KNOWLEDGE, ATTITUDE AND PRACTICE OF MIDWIVES IN THE MANAGEMENT OF WOMEN WITH POSTPARTUM MENTAL DISORDERS AT MOI TEACHING AND REFERRAL HOSPITAL, ELDORET, KENYA.

BY

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Declaration

Declaration by the Candidate

I hereby declare that this is my original work and that it has not been presented in any forum for academic purposes or published in any journal before. Reproduction of any part of the thesis is prohibited.

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Dedication

I dedicate this work in memory, to my late parents; Mama Phaustina Naututu and Baba Cleophus Wawire who had wished to see me grow to greater heights but never made it. May god rest their souls in eternal peace!

"From you I derived my inspiration"

Kabimba Anne Wawire

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GOD'S BLESSINGS TO YOU ALL.

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Operational Definitions

Midwife: An individual who having been regularly admitted to a midwifery education programme duly recognized in the country it is located, has successfully completed the prescribed course of studies in midwifery education and has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and able to conduct deliveries on her own responsibility and to care for a perinatal woman and her neonate (ICM, 2013).

Mental disorders: Mental or bodily conditions marked primarily by sufficient disorganization of personality, mind and emotions to seriously impair the normal psychological functioning of the individual (Diagnostic Disorders Statistical Manual of Mental Text Revised 4thed (DSM-IV R, 2013).

Postpartum: The period from complete delivery of the baby, placenta and membranes to 6 to 8 weeks (42-56 days) thereafter, during which all the systems in the woman's body recover from the effects of pregnancy, labour and childbirth and return to their non-pregnant state (Fraser et al., 2010).

Pregnancy: The period taken from conception to childbirth. A state of being gravid, it lasts for 40 weeks or 280 days starting from the first day of the woman's last normal menstrual period (LNMP). It is divided into three trimesters each lasting three months (Approx. 94 days each) (Farlex, 2013).

Labour: Period of spontaneous onset of regular and progressive painful uterine contractions resulting in progressive cervical effacement and dilatation to delivery of the baby, placenta and membranes (Fraser et al., 2006).

Childbirth: Process of expulsion of the baby, the placenta and membranes through the birth canal or via caesarean section (Farlex, 2013).

Knowledge: It refers to the information or correct responses obtained from the midwives to the knowledge on postpartum mental disorders elicited by use of semi-structured researcher administered questionnaire (Dictionary of modern medicine, 2013).

Attitude: Attitude is defined as a way of thinking or feeling about, or viewing someone or something as reflected in the person's behaviour or means and ways the midwives feel, look and think about and their opinion towards women with PMD, measured by a structured attitude scale (Dictionary of modern medicine, 2013).

Practice: Practice can be defined as the actual doing again and again, performance, application, use of an idea, belief or method as opposed to theories about such an application or use (Oxford English Dictionary, 2010).

Midwifery knowledge entails being admitted to a midwifery education programme and successfully completing the prescribed course acquiring the required qualifications and after being registered and licensed to practice midwifery (ICM, 2013).

Abbreviations

ACNM: American College of Nurse-Midwives

ANOVA: Analysis of Variance

CONAMA: Confederation of African Midwives Associations

AWHONN: Association of Women's Health, Obstetric and Neonatal Nurses

CPD: Continuing Professional Development

DSM-IV-TR: Diagnostic Disorders Statistical Manual of Mental Text Revised 4thed.

EPDS: Edinburgh Postpartum Depression Scale

ICM: International Confederation of Midwives

ICN: International Council of Nurses

IREC: Institutional Research and Ethics Committee

KAP: Knowledge Attitude and Practice

LBW: Low Birth Weight

MINI: Mini International Neuro- psychiatric Interview

MTRH: Moi Teaching and Referral Hospital

NICE: National Institute for health and Clinical Excellence

PHQ-9: Patient Health Questionnaire-9; substance abuse

PHQ-2: Patient Health Questionnaire-2; frequency of depressed mood and anhedonia over the past two weeks.

