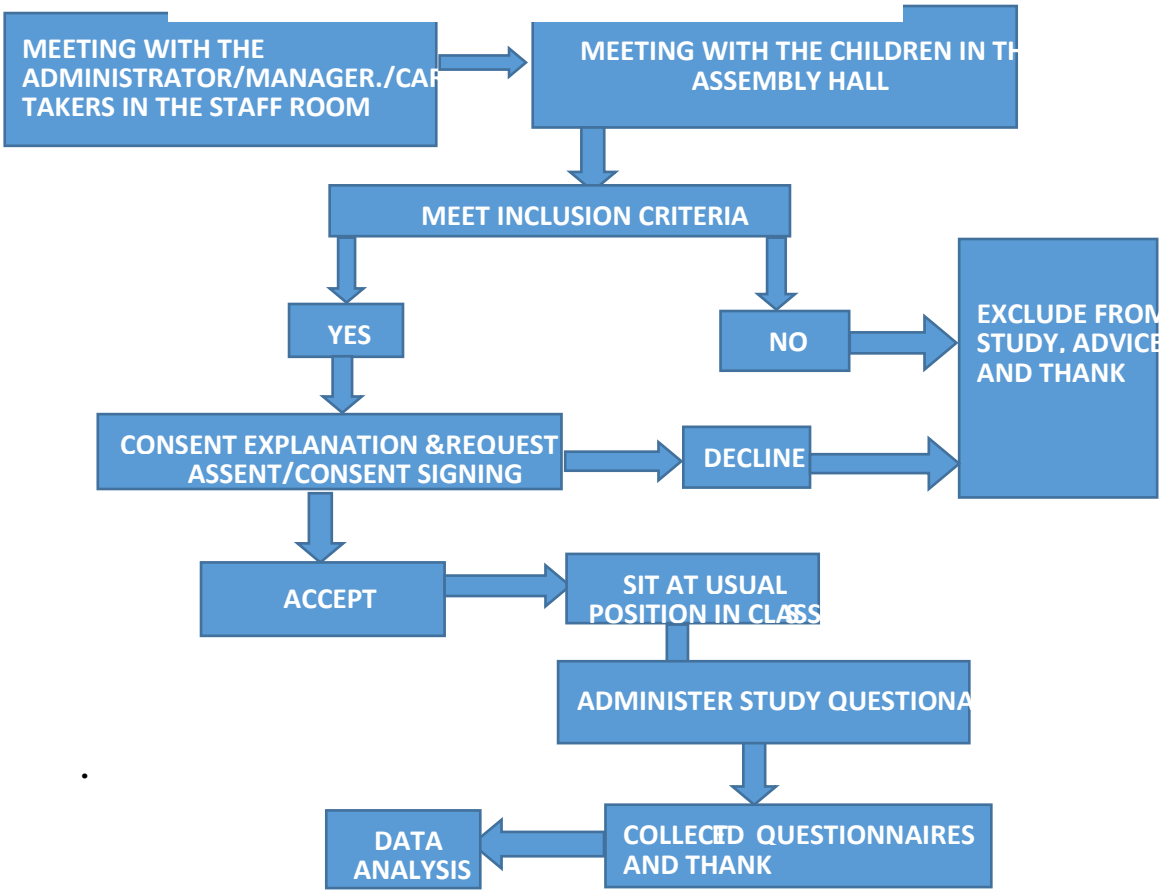
All children who met the inclusion criteria were recruited and assent form signed having explained to them in a common room about the research. They were then informed about the date of data collection after assent and consent form in their respective classrooms on that day. the children were staying with before transfer, occupation of parents/guardian if any, type of transfer method whether retrieved from home, by security, or Children's officer and gender were addressed . The M.I.N.I. K.I.D version 7.02 was used with total of 24 variables although only 8 variables were chosen.

3.10 Data collection procedure

On the appointment date the recruited children were issued with the instruments by the researcher whilst in their usual sitting positions in their respective classes. The questionnaires distributed had serial numbers same as the consent and assent forms to protect children's identity. The study was conducted on a weekend to avoid interference with school lessons. Clear instructions were given to each class. Managers, administrators, teachers and caretakers were absent to avoid fear of victimization.

After filling out the questionnaires the researcher checked for completeness and the exercise was terminated and children thanked. The whole process took around 60 minutes. No assistants was used.

FIGURE 2 FLOW CHART



3.11 Ethical Considerations

Topic was identified and proposal submitted for approvalto the Ethics and Research Committee of Kenyatta National Hospital and University of Nairobi management before carrying out the study. Another approval was sought from National Commission For Science and Technology and Innovation (NACOSTI) and Nairobi County and Sub county Commissioners for Education and Director of Children Services.

Confidentiality was observed in the whole process of data collection and data management and no identifiers was put on the study instruments as serial numbers were used instead of names.

The information collected was stored in a lock and key cabinet and only accessible to the researcher and data analyst. A written authority was sort from the KNH/UON/ ERC BOARD while a written informed consent was sort from the administrator of children aged below 18 years giving them permission to participate in the study. This was the current case with the 3 institutions, the children were ranging from 8 to 23 years. The children were either orphans or court cases and so were not accessible to parents. This was maintained by the institutions to encourage free communications and in case of previous problems they could be advised to relate in drawing form. .

The assent was sought from all under 18 years, and written informed consent from managers and above 18 years. Confidentiality was also guaranteed by ensuring that information given would not in any way be traced back to the respondents. The consent form also affirmed that no physical harm would be encountered unless intentionally inflicted

3.12 study Benefits

This study is vital in measuring the burden of emotional disorders among children, as well as, informing policy makers who may focus on implementing programs that seek to improve the care of the orphans and destitutes.

The findings will also inform the need for scholarly information regarding mental health amongst the institutionalized Kenyan population as this is one of the first study that explores emotional disorders among the institutionalized normal children in Kenya

3.13 Risks of study

Some institutions start as a rescue facility without the financial or physical capacity to care for the children in their charge it could open up more things about the lives of the children. These children are often unable to explore family-care or other alternative care options and so financial gain was be expected which the researcher could notgive.This study could be looked at as a highway to de-institutionalization and so lots of precaution needs to be taken.

3.14 Privacy and confidentiality

Researcher did not disclose identifiable data to anyone so as to avoid social or psychological trauma. Serial numbers instead of names were used in the consent documents and study questionnaire. A link log that could help trace the patients with severe psychopathology was accessible to the researcher only. Data collected was stored under lock and key in a cabinet and the information was only accessible to the researcher and statistician. Once the data was entered into the computer, a password protected folder was created.

3.15 Data management

Data from the study questionnaire was checked daily for completeness. The researcher had data cleaned and computerized ready for analyses by the statistician. The hard data was stored in a lockable cabinet while the soft data was extracted.it was coded for easier detection of errors using SPSS version 22.0 and later on stored into a password-protected Microsoft Access Database. The results were presented in narration, tables, graphs and charts.This data only accessible to the researcher and supervisors to protect the integrity and privacy of the participants. The researcher submitted the final research in both hardand soft copy to the University Of Nairobi Department Of Psychiatry for marking and later on assessment.

3.16 Data analysis and presentation

Data was collected and analysed as per the research questions using statistical software SPSS version 22.0 where Chi-square test and Pearson's R-value for relationship between emotional disorders were determined. The information was then tabulated in graphs, tables' charts and diagrams for easy discussion and presentation.

CHAPTER 4

4.0 RESULTS OF THE STUDY

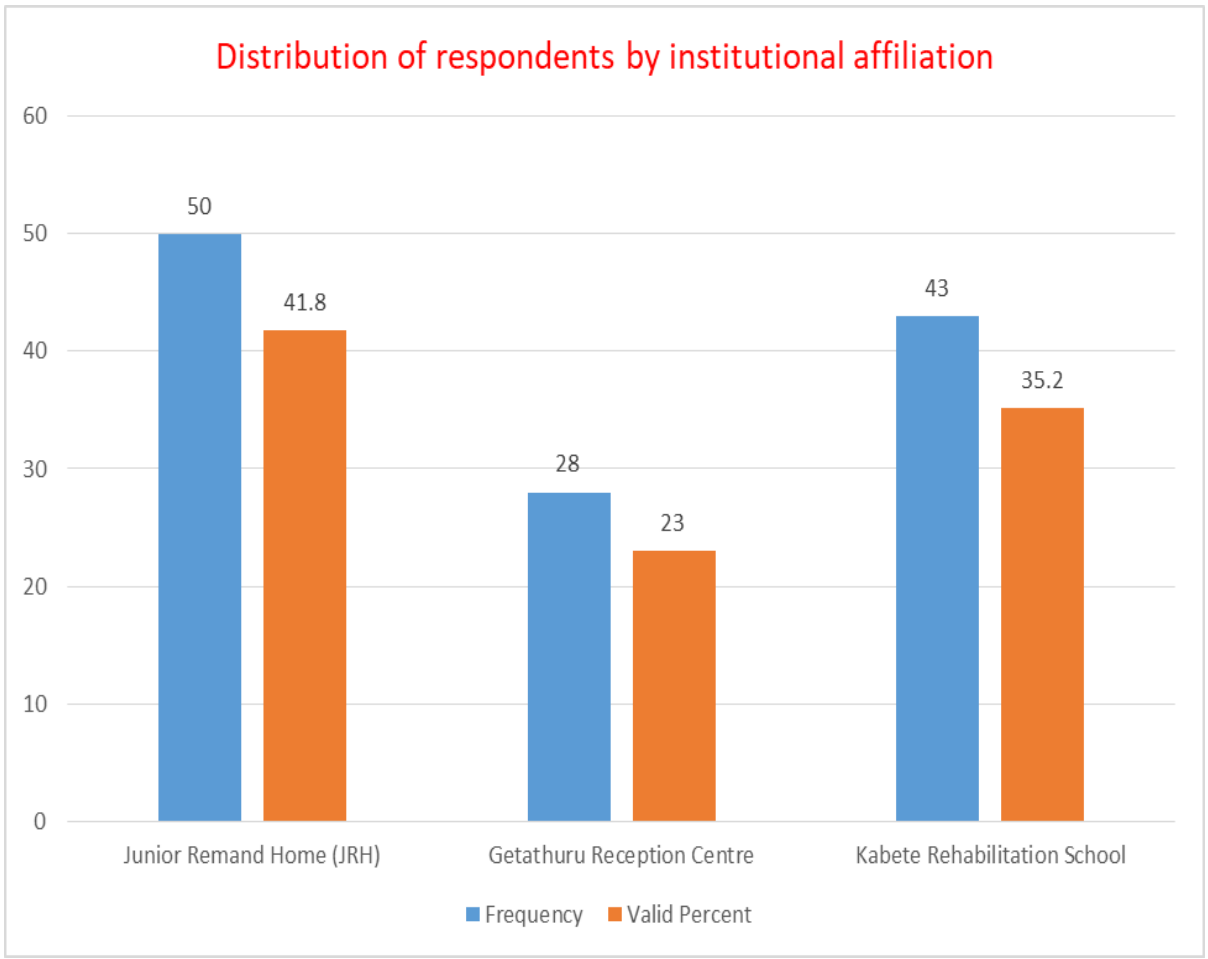
4.1 Specific objective 1

The study is ment to determine the socio/demographic profiles of the institutionalized care children in the Nairobi suburb settings in Kenya in terms of age, gender, education.

4.2 Demographic Factors By Institution

The respondents were from 3 statutory institutions, distributed as follows: 50 (41.8%) from Juvenile Remand Home (JRH); 28 (23.0%) from Getathuru Reception Centre (GRC); 43 (35.2%) from Kabete rehabilitation School (KRS).

Figure 3. Distribution Of Respondents By Institution



		Overall Mean	Juvenile RemandHome	GetathuruReception Centre	Kabete RS
Sample		122	50 (41.8%)	28 (23.0%)	43 (35.2%)
Number of responders siblings		4.08+0.22	3.53+.52	4.37+.38	4.18+ .30
Years completed in school		5.50+0.22	4.75+.33	6.75+ .43	5.58+ .36
Year of admission		2015.45+ 0.44	2016.13+ .84	2015.58+ .81	2014.92+ .67
Respondents age		12.83+ 0.26	12.45+.40	14.00+.48	12.56+.44
Age distribution of respondents	8-10	25.6	16	3	13
	11-13	33.9	19	6	16
	14-16	32.2	10	15	14
	17-23	8.3	6	3	1
Educational Distribution Of Respondents	**Class 0-3)**		**22(18.2%)**	**3(2.5%)**	**10(8.3%)**
			25(20.7%)	**20(16.5%)**	**29(24%)**
	(Class 4-8)	**28.9%**	**3(2.5%)**	**5(4.1%)**	**4(3.3%)**
		61.2%	**51(41.3%)**	**28(23.1%)**	**43(35.5%)**
	(Class 9~11)	**9.9%**			10(8.3%)
		100%			
	TOTAL				
Gender distribution of respondents	Male	56.2	29	17	43(100%)
	Female	43.8	21	11	0
Prevalence of emotional disorders		23.0	12.9	30.5	28.9

The mean class by the respondent was class 5 (end).), with the largest majority falling in the upper primary education, and lowest being of secondary level of education. These are as shown below. The respondents constituted 56.2% males and 43.8% females.

TABE 1: SUMMARY OF SOCIODEMOGRAPHIC STUDIES

4.5 Prevalence Of Emotional Disorders In The 3 Institutions

The respondents constituted 35.2% Kabete; 41.8% Junior Remand; and 23.0% Getathuru. The mean prevalence of all the emotional disorders assessed was 23.0%, comprising 28.9% Kabete; 12.9% Junior Remand; and 30.5% Getathuru (n=122).

Table 2 Emotional Disorders ByInstitution (Prevalence By Institution)

	Juvenile Remand Home %	Getathuru Reception Centre %	Kabete Rehabilitation School %	% Mean
Major depression episode experience	30	60.7	62.5	51.6
Suicidality episode	0	28.6	27.5	18.1
Suicidal behaviour disorder	2	7.1	5	3.7
Panic disorder episode	16.3	42.9	42.5	31.7
Agoraphobia	4	25	30	17.9
Separation anxiety disorder	8.2	22.2	20	19.9
Social anxiety disorder	14.3	37.0	27.5	25.1
Specific phobia episode	16.7	51.9	41.5	28.5
Obsessive compulsive disorder	3.7	5.6	8.1	4.3
Post-traumatic stress episode	22.9	29.6	52.5	34.1

	12.9	30.5	28.9	23.0

Table 3 .Gender And Emotional Disorders

Emotional Disorder	Number	Male %	Female %	Mean Prev %
Major Depression Episode	118	47.8	51	49.2
Suicidality Episode	116	24.2	8.0	17.2
Suicidal Behaviour Disorder	117	4.27	6.1	1.96
Panic Disorder	118	35.8	24.7	32.2
Agoraphobia	118	14.9	21.6	17.8
Separation Anxiety Disorder	117	17.9	12.0	15.4
Social Anxiety Disorder	116	19.7	80	24.1
Specific Phobia Disorder	116	18.5	51	32.8
Obsessive Compulsive Disorder	88	3.64	10	6.02
Post-Traumatic Stress Disorder	115	34.8	34.8	34.8

GENDER AND EMOTIONAL DISORDERS:

The respondents constituted 56.2% males and 43.8% females. The meanprevalence emotional disorders 22.6%, comprising 21.31% males and 24.30% females (n=122). The breakdown prevalence for specific mental disorders are as follows withe highest being : Major depression disorder as 49.2% (47.8% males and 51% females; n=118).followed by The p-value for post-traumatic stress episode is 34.8% (34.8% males and 34.7% females; n=115)with the least being . P-value1.96% for suicidal behavior disorder is (6.1% males and 4.2% females; n=117).

Table 4 .Education Level And Emotional Disorder

The mean class by the respondent was class 5 (end).), with the largest majority (64.2%) falling in the upper primary education, with only 13% being of secondary level education. Among the respondents' host institutions, upper primary was still the modal education level led by Kabete (29 or 23.8%), then Juvenile remand (25 or 20%).

	Lower primary(0-3)Nos affected	Lower primary(0-3)denominator	Upper primary(4-8)Nos.affected	Upper primary(4-8) Denominator	Secondary (9-11)No.affected	Secondary(9-11)(Denominator	Total
Major Depressive Episode	**13**	**35**	**38**	**74**	**7**	**11**	**58**
Suicidality Episode	**8**	**35**	**12**	**71**	**0**	**11**	**20**
Suicide Behavior Disorder	**0**	**35**	**5**	**72**	**0**	**11**	**5**
Panic Disorder	**8**	**35**	**25**	**72**	**5**	**11**	**38**
Agora Phobia	**7**	**35**	**9**	**73**	**5**	**11**	**21**
Separation AnxietyDisorder	**4**	**35**	**11**	**71**	**3**	**11**	**18**
Social Anxiety Disorder	**9**	**35**	**13**	**71**	**6**	**11**	**28**
Specific. Phobia.	**4**	**35**	**28**	**72**	**7**	**10**	**39**
Obsessive Compulsive Disorder	**1**	**29**	**2**	**48**	**2**	**6**	**5**
Posttraumatic Stress Disorder	**11**	**35**	**23**	**70**	**6**	**11**	**40**

Generalized Anxiety Disorder	**0**	**22**	**1**	**40**	**0**	**6**	**1**
Total	65	366	167	734	41	110	273
%	17.8		22.8		37.3		22.7

4.9 Emotional disorders & education of respondents

Other than specific phobia episode, all other mental disorders studied bear no correlation at all with education level of the respondents, as all x^2-values are more than the critical value of 0.05. As such, the Ho is not rejected, essentially meaning no relationship is detected. This is proved further by the low Pearson's R-values recorded (-0.000-0.188), all less than 0.2.

However, for specific phobia episode, the X2=0.004, which is less than the critical value of 0.05, implying a relationship exists; the condition is dependent on level of education.
To qualify this further, a -0.362 is registered as the Pearson's R-value. This R-value implies an inverse proportionality relationship.

Figure 4 Parental Status / Orphan Hood And Emotional Disorders

The total orphan's prevalence is highest in JRH at 44.7% followed Kabete at 31.4%.