PPD: Postpartum depression

PPP: Postpartum Psychosis

PMD: Postpartum Mental Disorder

SRQ: Self-Reporting Questionnaire

SPSS: Statistical Package for the Social Sciences

U.K: United Kingdom

U.S: United States

UNFPA: United Nations Population Fund

USNS: United States National Survey

WHO: World Health Organization

Abstract

Introduction: Midwives predominantly focus their care on women and their families throughout pregnancy, labour, childbirth, breastfeeding and peurperium. The midwives can influence the health and well-being of women and their infants. The care of women with postpartum mental disorders (PMD) remains an issue of great concern to midwives. However, midwives receive little or no training on this issue since the curriculum does not include the competences on midwifery mental disorders. The incidence of PMD in this hospital is not documented.

Methodology: Descriptive cross sectional design was used. Population was all midwives in post-natal and mental health units. Sixty four midwives were sampled using stratified disproportionate sampling /census. Data was collected using Questionnaires and patient hospital records, entered and analyzed using Statistical Package for Social Science (SPSS) version and presented in graphs, tables and descriptions.

Findings: The midwives (41%) reported socio-demographic characteristics as signifcant. Most midwives (45.3%) reported primiparas as the most vulnerable group. Married women, living with spouses were at most risk of PMD (50%). Some midwives (37%) cited contributory factors as strain and stresses, poor social support and previous history of mental illness. Most midwives (67.2%) reported impaired concentration, mood swings, and self neglect as clinical features. Some midwives (28%) identified knowledge and skills gaps amongst themselves. However 23% reported that midwives gave low priority to patients, leaving decisions to doctors, referring them to other disciplines for management and shifting care to relatives. Most midwives (68.8%) indicated that PMD registered at MTRH cut across all socioeconomic classes. However, 67% of midwives indicated that mothers with PMD were separated from their infants and families. Infant complications included malnutrition, anemia, diarrheal diseases, pneumonia and poor weight gain. Majority, (60%) of the midwives had their clients booked for psychiatric, social workers' and counselors' follow up or left to the relatives. The midwives had divided views on the availability of screening services with 50% agreeing and 50% disagreeing.

Conclusion: It is evident that there are knowledge and skills gaps among midwives, the attitude of the midwives towards the care of women with PMD tended to lean on the negative and that although the midwives may have been competent, the actual practice and care provided to women with PMD had been met with shortfalls and challenges, hence, women with PMD did not receive adequate management from the midwives.

Recommendation: A more comprehensive KAP research study, involving midwives and reproductive health personnel on peri-natal mental disorders should be conducted. There is also need to carry out a needs assessment study and possible capacity enhancement for the midwives. A study on community involvement in the care of women with perinatal mental disorders.There is need for midwives to take active roles in the management of women with PMD and equip self with necessary knowledge and skills. Continuous Education Modules should be developed to educate/update the midwives on mental health disorders and their management. There is need to develop and utilize Screening tools for PMD. Interventional studies in PMD and publishing results in peer reviewed Journals for worldwide sharing would go a long way to improve psychiatry midwifery care.

CHAPTER ONE: INTRODUCTION

1.0: Background

Midwives predominantly focus their care on women and their families throughout pregnancy, labour, childbirth, breastfeeding and peurperium. The care of women with postpartum mental disorders (PMD) remains an issue of great concern to midwives (Kulkarni et al. 2008). In Kenya midwifery education has not been singled out as a standalone entity. Three decades ago, midwifery was a distinct discipline, where already qualified general nurses took a post basic specialization at diploma level. This fully prepared the midwife to handle all issues of a woman pertaining to pregnancy, labour, childbirth, breastfeeding and peurperium. This later transformed into a combined course called Kenya Registered Community Health Nursing (NCK, 2013). A few years ago, advancement in midwifery has been realized and now the country trains midwives at masters level and to a small extent doctorate level except psychiatry midwifery **(**ICM, 2013).