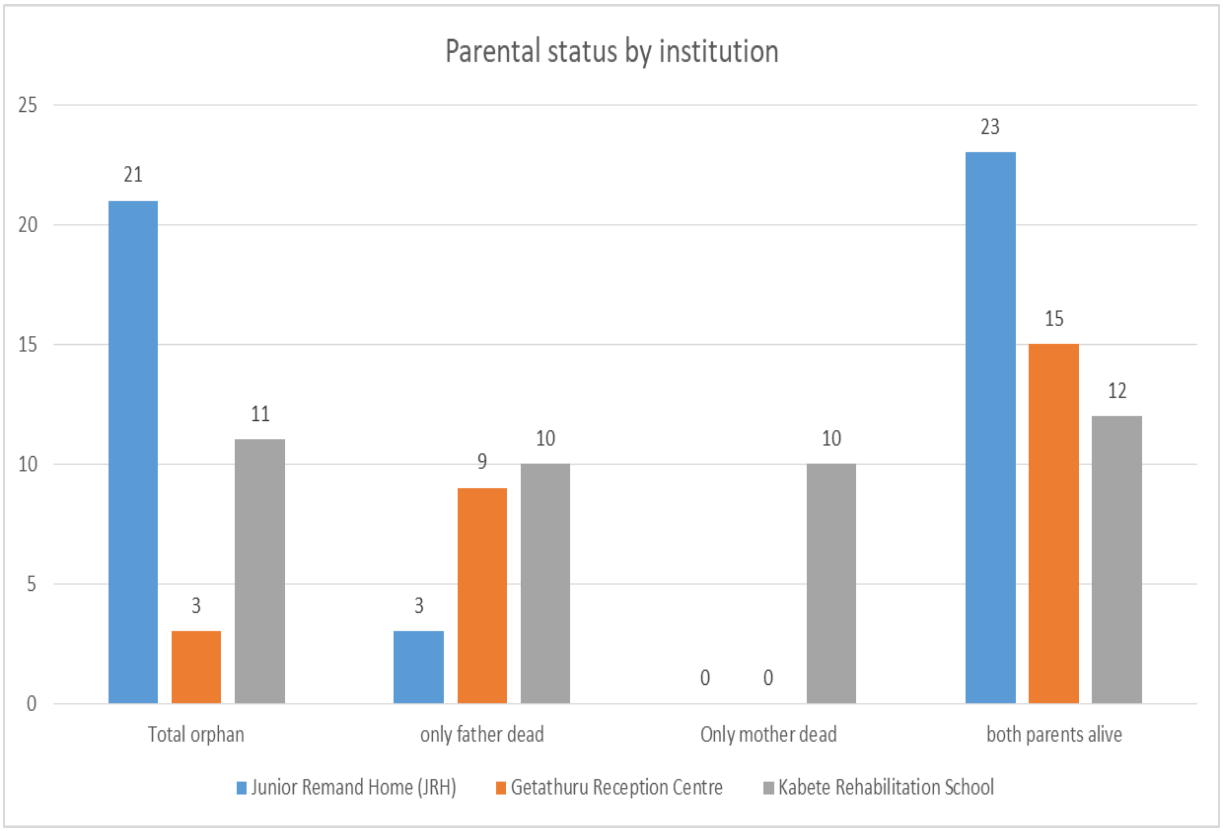
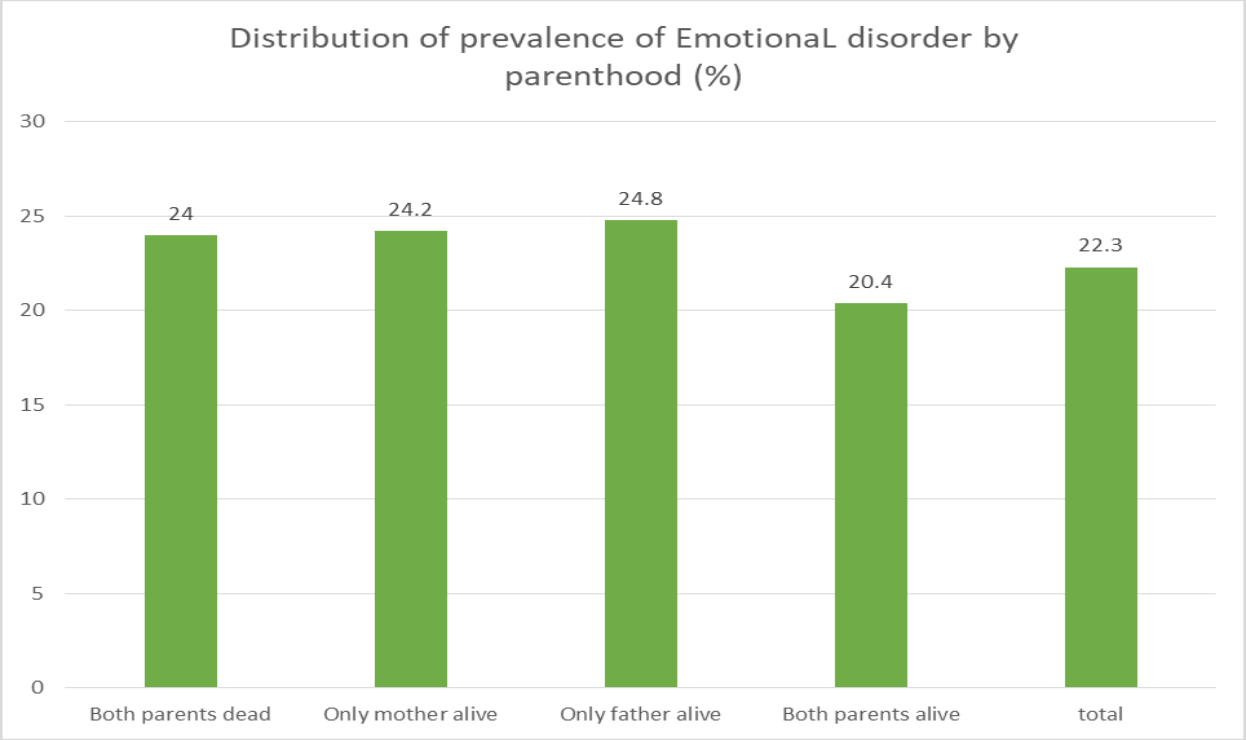


Figure 5Emotional Disorders ByOrphanhood:

This, however, varies with the state of parenthood of the respondents. (Total orphans have



registered a prevalence of 29.9%; those with both parents have a prevalence of 42.7%; 8.54% for those with only a father and 18.8% for those with only a mother.) Parenthood and emotional disorder:The mean prevalenceof emotional disorders as determined by parenthood perspective was 22.3% out these.total orphans scored 24%,mother alive 24.2%,father alive 24,8% both parents alive 20,4%

Table5.Pearson Chi-square and Pearson's Correlation @ Asymptomatic Significance (2-sided)

Emotional Disorder	Respondent's Gender			Age Category			Educational Level			Institutional Affiliation		
	Chi (X^2)	R	N	Chi (X^2)	R	n	Chi (X^2)	R	N	Chi (X^2)	R	n
Major depression episode experi	.492	-.058	118	.951	-.021	118	.429	-.165	120	.013		94
Suicidality episode	.038	.150	116	.436	.178	116	.439	.123	117	.004	.320	117
Suicidal behaviour disorder	.292	.005	117	.516	-.016	117	.409	.075	118	.527	.127	119
Panic disorder	.375	.035	118	.844	.027	192	.704	-.136	118	.079	.271	118
Agoraphobia	.338	-.120	118	.872	.075	118	.089	-.089	119	.008	.321	119
Separation anxiety disorder	.407	.009	117	.831	.093	116	.818	-.099	118	.324	.028	117
Social anxiety disorder	.308	-.160	116	.226	.034	115	.226	-.089	116	.199	-.191	116
Specific phobia	.002	-.325	116	.656	.070	116	.004	-.362	117	.039	-.026	117
Obsessive compulsive disorder	.170	-.204	83	.942	-.012	83	.053	-.188	83	.770	-.136	83
Post-traumatic stress disorder	.987	-.007	115	.336	.148	115	.475	-.110	116	.045	.250	116
Generalized anxiety disorder	.039	.088	68	.262	-.155	68	.755	.000	68	.269	-.154	71

Gender influence on specific emotional disorders

For all specific disorders, Pearson's x2 p-value is more than 0.05 (except in three cases marked red- Generalized anxiety Disorders with X^2=0.039,Suicidality Episode with X^2=0.038 and specific Phobia Disorder $X^{2=}$ 0.002), meaning the null hypothesis is not rejected), meaning the null hypothesis is not rejected. This practically means that there is a relationship between specific phobia episode disorders (18.5% male and 51% female), indicating a female biasness of this condition; generalized anxiety disorder (0% male and 2% female) indicating a female bias towards this condition; and suicidality episode (24% male and 8% female) indicating a male biasness towards this disease. All the difference in prevalence for these three is partly attributed to gender influences, but not other 8 disorders).

For The Emotional Disorders And Age

For all Emotional disorders studied, there is no correlation at all with age groups as all p-values are more than the critical value of 0.05.This is proved further by the low Pearson's R-values recorded (-0.021-0.178), all less than 0.2.

Relationship between institutional affiliation and emotional disorders

For all specific disorders, Pearson's X^2 p-value is more than 0.05 (except in five cases marked red), meaning the null hypothesis is not rejected. This practically means that a relationship exists between specific disorders and institutional affiliation, attributed largely to management.

Institutional affiliation affects: specific phobia episodes (X^2=.039; n=117); post-trauma stress disorder (X^2=.045; n=116); agoraphobia (X^2=.008; n=119); suicidality (X^2=.004; n=117);and major depression disorders (X^2=.013; n=94), with a strong relation (Pearsons' R -0.32),) exhibited by suicidality (Agoraphobia (R=0.321), and Post-traumatic stress disorders (R=0.25).

This marches well with the prevalence per institution, whose difference was very significant: Major depression episode experience 61% Kabete; 64%Juvenile Remand; and 61% Getathuru (n=118); Suicidality episode 27% Kabete; 2.0% Juvenile Remand; and 29% Getathuru (n=116); agoraphobia (30% Kabete; 3.9% Juvenile Remand ; and 25% Getathuru; n=118); specific phobia episode (41% Kabete; 16% Juvenile Remand ; and 52% Getathuru; n=116); and post-traumatic stress episode is 34.5% (52.5% Kabete; 22.4% Juvenile Remand ; and 29.6% Getathuru; n=115)have either a wide range, or extremes from at least one institution.

Emotional disorders & education of respondents

Other than specific phobia , all other mental disorders studied bear no correlation at all with education level of the respondents, as all x^2-values are more than the critical value of 0.05. As such, the Ho is not rejected, essentially meaning no relationship is detected. This is proved further by the low Pearson's R-values recorded (-0.000-0.188), all less than 0.2.However, for specific phobia , the X2=0.004, which is less than the critical value of 0.05, implying a relationship exists; the condition is dependent on level of education.

To qualify this further, a -0.362 is registered as the Pearson's R-value. This R-value implies an inverse proportionality relationship.

CHAPTER 5

5.0 Discussion

Age seems to be a factor in mental problems The current study confirms this as followsA total of 122 respondents' experienced emotional disorders, distributed by age as follow **25.6%** for ages **8- 10** years **33.9 %** for the ages 11-13 year olds**; 32.2 %** for the ages 14-16 year olds; and 8.3% for 17 -23 years. This confirms the later which says that 50% of all mental illnesses begin by age 14, undetected and untreated like Depression, anxiety disorders become the leading causes of health-related disability in this age group.If they remain unaddressed could worsen in adulthood interfering with one's overall quality of life, relationships and work (APHRC, 2015).

Adulthood mental disorders have 50% origin from childhood, yet spending on child and adolescent during the most important developmental phase for prevention, is just 0.1 % of total world development assistance for health (Otieno, (2018)).WHO reports that mental health problems affect 10 -20% of children and adolescents worldwide (APHRC, 2015). By early recognition treatment should be appropriately given if preventive measures were not followed on time.

Confirmation of the prevalence of child and adolescent mental health problems is a first step towards acceptance of the magnitude of the problem in Kenya.:This study shows the trend of emotional disorders as follows: depression 51%, PTSD 34.1%, Panic Disorder 31.7%, specific anxiety disorder 28%, social anxiety disorder 25%, separation anxiety disorder 19.9%, and suicide episodes 18.1%, Agoraphobia 17.9%, OCD 4.3% and Suicide Behaviour Disorder 3.7%.

It also confirms the effect of institunalization by comparing the data by Mutiso et al 2008 among institutionalized HIV orphans as follows:408 institutionalized children revealed below results , Depression 44%, GAD 44.7%, OCD 55%, Panic-disorders 44% Social phobia 50% this is almost in line with the current research.M.O.H reveals that it is hard to extract clear records of the number of people affected by the different forms of depression (in Kenya) because many people do not seek help and simply conceal their condition Kasanga (2019).

5.1 Prevalence By Type Of Disorder

First household epidemiological study of mental disorder in Kenya in 2004 found out that age and presence of physical illness were significant risk factors. The prevalence rates were higher than in Tanzania and Nigeria, but comparable to other studies in Sub-Saharan Africa.An earlier review suggested the prevalence in Africa ranging from 8% to 43% depending on research strategy. In a related study, the lifetime rate of any disorder across 17 countries around the world was found to range between 12% and 47% (Rachel et al, 2012).was the ranges in current study

Between 51% to 3.7%.

Nigeria studies had relatively low figures as follows: any anxiety (4.1%); any mood disorder (1.3%) and overall depression (5.2%)(Rachel, et al (2012). Whereas Rachel et al (2012) found a Prevalence rate of 10.8% with no gender difference, this current work finds a more than double overall level comprising a 22% prevalence for males and 23.4% for females, implying a significant difference. The female prevalence is higher in: social anxiety disorder (12.6%; male 9.3%); specific phobia episode (20.6%; male 6.0%); obsessive compulsive disorder (2.3%; Male 0.7%). Experts have thus declared mental illness as the continent's "silent epidemic.

There is a as level of education prevalence as follows ; of 48.3% for major depression episode experience, distributed by class as follows: 37.1% lower primary; 51.3% upper primary; and 63.6% secondary (n=120). Suicidality episode prevalence of 17.1% is distributed as follows: 22.9% lower primary; 16.9% upper primary; and 0% secondary (n=117). A total of 4.2% respondents experienced suicidal behavior disorder with 0% lower primary; 6.9% in upper primary; and 0% for secondary (n=118). Similarly, panic disorder episode experience registers a prevalence of 32.2%, distributed as follows by class: 22.9% lower primary; 34.7% in upper primary; and 45.4% for secondary (n=118).

A 33.3% p-value was registered for specific phobia episode, distributed as follows by class: with 11.4% for lower primary; 38.9% in upper primary; and 70% for secondary (n=117). Lastly, of 1.5% prevalence of generalized anxiety disorder episode, di was registered, distributed as follows: 0% lower primary; 2.5% in upper primary; and 0% for secondary (n=68).

Research shows that mental health care needs of young people are not acknowledged, and when they are, the insufficient numbers of professionals trained to provide such care become challenges to the system. Trained informal health providers to refer individuals with suspected mental disorders for treatment, and potential opportunities to counter these challenges.

Kenya human rights commission report noted that the country lacked an effective legal and policy framework for mental health: Kenya's mental health act which was effected in 1989 is narrowly focused on inpatient treatment and even then remained only partially enforced because the implementing board of mental health lacked an operational budget and so screening for mental disorders hardly takes place unless by unsponsorered students who use minimal numbers for academic purposes like the current 122 respondents used by the researcher. The authors further noted that though a mental health policy was drafted in 2003 and revised in 2007, neither drafts were adopted. Effectively, Kenya has no mental health policy.

CHAPTER 6

6.0 CONCLUSION

This study confirms high levels of major depression (51.6%) and PTSD (34%) among others in institutional care children.Institutionalized total orphans, more vulnerable to these emotional disorders than others.

These findings concur with documented negative effects of parental deprivation and institutionalization on children's wellbeing by John Bowlby and others who confirmed that maternal deprivation was the central issue causing psychological damage to orphanage children arguing that any amount of orphanage experience was harmful; the damage was greatest during the first year of life and increased dramatically with length of stay in an institution.In terms of age and education the higher a child's cognitive ability, the greater the capacity to deal with complex problem situations and the emotional state attached to the event.

Parental presence as a protective factor underscored by the finding of statistically significant lower prevalence of emotional disorders as follows the mean prevalenceof emotional disorders as determined by parenthood perspective was 22.3% out these.total orphans scored 24%,mother alive 24.2%,father alive 24.8% both parents alive 20.4%.

overall health and socio-economic development is determined by Mental health which influence variety outcomes for individuals and communities such as healthier lifestyles.

Kenya's mental health act which was effected in 1989 is narrowly focused on inpatient treatment and even then remained only partially enforced because the implementing board of mental health lacked an operational budget and so screening for mental disorders hardly takes place unless by unsponsorered students who use minimal numbers for academic purposes like the current 122 respondents used by the researcher. The researcher further noted that though a mental health policy was drafted in 2003 and revised in 2007, neither drafts were adopted. Effectively, Kenya has no mental health policy.

6.2 Limitations

1. The study mainly relied on the verbal self-reports from the participants as there were no collaborative interviews from medical records, family members, managers or clinical information.Being a cross-sectional study it was difficult to determine any pre-existing emotional disorder prior to institutionalization
2. Sample size was very small.
3. A study comparing emotional disorders among statutory institutionalized youth and the general Kenyan youth population should be undertaken with a larger sample size

6.3 Recommendation

The study concentrated on the questionaires from the participants as there were no collaborative interviews from medical records, family members, managers or clinical information so further studies require both.

Being a cross-sectional study it was difficult to determine any pre-existing emotional disorder prior to institutionalization.

A study comparing emotional disorders among statutory institutionalized youth and the general Kenyan youth population should be undertaken with a larger sample size.

Institutional management is a key factor in containing disorder; well managed institutions help stabilize children, thereby exposing them less to emotional disorder

Psychosocial needs assessment.

Correctional settings can offer opportunities for intervention as there is a robust association between mental illness and justice involvement but this depends on the willingness and ability of correctional administrators to ensure the routine assessment and implementation of mental health screening and assessment.

Table 6. Study Timelines Work Plan

Objectives	Activities	Time Frame					Responsible Person
		2017	March to July 2019	Aug 2019	Sept2019	Oct2020	
Administrative requirements	Choosing & Presentation of the research topic for approval						Supervisor Researcher
Proposal writing	Writing a proposal and preparing research tools Typing and binding the proposal Handing the proposal to the Ethics team for research approval and Correction of the proposal						Supervisor Researcher
Gathering data	Distribution of research tools and collection						Researcher
Data analysis	Making sense of the collected information Compiling the analyzed information Discussing, finalizing, the findings.						Data Analyst and Researcher
Dissemination of information	Copies of the dissertation presented to KNH/UON AND MINISTRY OF SOCIAL SERVICES						Researcher

Table 7 Budget

ITEM	UNITS	COST
Proposal Development – internet, flash disk,	20	7,000.00
Typesetting – formatting, printing	1000	3,000.00
8 books Photocopying and 8books binding plus anti-plagiarism	@5*80	8,000.00
Ethics fees.Narcosis.	2	4,000.00
Data collection transport	7	20,000.00
Questionnaire printing and photocopying	700	10,000.00
Data analysis statistician	3	50,000.00
Thesis write up – typing, printing,8books binding	8	10,000.00
SUB TOTAL		112,000.00
Add 10% Contingencies		11,200.00
GRAND TOTAL		123,200.00

Table 8 Morgan,S Population Determinant Table

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

REFERENCES

1 Gupta, L., & Zimmer, C. (2008). Psychosocial intervention for war-affected children in Sierra Leone.

2 The British Journal of Psychiatry : The Journal of Mental Science, 192, 212–216. https://doi.org/10.1192/bjp.bp.107.038182

3 Ijzendoorn, . (2014).

4 https://doi.org/10.1111/j.1540-5834.2011.00626.x. Children in institution Care Delayed Development and Resilience, 76(4). Children

5 Mccall, R. B., &Groark, C. J. (2015). Research on Institutionalized Children : Implications for International Child Welfare Practitioners and Policymakers, 4(2), 1–20.

6 Petrowski, N., Cappa, C., & Gross, P. (2017). Estimating the number of children in formal alternative care:

7 https://doi.org/10.1016/j.chiabu.2016.11.026 Challenges and results. Child Abuse & Neglect, 70, 388–398.

8 Rahman, W., Mullick,. (2012). Prevalence of Behavioral and Emotional Disorders among the Orphans and Factors Associated with these Disorders.

9 https://doi.org/10.3329/bsmmuj.v5i1.10997 Bangabandhu Sheikh Mujib Medical University Journal, 5(1).

10 Van IJzendoorn, M. H., Palacios, J., Sonuga-Barke, E. J. S., Gunnar, M. R., Vorria, P., McCall, R. B., … Juffer, F. (2011).

11 https://doi.org/10.1111/j.1540-5834.2011.00626.x Children in Institutional Care Delayed Development and Resilience. Monographs of the Society for Research in Child Development, 76(4),

12 Williams, N. J, G. A. (2018a). Prevalence of Serious Emotional Disturbance among U.S Children

13 https://doi.org/10.1176/appi.ps.201700145 A Meta-Analysis. Psychiatric Services,69(1), 32–40.

14 Institute for Health Metrics and Evaluation and International Centre for Humanitarian Affair (2015) The Global Burden of Disease Generating Evidence, Guiding Policy in Kenya. A report produced by the Institute for Health Metrics and Evaluation and the International Centre for Humanitarian Affair. Kenya Red cross, Ministry of Health and International Centre for Humanitarian Affair, and Institute for Health Metrics and Evaluation.

15 https://www.nation.co.ke/newsplex/2718262-4813418-ufh9bs/index.html on 12/5/2020 Kasanga Senator Sylvia (2019).

16 The many faces of mental health in Kenya. The mental health (amendment) bill, 2018 held between May and June 2019.

17 Rachel Jenkins,. (2012). Prevalence of Common Mental Disorders in a Rural District of Kenya, and Socio-Demographic Risk Factors.