1.1: Knowledge of midwives regarding PMD

Midwifery knowledge dates back into the ancient Greek times when the midwives travelled with their equipment in search of women in child labour in their homes (Soranus) and the biblical recognition of the two Hebrew women who refused to kill the male infants in defiance of the king of Egypt (Exodus 1:15-22). The midwives knew how to diagnose perinatal conditions and events that led to stress and depression. They handled the labouring women by learning and responding to their behaviour (Nechama, 2011). The midwife having undergone training and exposed to technology is the most skilled birth attendant capable of helping mothers through the birth process. The midwife is therefore expected to be knowledgeable and skilled to comprehend the art through theory and

practice. This knowledge comprises both theoretical and practical aspects of care. He/she must be conversant with the physiological, psychological and emotional changes that a perinatal woman goes through (Eden, 2015).

1.2: Midwifery Practice

In this study, 'practice' will be used to denote the care given to women diagnosed with PMD by the midwives at MTRH. The midwives' scope of practice mandates them to take care of a perinatal woman and make clinical judgments and decisions regarding the management of the woman for her safety and the wellbeing of the neonate. The midwife is charged with the responsibility of ensuring a healthy baby and mother. The practice involves physical care, counseling/health education and contemporary medication (Warenius et al., 2015). The aim of practice is to provide holistic care, manage and prevent stressful and anxiety states prevailing in women, families, communities and the society as a whole while embracing evidence based practice. The midwife must therefore demonstrate such skills as providing professional support and reassurance, good communication and observation and have ability to respond to women's concerns (ACNM, 2010).

1.3: Midwifery as a profession

The International Confederation of Midwives (ICM) and the Nursing Council of Kenya (NCK) have set basic competencies, standards and guidelines that ensure that midwives have quality education on the management of the perinatal women (ICM, 2013 & NCK, 2013). Such include physical assessment, physical care, mental status examination (MSE), nutritional care and support, basic counselling, health education and administration of contemporary medicines (ICM, 2010).

1.4: Problem Statement

It is generally estimated that approximately 65,000 women in Kenya suffer from mental disorders in general (WHO, 2015). However, there is no clear documentation on the midwifery management of these perinatal mental disorders. In Kenya, postpartum mental disorders have not received the attention they deserve to allow for early recognition and management hence remain disabling to the mothers and their infants as they significantly and negatively impact on the maternal-infant relationship and bonding. Further still, there are no clear guidelines on midwifery mental health care stipulated in NCK standards and the Beyond Zero Campaign Document (Macharia & Kenyatta, 2013). At MTRH, while there are protocols for managing other perinatal conditions, there are no laid down procedures or protocols for admitting and managing women with PMD. This has contributed to knowledge and skills deficit amongst midwives in the care of women with PMD. Early discharge of mothers from the hospital wards following childbirth and lack of close follow-up have also contributed to under diagnosis/misdiagnosis or completely missing out the women with postpartum mental disorders hence the poor management (Lana et al., 2013).

Whereas there have been periodic updates on various perinatal conditions in the MTRH maternity unit, there has been none on psychiatric conditions in the perinatal period and in particular the postpartum period. According to the ward records, there hasn't been any update, Continuing Professional Development (CPD) on postpartum mental disorders. The incidence of postnatal mental disorders at MTRH is not clear owing to the inconsistent records, under diagnosis/misdiagnosis. There is no information on the availability of validated assessment tools or instruments in the hospital to help diagnose PMD. It is estimated that about one in fifty mothers in Kenya experience episodes of mental

disturbances of which 50% become chronically ill, 2-3% die, 10% recover with residual disability and are likely to have a recurrence with the next pregnancy, 30% recover completely while the remaining 5-7% are lost to follow up (WHO, 2013). It is not clear how these women are managed so as to come out with these figures. The goal is to provide holistic care, solve and prevent stressful and anxiety states prevailing in women, families, communities and the society as a whole yet there is no programme designed to train or update the midwives on the management of women with PMD. Few researches in Kenya have been carried out to address this area (UNFPA and ICM, 2006). For example studies by Onono and Bukusi basically address postpartum depression in relation to HIV/AIDS and not a standalone postpartum mental condition (Onono et al.; 2015). While the need for mental health knowledge in midwifery has been highlighted in the literature, there is no evidence concerning the implementation of training on mental health for midwives working in maternity settings. According to the Nursing Council of Kenya Strategic Plan 2005 – 2010 (NCK, 2005) all enrolled nurses were supposed to have been upgraded to diploma level by the year 2010 yet there was no mention of post basic midwifery mental health training.