18 Int. J. Environ. Res. Public Health 2012, 9,1810-1819; doi: 10.3390/ijerph9051810. International Journal of Environmental Research and Public

19 www.mdpi.com/journal/ijerph Health ISSN 1660-4601. The Draft Mental Health Policy (2012).Ministry Of Medical Services, Kenya

20 http://www.health.go.ke Meyer AC, Ndetei D Kenya Mental Health Policy 2015–2030 (2015). Published by Ministry of Health; Afya House,;. Providing Sustainable Mental Health Care in Kenya:

21 https://www.ncbi.nlm.nih.gov/books/NBK350312/. A Demonstration Project. In: Forum on Neuroscience and Nervous System Disorders; Board on Health Sciences Policy; Board on Global Health; Institute of Medicine; National Academies of Sciences, Engineering, and Medicine. Providing Sustainable Mental and Neurological Health Care in Ghana and Kenya: Workshop Summary. Washington (DC): National Academies Press (US); 2016 Feb 25. E. Available from:
22 https://doi.org/10.1186/s13033-017-0152-4Musyimi, C.W., Mutiso, V.N., Ndetei, D.M. et al. (2017). Mental health treatment in Kenya: task-sharing challenges and opportunities among informal health providers. Int J Ment Health Syst.
23 https://ijmhs.biomedcentral.com/articles/10.1186/s13033-017-0152-4
24 https://www.nation.co.ke/newsplex/2718262-4813418-ufh9bs/index.htmlOtieno, Dorothy: Tue Oct 23 07:36:00 Eat 2018. Newsplex.
25 https://ilakenya.org/mentalhealth-problems-in-kenya-and-africa-and-how-their-perception-negatively-impacts-theprovision-of-care/ ILA (2015). International institute for legislative affairs (ILA)
26 https://www.aljazeera.com/indepth/features/2016/04/taboo-mental-illness-kenya160406093345546.html .Osman Mohamed Osman 18 Apr 2016: The taboo of mental illness in Kenya.
27 https://aphrc.org/blogarticle/adolescent-mental-health-in-kenya-where-is-the-data/ African Population and Health Research Center(APHRC).

APPENDICES

APPENDIX 1: Research Questionnaire Designed By The Researcher

Socio-Demographic Questionnaire –

(To be answered by child. Tick where applicable to you)

Gender: Male Female

Age: Completed years 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Type of transfer: Security Children's Officer Family Member

Origin of transfer: Home Hospital Street Approved School

Level of Education: 1 2 3 4 5 6 7 8 9 10 11

Parents Details Tick Where Appropriate

	LEVEL OF EDUCATION	**SKILL**	**ALIVE**	**DEAD**
FATHER				
MOTHER				
GUARDIAN				
NUMBER OF SIBLINGS				

APPENDIX 2: Mini International Neuropsychiatric Interview for Children and Adolescents

Patient Name:	Patient Number:
Date of Birth:	Time Interview Began:
Interviewer's Name:	Time Interview Ended:
Date of Interview:	Total Time:

MODULES TIME FRAME CRITERIA ICD-10- DIAGNOSIS

Major Depressive Episode Current (2

Suicidality Current (Past Month) ☐

Lifetime Attempt ☐☐Low ☐ Moderate

Agoraphobia Current F40.00 ☐☐

Separation Anxiety Current (Past Month) ☐ F93.0 ☐

Social Anxiety Disorder Current (Past Month) F40.10 ☐☐

Specific Phobia Current (Past Month) F40.218 ☐☐

Obsessive-Compulsive Current (Past Month) F42.2 ☐☐

Posttraumatic Stress Current (Past Month) F43.10

Generalize identify Thd E PriMaranxiety Diagnosis By(Pas Check 6 Months) The Approprf41iat.1 E Check Box.

Major Depressive Episode

(➡ Means: Go To The Diagnostic Box, Circle No In The Diagnostic Box, And

Move To The Next Module)

A1 a at any time in your life, did you feel sad or depressed? Did you feel down or empty or hopeless?

Did you feel grouchy or annoyed? Did you feel this way most of the time, for at least 2 weeks?

IF YES TO ANY, CONTINUE. IF NO TO ALL, CODE NO TO A1a AND A1b. NO

YES

b For the past 2 weeks, did you feel this way, most of the day, nearly every day? NO

YES

A2 a At any time in your life, were you bored a lot or much less interested in things (like playing your favorite games)? Did you feel that you couldn't enjoy things? Did you feel this way most of the time, for at least 2 weeks?

IF YES TO ANY, CONTINUE. IF NO TO ALL, CODE NO TO A2a AND A2b. NO YES

b For the past 2 weeks, did you feel this way, most of the day, nearly every day? NO YES

IS A1 OR A2 CODED YES? NO YES

A3 if a1b or a2b = yes: explore the current and the most symptomatic past episode, otherwise if a1b and a2b = no: explore only the most symptomatic past episode in the past two weeks, when you felt depressed / grouchy / uninterested: <u>past 2 weeks past episode</u>

were you less hungry or more hungry most days? did you lose no yes no yes or gain weight without trying? [i.e., by ± 5% of body weight in if yes to either, code yes.

did you have trouble sleeping almost every night ("trouble no yes no yes

trouble falling asleep, waking up in the middle of the night, too early or sleeping too much)?

did you talk or move slower than usual? were you fidgety,no yes no yes or couldn't sit still almost every day? did anyone notice this?

did you feel tired most of the time? no yes no yes

did you feel bad about yourself most of the time? did you feel no yes no yes most of the time?

if yes, ask for examples. look for delusions of failure, of inadequacy, of ruin or of guilt, or of needing punishment or delusions of disease or death or nihilistic or somatic delusions. the examples are consistent with a delusional idea. current episode ☐ no ☐ yes past episode ☐ no ☐ yes

f,, Did you have trouble concentrating or thinking or did you have trouble no yes

no yes

making up your mind almost every day? if yes to either, code yes.

G, Did you feel so bad that you wished that you were dead? no yes no yes did you think about hurting yourself? did you have thoughts of death?

Did you think about killing yourself? if yes to any, code yes. (fear of dying does not count he<u>past 2 weekspast episode</u>

A4 did these sad, depressed feelings cause a lot of problems at home? no yes no yes at school? with friends? with other people? or in some other important way?

A5 in between your times of depression, were you free of depression orsadness for of at least 2 months? n/a no yes are 5 or more answers (a1-a3) coded yes and is a4 coded yes for that time frame? and is “rule out organic cause (w2 summary)” coded yes? specify if the episode is current and / or past. if A5 is coded yes, code yes for recurrent.

no yes

major depressive episode

current☐ past ☐ recurrent ☐

A 6 a, How many episodes of depression did you have in your lifetime? Between each episode there must be at least 2 months without any significant depression. in the past month did you:

B. suicidality (for ages 13 through 17)

Points

B1, Have any accident? this includes taking too much of your medication by accident. no yes if no to b1, skip to b2. if yes, ask b1a:

B1a, Plan or expect to hurt yourself on purpose in any accident, or put yourself in a position no yes where you could be hurt if no to B1a, skip to B2. if yes, ask b1b:

B1b Want to die as a result of any accident? no yes 0

B2 Think that you would be better off dead or wish you were dead or no yes

1 need to be dead?

B3 think about hurting yourself, with the possibility that you might die? no yes 6 or did you think about killing yourself? if yes to either, code yes. if no to b2 + b3, skip to b4. Otherwise ask: how often? How strong were the thoughts?

Occasionally ☐ mild ☐ often ☐ moderate ☐ very often ☐

severe

B4 Hear a voice or voices telling you to kill yourself or have a dream or a nightmare about killing yourself?

If yes, mark either or both: ☐was it a voice or voices? ☐was it a dream or a nightmare? no yes

B5 Have a way or a method in mind to kill yourself (i.e. how)? No yes 8

B6 Think about what you would use to kill yourself? No yes 8

B7 Think about where you would go to kill yourself? No yes 8

B8 Think about when you could kill yourself? No yes 8

B9 Think about anything you would like to finish before trying to kill yourself? No yes 8 (e.g. writing a suicide note)

B10 Expect to go through with a plan to kill yourself? No yes 8

If yes, mark either or both: ☐Did you intend to act at the time?

☐Did you intend to act at some time in the future?

B11 Expect to die as a result of trying to hurt yourself? No yes 8

If yes, mark either or both: ☐ did you intend to die by suicide at the time?

☐ did you intend to die by suicide at some time in the future?

B12 Feel the need or impulse to kill yourself or to plan to kill yourself sooner rather than later?

No yes

If yes, mark either or both: ☐ was it to kill yourself? ☐ was it to plan to kill yourself?

If yes, mark either or both: ☐ was it for no good reason? ☐ was it for some good reason?

B 13, In assessing whether this was largely unprovoked ("for no good reason") or provoked ask:

"5 minutes before this impulse to kill yourself, could you have predicted it would occur at that time?" if no to B12, skip to B14 B13

Have difficulty resisting these impulses to kill yourself? No yes

B14 Do things to prepare to kill yourself, but were interrupted or stopped yourself, no yes Before harming yourself?

if no to B14, skip to B15. Otherwise go to B14a.

B14 a do things to get ready to kill yourself, but you did not start to kill yourself? no yes 9

B14b Do things to get ready to kill yourself, but then you stopped yourself just before you hurt yourself ("aborted")?

no yes 10

B14c Do things to get ready to kill yourself, but then someone or something stopped you just before you hurt yourself ("interrupted")? No yes

B151hurt yourself on purpose without trying to kill yourself?

(B15 is not counted as suicidal behavior) try to kill yourself?

If no to B16, skip to B17.

No yes 0

No yes

B16a Start to kill yourself, but then you decided to stop. No yes 12

And you did not finish the attempt?

B16b Start to kill yourself, but then someone or something stopped you. No yes 13 And you did not finish the attempt?

B16c Do everything you could to try to kill yourself completely, as you meant to? No yes

A suicide attempt means you did something where you could possibly be injured, with at least a slight intent to die

If no, skip to B17. Hope to be rescued / survive ☐expected / intended to die ☐

B17 time spent per day with any suicidal impulses, thoughts or actions:

Usual time spent per day: hours, minutes.

Least amount of time spent per day: hours, minutes.

Most amount of time spent per day: hours , minutes.

In your lifetime:

B18 Did you ever try to kill yourself?

If yes, how many times? No yes 4

If yes, when was the last suicide attempt?

Current: within the past 12 months ☐

In early remission: between 12 and 24 months ago ☐

In remission: more than 24 months ago ☐

“a suicide attempt is any self-injurious behavior, with at least some intent (> 0) to die as a result of the act. evidence that the individual intended to kill him-or herself, at least to some degree, can be explicit or inferred from the behavior or circumstance. for example, it is defined as a suicide attempt if it is clearly not an accident or if the individual thinks the act could be lethal, even though denying intent.” (fda guidance for industry suicidal ideation and behavior document 2012 and c-casa definition). posner k et al. am j psychiatry 2007; 164 (7): 1035-1043 &

http://www.fda.gov/drugs/guidancecomplianceregulatoryinformation/guidances/default.htm/

B19 how likely are you to try to kill yourself within the next 3 months on a scale of 0-100%

Any likelihood > 0% on B19 should be coded yes. No yes 13

Is at least 1 of the above (except b1) coded yes?

if yes, add the total points for the answers (B1-B19) checked 'yes' and specify the suicidality score category as indicated in the diagnostic box:

Indicate whether the suicidality is current (past month) or a lifetime suicide attempt or both by marking the appropriate boxes or by leaving either or both of them unmarked.

Current = any positive response in B1a through b16c (except B15) or any time spent in B17.

Lifetime attempt = B18 coded yes.

Likely in the near future = B19 coded yes.

Make any additional comments about your assessment of this patient's current and near future suicidality in the space below:

Is B18 coded yes? And a yes response to

Was the suicidal act started when the subject was not in a state of confusion or delirium?

And a yes response to

Was the suicidal act done without a political or religious purpose?

If yes, specify whether the disorder is current, in early remission or in remission.

No yes

Suicidality

1-8 points low ☐ 9-16 points moderate☐> 17 points high ☐

Current ☐ lifetime attempt ☐ likely in near future ☐ No yes

Suicidal behavior disorder

Current ☐ in early remission ☐ in remission ☐

D. PANIC DISORDER

(➡ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

D1 a Have you ever been really frightened or nervous for no reason; or have you ever been really frightened or nervous in a situation where most kids would not feel that way? No yes

If yes to either, code yes. If no to all, code no.

b, Did this happen more than one time? No yes c, Did this nervous feeling increase quickly over the first few minutes? No yes

D2 a Has this ever happened when you didn't expect it? b, After this happened, were you afraid it would happen again or that something bad

Would happen as a result of these attacks? No yes

D3a, Did you change what you did because of these attacks? (e.g., going out only with someone, not wanting to leave your house, going to the doctor more frequently or doing things to avoid a panic attack)? No yes

b ,Did you have these worries for a month or more? No yes

D3 summary: if yes to both d3a and d3b questions, code yes. no yes

D4 ,Think about the time you were the most frightened or nervous for no good reason:

a, Did your heart beat fast or loud?

b, Did you sweat? Did your hands sweat a lot? No yes. Yes if yes to either, code yes.

c, Did your hands or body shake? No yes d, Did you have trouble breathing or feel like you were running out of air? No yes e, Did you feel like you were choking? Did you feel you couldn't swallow? If yes to either, code yes. No yes f, Did you have pain or pressure in your chest? No yes g, Did you feel like throwing up? Did you have an upset stomach? No yes

Did you have diarrhea? If yes to any, code yes.

h, Did you feel dizzy or faint? No Yes i, Did you feel hot or cold? No Yes j,Did parts of your body tingle or go numb? No Yes k ,Did things around you feel strange or like they weren't real? No yes

Did you feel or see things as if they were far away?

Did you feel outside of or cut off from your body?

If yes to any, code yes.

l ,Were you afraid that you were losing control of yourself? No yes

Were you afraid that you were going crazy?

If yes to either, code yes.

m, Were you afraid that you were dying? No yes

D5 are both D3 summary, and 4 or more D4 answers, coded yes? No yes

Panic disorder lifetime

D6 a, In the past month, did you have these problems more than one time? NO YES

If no, circle no to D6 summary, complete the diagnostic box and move to e1. For the past month:

Did you worry that it would happen again? No yes

Did you worry that something bad would happen because of the attack? No yes

d, Did anything change for you because of the attack? No yes

(e.g., going out only with someone, not wanting to leave your house going to the doctor more frequently)?

D6 summary: if yes to D6b, or D6c, or D6d, code yes. No yes panic disorder current

Is either D5 or D6 coded yes? and is "rule out organic cause (w2 summary)" coded yes?

Specify if the episode is current and / or lifetime. No yes Panic disorder lifetime ☐ Current

E. AGORAPHOBIA

(➡ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

E1 ,Do you feel anxious, scared, or uneasy in places or situations where you might become NO YES

really frightened; like being in a crowd or in a closed place, standing in a line (queue), when you are all alone, or when crossing a bridge or when you are in an open space, or when traveling in a bus, train, car or on a subway?

If Yes To Any, Code Yes.

Are 2 Or More Of The Above Situations Coded Yes?

E2 ,Do these situations almost always make you anxious or scared?

E3 , Are you so afraid of these things that you try to stay away from them?

Or you can only do them if someone is with you? Or you do them, but it's really hard for you?

If Yes To Any, Code Yes.

E4 ,Are you much more scared than other kids your age in these situations? No Yes

E5 ,Have you been scared of and avoiding these situations for at least 6 months? No Yes

E6 ,Did these symptoms cause significant problems at home, at school, at work, with your friends, or upset you in some other important way? No Yes

Is E6 Coded Yes? No Yes

Agoraphobia Current

F. SEPARATION ANXIETY DISORDER

(➡ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

F1 a, In the past month, were you really afraid about being away from someone close to you; or have you been really afraid that you would lose somebody you are close to? (Like getting lost from your parents or having something bad happen to them). No Yes

If Yes To Either, Code Yes.

b, Who are you afraid of losing or being away from?

F2 a, Did it happen several times that you got upset a lot when you were away from?

Did you get upset a lot when you thought you would be away from?

If Yes To Either, Code Yes. No Yes

,Did you get really worried that you would lose ?

Did you get really worried that something bad would happen to ? No Yes

(Like Having A Car Accident Or Dying).

If Yes To Either, Code Yes. c,Did you get really worried that you would be separated from ? NO YES

(Like getting lost or being kidnapped?

d,,Did you refuse to go to school or other places because you were afraid to be away from ?

NO YES

e,Did you get really afraid being at home or anywhere else if wasn't there? NO YES

f,Did you not want to go to sleep unless was there? NO YES

g,Did you have nightmares about being away from ? NO YES

Did this happen more than once?

IF NO TO EITHER, CODE NO.

h,Did you feel sick a lot (like headaches, stomach aches, nausea or vomiting, heart beating fast or feeling dizzy) when you were away from ?

Did you feel sick a lot when you thought you were going to be away from ?

IF YES TO EITHER, CODE YES. NO YES

F2 SUMMARY: ARE AT LEAST 3 OF F2a-h CODED YES? NO YES

F3,Did this last for at least 4 weeks? ➡ NO YES

F4,Did your fears of being away from really bother you a lot?

Cause you a lot of problems at home? At school? With friends? NO YES

In any other way?

IF YES TO ANY, CODE YES.

ARE F1, F2 SUMMARY, F3 AND F4 CODED YES? NO YES

SEPARATION ANXIETY DISORDER

G. SOCIAL ANXIETY DISORDER (Social Phobia)

(➡ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

G1 In the past month, were you afraid or embarrassed when others your age were watching you?

NO YES

Were you afraid of being teased? Like talking in front of the class?

Or eating or writing or doing things in front of others?

IF YES TO ANY, CODE YES.

G2 Do these social situations almost always make you anxious or scared?

G3 Are you so afraid of these things that you try to stay away from them?

Or you can only do them if someone is with you? Or you do them, but it's really hard for you?

IF YES TO ANY, CODE YES.

G4 Are you much more scared of these situations than other kids your age?

G5 Have you been scared of and avoiding these situations for at least 6 months?

G6 Did these social fears cause significant problems at home, at school, at work, with your friends, or upset you in some other important way?

IS G6 CODED YES?

IS “RULE OUT ORGANIC CAUSE (W2 SUMMARY)” CODED YES?

TO INTERVIEWER: PLEASE SPECIFY IF THE SUBJECT’S FEARS ARE RESTRICTED TO

SPEAKING OR PERFORMING IN PU

SOCIAL ANXIETY DISORDER (Social Phobia) CURRENT

RESTRICTED TO PERFORMANCE SAD ONLY ☐

H. SPECIFIC PHOBIA

(➡ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

H1 ,In the past month, have you been really afraid of something like: snakes or bugs? NO YES Dogs or other animals? High places? Flying? Storms? The dark?

Or seeing blood or needles?

H2,List any specific phobia(s):

Clinician: Make Sure This Phobia Is Not Better Explained By A Fear, Anxiety

Or Avoidance Associated With Panic Disorder, Agoraphobia, Separation Anxiety Ocd, Ptsd, Or Social Anxiety Disorder.

H3 Does being near or around (NAME SPECIFIC PHOBIA) make you afraid immediately?H4 Are you so afraid of (NAME SPECIFIC PHOBIA) that you try to stay away from it / them? Or you can only be around it / them if someone is with you?

Or can you be around it / them but it's really hard for you?

IF YES TO ANY, CODE YES.

H5 Are you more afraid of (NAME SPECIFIC PHOBIA) than other kids your age? NO YES

H6 Have you been afraid of (NAME SPECIFIC PHOBIA) for 6 months or more? NO YES

H7 Does this fear really bother you a lot? Does it cause you problems at home or at school or at work or with your friends? Does it keep you from doing things you want to do? NO YES

If Yes To Any, Code Yes. No Yes

Is H7 Coded Yes? No Yes

Specific Phobia Current

I. Obsessive-Compulsive Disorder

(➡ Means: Go To The Diagnostic Box, Circle No And Move To The Next Module)

I1a In the past month, have you been bothered by bad things that come into your NO YES mind that you couldn't get rid of? Like bad thoughts or urges? Or nasty pictures? For example, did you think about hurting somebody even though it disturbs or SKIP TO I3a distresses you? Were you afraid you or someone would get hurt because of some little thing you did or didn't do? Did you worry a lot about having dirt or germs on you? Did you worry a lot that you would give someone else germs or make them sick somehow? Or were you afraid that you would do something really shocking? IF YES TO ANY, CODE YES.