1.5: Research question

What knowledge, attitude and roles do the midwives have with regard to the management of women diagnosed with postpartum mental disorders at MTRH?

1.6: Broad Objective

To determine the knowledge, attitude and practice of the midwives in the management of women diagnosed with postpartum mental disorders at MTRH.

1.7: Specific Objectives

1. To assess the knowledge of the midwives with regard to postpartum mental disorders amongst postnatal women admitted at MTRH.

2. To evaluate the midwives' attitude towards women with PMD at MTRH

3. To determine the role of the midwives in the management of women with PMD at MTRH.

1.8: Significance of the study

The research findings will be used to drive policy change and hospital planning with regard to the management, discharge and follow up of women diagnosed with postpartum mental disorders. The findings will also act as reference material when designing protocols and procedure manuals for midwifery updates, practice and management of women diagnosed with postpartum mental disorders at MTRH, hence close gaps on midwifery knowledge and skills. The results will be used to support midwifery practice, promote the uptake of the research by linking it to specific guidelines for midwifery practice worldwide. The results will help in the development and validation of assessment instruments or tools for assessing women for mental disorders during pregnancy, labour, childbirth and peurperium by the perinatal midwives at MTRH.

1.9: Study Justification

The contribution of KAP studies to postpartum mental disorders prevention and management has not received much attention in Kenya and therefore in MTRH. This study will add to the growing body of knowledge needed by midwives to develop protocols and procedures for the care of women with PMD. The survey will provide data on key areas that require improvement in the management of women with PMD including

provision of mental health assessment instruments, tools and procedure manuals (WHO, 2011).

1.9.1: Purpose of the study

The study aimed at assessing the midwives' knowledge, attitude and practices towards women diagnosed with PMD admitted at Moi Teaching and Referral Hospital, postnatal and mental health units. This will contribute to improved service delivery, research uptake and midwifery education while promoting evidence based practice and service.

1.9.2: Ethical Considerations

Approval was obtained from Institutional Research and Ethics Committee (IREC) of Moi University and permission from the hospital, MTRH, to carry out the study was granted (appendices II&III). The researcher also submitted a written consent to the Medical Officer of Health, Kakamega County Hospital (appendix IV). Another written consent was presented to the midwives in the postnatal ward and mental unit at MTRH (appendix V). The details and purpose of the study and nature of the minimal risk involved were explained to the midwives to facilitate understanding. Maintaining confidentiality and privacy remained the benchmark of the study in handling data provided. All interviews were individualized and carried out in a private room. Midwives were booked in one by one such that there was no time overlap between two participants. No names of midwives were used but codes only known to the researcher. All data collected was kept under lock and key only accessed by the researcher.

1.9.3: Benefits to the participants and clients

By participating in this study the participants will gain knowledge about postpartum mental health issues at MTRH. The disseminated results will provide feedback that will

contain messages intended to create client and staff awareness, explain risk factors, signs and symptoms and management strategies for postpartum mental disorders thus lower the stigma experienced by the vulnerable women and their families (Dennis, 2006).

By applying the ethical principles throughout the research period, the study aims at enabling the midwives to treat women with PMD like any other sick woman in the community, allowing them to make informed decisions, encouraging self care and engaging them in activities of daily living. This will reduce cost burden on health; once the woman, family, community and the society are aware of the risk factors, they will be able to prevent them hence reduce the incidences of the disorders, frequency of hospital visits and admissions and therefore relief financial constrains (Robertson et al.; 2008).

CHAPTER TWO: LITERATURE REVIEW

2.1: Introduction

This chapter reviews the literature related to this study. It includes the ideas and findings of other researchers in Kenya and around the world on what is known about the research problem and what is yet to be researched. Literature information in this study includes the global views, regional and local study information about postpartum mental disorders with regard to midwifery knowledge, attitude and practice.

The history of postpartum mental illnesses dates back to 1797, when it was first described by a German Obstetrician, Osiander. He described the disorders as endogenous, inheritable illnesses with acute onset, benign course and fair response to treatment. During this time, the religious nuns and the old nannies took the role of midwives, helping women in child labour and birth. There was no formal training though they had informal knowledge about caring for the parturient mothers (Fraser et al, 2006).

The midwife needs to know that PMD may be rare yet have far reaching effects on mothers, babies and families. They affect close to 5-25% of total births worldwide. Psychotic signs and symptoms are florid, presenting dramatically in the early postpartum period yet rapidly changing from mild to acute phases that require urgent interventions (Bobbie, 2010). However, most recent studies have shown that postpartum mental disorders are becoming more common especially in the low resource countries (Linda, 2013), among which Kenya is one. With modernization, the midwife is equipped with knowledge and skills supported by technology. There are formal training schools of midwifery at diploma, masters' and doctorate levels. However Kenya as a country still lags behind as it is still in its infancy stages of achieving these trainings.

2.2: Types of Postpartum Mental Disorders

2.2.1: Postpartum Blues ('Baby Blues')

Postpartum blues, also known as 'baby blues' is a depressive disorder that manifests within 2 to 3 days of childbirth. It is so called because it happens after the birth of the baby with the symptoms peaking on the 4^{th} or 5^{th} days postpartum. It is characterized by mild mood swings, irritability, anxiety, decreased concentration, insomnia, tearfulness and laughter. However it is self-limiting, usually resolving within 1 to 2 weeks (Farlex, 2013).

The etiology is unclear but hormonal influence (oestrogen, progesterone and prolactin) is thought to play a role. No pharmacological intervention is required but psychosocial support and keen monitoring are key to the care of the woman. Prevalence is 40-80% of women depending on the parity (Narasimhaiah et al., 2011). Prevalence tends to rise in multiparas than in primiparas as indicated by a study in Alaska which showed that only 13% of the mothers presenting with postpartum depression were primiparas (Blabey, 2009). A study in a USA hospital showed that women who had two or more children reported significantly higher depressive symptom levels than those who had only one child (Linda, 2013).

2.2.2: Postpartum Psychosis (PPP)

This is usually a manifestation of bipolar disorder presenting within the first two weeks of childbirth or may develop a few months after as mere delusional depression. Postpartum psychosis is a rare disorder, affecting approximately 2-3 per 1000 births but regarded as the most severe of all the perinatal mental disorders (Fraser et al., 2010).

The risk factors include history of any mental disorder prior to pregnancy, family history of mental disorders or co-morbidities during pregnancy, increased use of tobacco, alcohol

and illicit drugs and drinks. It presents with severe insomnia, rapid mood swings, intense anxiety, psychomotor retardation and agitation, delusions and hallucinations, suspicion and fear, episodes of mania, major behavioral changes and confusion (Fraser et al., 2010). The role of the midwives is to initiate treatment, both pharmacotherapy and psychotherapy as well as encourage and promote social and family support systems and positive acceptance (ICM, 2013).

2.2.3: Postpartum Depression (PPD)

Postpartum depression is defined as a depressive disorder that manifests during the initial 12 months following childbirth (Cindy, 2012). The condition is perceived as 'normal' initially, especially for the primiparas. It is characterized by a sense of being overwhelmed, feelings of inadequacy, change in somatic function, intense irritability, persistent depressive moods, disinterest in activities coupled with disturbances in appetite, sleep, psychomotor function, energy level, poor concentration and self-worth, recurrent suicidal ideations or harming the baby, infanticide, anger and guilt. If left untreated, the condition results in chronic illness with adverse effects on self, infant and family. The prevalence is 5.5% to 25% depending on individual countries (WHO, 2013).