I1b In the past month, did you try to make these thoughts, impulses, or NO YES images go away or try to push them away with some other thought or action?

SKIP TO I3a

Do Not Include Simply Excessive Worries About Real Life Problems.

Do Not Include Obsessions Directly Related To Hoarding, Hair Pulling, Skin Picking, Body Dysmorphic Disorder, To Eating Disorders, Sexual Behavior, Pathological Gambling, Or Alcohol Or Drug Abuse Because The

Patient May Derive Pleasure From The Activity

And May Want To Resist It Only Because Of Its Negative Consequences.

I2 Did they keep coming back into your mind even when you tried to ignore or get rid of them? Obsessions

I3a In the past month, did you do something over and over without being able to stop doing it, like washing over and over? Straightening things up over and over? Counting something or checking on

something over and over? Saying or doing something over and over? IF YES TO ANY, CODE YES.

I3b Did you do these rituals to make the anxiety less or to prevent something NO YES bad from happening? Do they happen to you more than to other kids your age? compulsions

CODE YES ONLY IF YES TO BOTH PARTS OF I3b. CHILDREN MAY NOT BE ABLE TO EXPLAIN THE PURPOSE OF THE RITUALS.

ARE (I1a AND I1b AND I2) OR (I3a AND I3b) CODED YES? NO YES

I4 In the past month, did these thoughts or actions cause you to miss out on things at home? At school? With friends? Did they cause a lot of problems with other people? Did these things take more than one hour a day?

If Yes To Any, Code Yes.And

Is "Rule Out Organic Cause (W2 Summary)" Coded Yes? (Check For Any Obsessive Compulsive

Symptoms Starting Within 3 Weeks Of An Infection)

Specify The Level Of Insight And If The Episode Is Tic-Related.

No Yes

O.C.D. Current Insight: Good Or Fair ☐ Poor ☐

Absent ☐ Delusional ☐Tic - Related ☐

J. Posttraumatic Stress Disorder

(➡ Means: Go To The Diagnostic Boxes, Circle No In All Diagnostic Boxes, And Move To The Next Module)

J1 Has Anything Really Awful Ever Happened To You? Like Being In A Flood, Tornado Or

Earthquake? Like Being In A Fire Or A Really Bad Accident? Like Seeing Someone Being Killed Or Badly Hurt. Have You Ever Been Attacked By Someone? No Yes

Examples Of Traumatic Events Include: Serious Accidents, Sexual Or Physical Assault, A Terrorist Attack, Being Held Hostage, Kidnapping, Fire, Discovering A Body, War, Or Natural Disaster, Witnessing The Violent Or Sudden Death Of Someone Close To You, Or A Life-Threatening Illness.

J2 In The Past Month, Has This Awful Thing Come Back To You In Some Way? No

Yes

Like Dreaming About It Or Having A Strong Memory Of It Or Feeling It In Your Body?

In Children The Trauma May Be Expressed In Repetitive Play, And The Dreams May Be Frightening Without Obvious Content.

J3a B,In The Past Month: Have You Tried Not To Think About Or Talk About This Awful Thing? No Yes

Have You Tried To Stay Away From People Or Things That Might Remind You Of It? No Yes

J3 Summary: Are 1 Or More J3 Answers Coded Yes? No Yes

J4 In The Past Month:

a Have You Had Trouble Remembering Some Important Part Of What Happened? No Yes b Were You Down On Yourself Or Others Too Much? No Yes

,Did You Frequently Blame Yourself Or Others For The Bad Things That Happened? No Yes

Did You Feel More Down On Yourself, Like Feeling Guilty, Ashamed, Angry Or Frightened? No Yes

Have You Been Much Less Interested In Your Hobbies Or Your Friends? No Yes f Have You Felt Cut Off From Other People? No Yes g,Have You Not Been Able To Feel Any Good Feelings, (Like Being Happy)? No Yes J4 Summary: Are 3 Or More J4 Answers Coded Yes? No Yes

J5 In The Past Month: a Were You Been Moody Or Angry For No Reason? No Yes b Did You Do More Risky Things Or Do Things That Could Harm You? No Yes c Were You Nervous Or Watching Out In Case Something Bad Might Happen? No Yes d Would You Jump When You Heard Noises?

Or When You Saw Something Out Of The Corner Of Your Eye? No Yes

If Yes To Either, Code Yes.

e Did You Have Trouble Paying Attention? No Yes f Did You Have Trouble Sleeping? No Yes

J5 Summary: Are 2 Or More J5 Answers Coded Yes? No Yes

J6 Did All These Problems Start After The Traumatic Event And Last For More Than One Month? No Yes

And

Is “Rule Out Organic Cause (W2 Summary)” Coded Yes?

Specify If The Condition Is Associated With Depersonalization, Derealization Or With Delayed Expression.

No Yes

Posttraumatic Stress Disorder Current

With Depersonalization ☐Derealization☐ Delayed Expression ☐

Is “Rule Out Organic Cause (W2 Summary)” Coded Yes?

A: Cross Cutting Measures

SEVERITY OF SYMPTOM

21Use this scale to rate the severity of your symptom in the score column in the table below:

Assessment of Symptoms That Cut Across Disorders M.I.N.I. KID MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW FOR CHILDREN AND ADOLESCENTS English Version 7.0.2 For DSM-5 DISCLAIMER our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician. This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel. It is not a diagnostic test.

APPENDIX8:Studies involving children

PARTICIPANT INFORMATION AND CONSENT FORM

Title of Study: Prevalence of emotional disorders among institutionalized children in suburb

Principal Investigator Dr Joan Ahero Afullo

Institutional affiliation: University of Nairobi

Supervisors Dr Rachel Kangethe, Dr Judy Kamau and Dr Anne MbwayoInstitutional affiliation: University Of Nairobi department of medicine /psychiatry

Introduction: I would like to tell you about a study being conducted by the above listed researchers. The purpose of this consent form is to give you the information you will need to help you decide whether or not your child should participate in the study. Feel free to ask any questions about the purpose of the research, what happens if your child participates in the study, the possible risks and benefits, the rights of your child as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions to your satisfaction, you may decide if you want your child to be in the study or not.

This process is called 'informed consent'. Once you understand and agree for your child to be in the study, I will request you to sign your name on this form. You should understand the general principles which apply to all participants in a medical research:

Your child’s decision to participate is entirely voluntary

You child may withdraw from the study at any time without necessarily giving a reason for his/her withdrawal iii) Refusal to participate in the research will not affect the services your child is entitled to in this health facility or other facilities.

For children below 18 years of age we give information about the study to parents or guardians. We will go over this information with you and you need to give permission in order for your child to participate in this study. We will give you a copy of this form for your records.

What Is The Purpose Of The Study?

The researchers listed above are conducting a study on children who are between 8 to 23years, and have consented/assented and have been living in the institution to date the purpose of the interview is to find out about the emotional disorders and prevalence among these groups

Participants in this research study will be asked questions general feelings and closeness to others.

There will be approximately 300 participants in this study randomly chosen. We are asking for your consent to consider your child to participate in this study.

What Will Happen If You Decide You Want Your Child To Be In This Research Study?

If you agree for your child to participate in this study, the following things will happen:

You will be given a questionnaire and sited in your usual place in class you will answer in the presence of the researcher feel comfortable answering questions. The questionnaire will take approximately 60 minutes to complete but less time could be used.

Topics such as anxiety, happiness, appetite, sleep, isolation, trauma, suicidality will be covered.

After finishing, (the participant will be thanked for their time and researcher will move to the next class. No invasive procedure will be used.

We will ask for a telephone number where we can contact you if necessary. If you agree to provide your contact information, it will be used only by people working for this study and will never be shared with others. The reasons why we may need to contact you include, that we need to discuss further things relevant to the study.

Are There Any Risks, Harms, Discomforts Associated With This Study

Medical research has the potential to introduce psychological, social, emotional and physical risks. Effort should always be put in place to minimize the risks. One potential risk of being in the study is loss of privacy. We will keep everything you tell us as confidential as possible. We will use a code number to identify your child in a password-protected computer database and will keep all of our paper records in a locked file cabinet. However, no system of protecting confidentiality can be absolutely secure so it is still possible that someone could find out your child was in this study and could find out information about your child.

Also, answering questions in the interview may be uncomfortable for you. If there are any questions you do not want to answer, you can skip them. You have the right to refuse the interview or any questions asked during the interview.

It may be embarrassing for you to share private things, we will do everything we can to ensure that this is done in private. Furthermore, all study staff and interviewers are professionals with special training in these examinations/interviews. Also counselling may be stressful.

Are There Any Benefits Being In This Study?

Your child may benefit by freely giving the required information, you may be counseled on health information etc. We will refer your child to a hospital for care and support if necessary. Also the information you provide will help us better understand the systems. This information is a major contribution to science and society.

Will Being In This Study Cost You Anything?

(Explain) __none apart from your time and energy

Is There Reimbursement For Participating In This Study?

There will be no monetary or material benefit .From either side only cooperation from both parties will make the research fruitful..

What If You Have Questions In Future?

If you have further questions or concerns about your child participating in this study, please call or send a text message to the study staff at the number provided at the bottom of this page. 07

For more information about your child's rights as a research participant you may contact the Secretary/Chairperson, Kenyatta National Hospital-University of Nairobi Ethics and Research Committee Telephone No. 2726300 Ext. 44102 email uonknh_erc@uonbi.ac.ke.

The study staff will pay you back for your charges to these numbers if the call is for study-related communication.

What Are Your Other Choices?

Your decision to have your child participate in this research is voluntary. You are free to decline or withdraw participation of your child in the study at any time without injustice or loss of benefits. Just inform the study staff and the participation of your child in the study will be stopped. You do not have to give reasons for withdrawing your child if you do not wish to do so. Withdrawal of your child from the study will not affect the services your child is otherwise entitled to in this health facility or other health facilities.

For more information contact Dr Joan Ahero Afullo at UNIVERSITY OF NAIROBI from 8AM to 5PM TELL 0713287558

APPENDIX9: Consent Form (Statement Of Consent)

Parent/guardian statement

I have read this consent form or had the information read to me. I have had the chance to discuss this research study with a study guardian. I have had my questions answered by him or her in a language that I understand. The risks and benefits have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that my participation and that of my child in this study is voluntary and that I may choose to withdraw it any time.

I understand that all efforts will be made to keep information regarding me and my child's personal identity confidential.

By signing this consent form, I have not given up my child's legal rights as a participant in this research study.

I voluntarily agree to my child's participation in this research study: Yes No

I agree to have my child undergo _____ testing: Yes No

I agree to have (define specimen) preserved for later study: Yes No

I agree to provide contact information for follow-up: Yes No

Parent/Guardian signature /Thumb stamp: _____ Date _____

Parent/Guardian printed name: _____

Researcher's statement I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given his/her consent.

Printed Name: Dr Joan Ahero Afullo Date: _4/5/2019 Signature:

Role in the study: researcher Signature: _____Date; _____

APPENDIX 10:Child Assent Form

Project Title: Prevalence of emotional disorders among institutionalized children in suburb

Investigator(s): Dr Joan Ahero Afullo. Am doing a research study about effects of institutionalization on the emotions of children.

Permission has been granted to undertake this study by the Kenyatta National Hospital-University of Nairobi Ethics and Research Committee (KNH-UoN ERC Protocol No. http://erc.uonbi.ac.ke/node/3355.

This research study is a way to learn more about people. At least 122 children will be participating in this research study with you. If you decide that you want to be part of this study, you will be asked to (verbalize your assent and spare 60 minutes of your time to answer some of our questions.description, including time involved). There are some things about this study you should know. These are (fears, trauma, re-experiencing previous episodes depending, on what situation you faced prior to being brought to the institution.

Not everyone who takes part in this study will benefit. A benefit means that something good happens to you. We think these benefits might be (relief after verbalizing your problem which had bothered you for a long time e.g suicidal ideations or attempt) If you do not want to be in this research study, we will abide and respect your decision.KNH-UoN/ERC/FORM/IC03

When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study. You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay too. Your parents know about the study too. If you decide you want to be in this study, please sign your name.

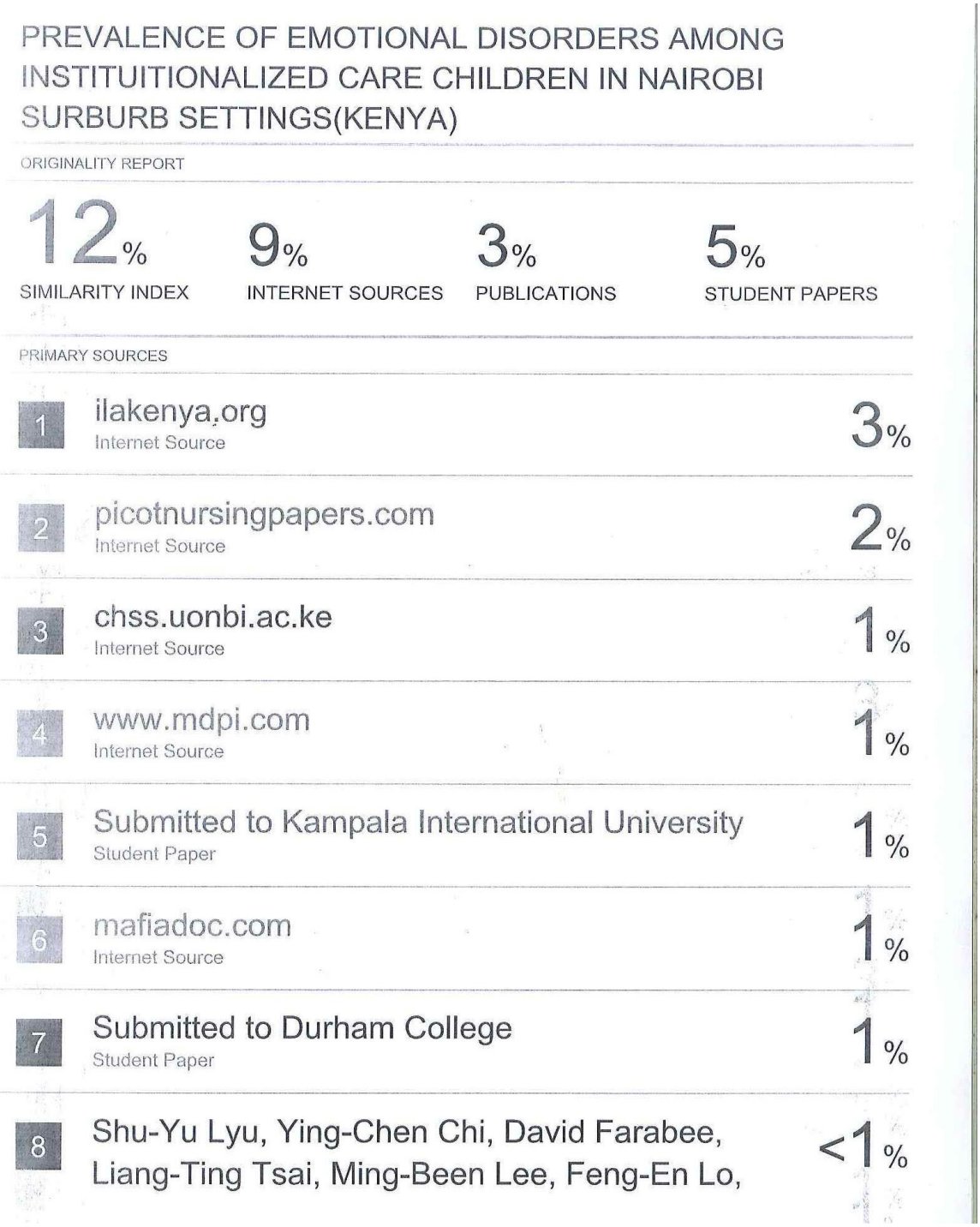
I, _____, want to be in this research study.

_____ _____

(Signature/Thumb stamp) (Date) .

APPENDIX 11: Anti Plagarrism Report

PREVALENCE OF EMOTIONAL DISORDERS AMONGINSTITUITIIONALIZED CARE CHILDREN INSURBURB



PREVALENCE OF EMOTIONAL DISORDERS AMONG INSTITUITIONALIZED CARE CHILDREN IN NAIROBI SURBURB SETTINGS(KENYA)

ORIGINALITY REPORT

12%	9%	3%	5%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	ilakenya.org Internet Source	3%
2	picotnursingpapers.com Internet Source	2%
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8	Shu-Yu Lyu, Ying-Chen Chi, David Farabee, Liang-Ting Tsai, Ming-Been Lee, Feng-En Lo,	<1%

	Donald E. Morisky. "Psychological distress in an incarcerated juvenile population", Journal of the Formosan Medical Association, 2015 Publication	
9	www.kenya.iom.int Internet Source	<1%
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	Socio-Demographic Risk Factors", International Journal of Environmental Research and Public Health, 2012. Publication	
18	www.coursehero.com Internet Source	<1%
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24	Rahman, Wasima, M S I Mullick, Mohammed Asraful Siddike Pathan, Nafia Farzana Chowdhury, Mohammed Shahidullah, Helaluddin Ahmed, Surajit Roy, Atiqul Haq Mazumder, and Farzana Rahman. "Prevalence of Behavioral and Emotional Disorders among the Orphans and Factors Associated with these Disorders", Bangabandhu Sheikh Mujib Medical University Journal, 2012. Publication	<1%

APPENDIX 12: Research Authorization

Republic of Kenya

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref:RCE/NRB/GEN/VOL.1

DATE: 28th January, 2020

Dr. Joan Ahero
University of Nairobi
NAIROBI

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on "**Prevalence of emotional disorders among institutionalized care children in suburbs**

This office has no objection and authority is hereby granted for a period ending **05th November, 2020** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the Sub County you intend to visit.

REGIONAL DIRECTOR OF EDUCATION NAIROBI
28 JAN 2020
MINISTRY OF EDUCATION P. O. Box 74629, NAIROBI

JAMES KIMOTHO
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI

C.C.

Director General/CEO
Nation Commission for Science, Technology and Innovation
NAIROBI

APPENDIX 13: Approval Of Modifications

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
(254-020) 2726300 Ext 44355

KNH-UoN ERC
Email: uonknh_erc@uonbi.ac.ke
Website: http://www.erc.uonbi.ac.ke
Facebook: https://www.facebook.com/uoeknh.erc
Twitter: @UONKNH_ERC https://twitter.com/UONKNH_ERC

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/ Mod&SAE/501

27th November 2019

Dr. Joan Ahero Afullo
Reg. No. H58/81186/ 2015
Dept.of Psychiatry
School of Medicine
College of Health Sciences
University of Nairobi

Dear Dr. Afullo

Re: Approval of modifications – study titled 'Prevalence of Emotional Disorders among Institutional Care Children in Suburb setting' (P395/05/2019)

Your communication dated October 15, 2019 refers.

The KNH-UoN ERC has reviewed and approved changes in the study sites namely; Foundation Stone Trust Children's Home and the Carry the light Children's Home both in Siaya County to Kabete Approved Home, Juvenile Remand Home and Getathuru Reception Centre all in suburb setting in Nairobi County due to administrative reasons.

This changes are reflected in the revised proposal and are acceptable since they will not interfere with approved study outcomes.

Yours sincerely

PROF. M.L. CHINDIA
SECRETARY, KNH-UoN ERC

c.c. The Principal, College of Health Sciences, UoN
The Director CS, KNH
The Chair, KNH-UoN ERC
The Dean, School of Medicine, UoN
The Chair, Dept. of Psychiatry, UoN
Supervisors: Dr. Rachel Kangethe(UoN), Dr. Judy Kamau(UoN), Dr. Anne Mbwayo(UoN)

Protect to discover

APPENDIX 15: Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **226191**

Date of Issue: **05/November/2019**

RESEARCH LICENSE

This is to Certify that Dr.. Joan Ahero of University of Nairobi, has been licensed to conduct research in Nairobi on the topic: PREVALENCE OF EMOTIONAL DISORDERS AMONG INSTITUTIONALIZED CARE CHILDREN IN SUBURBS for the period ending : 05/November/2020.

License No: **NACOSTI/P/19/2507**

226191

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY &
INNOVATION

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28/01/2020

COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI
TEL: 341666