Across the globe, many women are reluctant to seek medical assistance for lack of trust in professionals and concerns about privacy, confidentiality and the fear of being dismissed or humiliated. The women then opt to seek traditional healers, herbalists or divine interventions. A qualitative study in the U.S.A reported that after depressed mothers made the decision to seek professional help, they felt disappointed, frustrated, humiliated and angry due to poor interactions with healthcare providers (Parvin et al., 2004)

The midwives are charged with the responsibility of caring for the woman and her infant holistically. This care involves psychosocial support, physical care (hygiene and grooming, assisting with baby care & breastfeeding, nutritional care). In severe cases, administration of contemporary antidepressants, monitoring adherence and follow up may be necessary. The most common risk factors include, low socioeconomic status, stressful life events, ante partum depression and anxiety, personal psychiatric history, family psychiatric history, poor social support, poverty, co-morbidities, unstable marital relationships/domestic violence, lack of knowledge with regard to normal physiological and psychological changes and stresses related to pregnancy, childbirth and peurperium (Ramchandani, 2009)

2.3: Diagnosis of Postpartum Mental Illnesses

According to a study by Association of Reproductive Health professionals (ARHP), 2013, midwives play a key role in screening for postpartum mental disorders and counseling. Screening may take the form of provider-administered or patient self-report assessment tools for identification of women at risk for PMD. Such tools include but not limited to, Postpartum Depression Predictors Inventory (PDPI Revised) used for interviewing the women from preconception to postpartum. It basically focuses on predictors of PMD. Edinburgh Postnatal Depression Scale (EPDS) assesses depressive moods based on patient responses to questions related to mood, anxiety, guilt, and suicidal ideation, Postpartum Depression Screening Scale (PDSS) focuses on sleeping/eating disturbances, anxiety/ insecurity, emotional labiality, mental confusion, guilt/ shame and suicidal thoughts. The short-form Depression Anxiety Stress Scales (DASS-21) is used to diagnose depression or anxiety in postpartum women and PHQ-2: (Patient Health Questionnaire-2) assesses frequency of depressed mood and anhedonia over the past two weeks (Miller et al.; 2006).

In the DSM-IV-TR (2013), symptoms of mental illnesses are more or less the same. Proper history taking and subsequent documentation of any past history of mental disturbances takes the lead in identifying the mental illnesses in the postpartum period. History of more than one episode of depression, severe stress, suicidal ideation or intent, lack of initiative, poor energy levels, hopelessness, hallucinations, delusions, disturbance in appetite and feeling sad among others that occur every day for 2 weeks are considered key in the diagnosis.

There are various screening instruments, tools and procedures available on the market (depression screening scale (PDSS), Edinburgh depression scale (EPDS), Beck depression inventory-ii (BDI-ii) and structural clinical interview of DSM-IV R axis1 disorders) among others used in the assessment of patients with mental disorders (APA, 2014)

2.3.1: Caring for the Woman with PMD.

The way the midwife will manage postpartum mental disorders will depend on his/her level of understanding, comfort, expertise and competencies in dealing with mental and emotional problems, as well as the perception of the seriousness of the woman's problem. Some of the competencies may include reassuring the woman, encouraging her to discuss her feelings, helping her identify family support systems and offering behavioral counseling, breastfeeding education and support and mandatory postpartum follow-up visits (NCK, 2010). The midwife encourages the woman with PMD to have enough rest, eat a well-balanced diet, exercise regularly and promote postpartum support groups. Women diagnosed with PMD need individualized care from midwives and therefore the care should be nurturing, identifies risk factors for PMD and gives them the tools and resources to obtain healthcare needed after hospital discharge. Hospital based perinatal midwives are the key members of the healthcare team responsible for caring for women

with postpartum mental disorders. The social support system must be emphasized as it plays an important role in the management and recovery of women with PMD. Given the risks of pharmacological interventions during puerperium, it is important that the midwife balances these risks against psychotherapy and counseling with regard to the benefits to the woman as well as the infant. It should therefore be appreciated that breastfeeding should be encouraged and promoted and that the woman should be helped to actively participate despite the contemporary pharmacotherapy. In general, the management for the women with PMD should always embrace case specificity based on risk-benefit analysis (Annemarie & Crozier, 2012).

The concept of collaborative management comprising the midwives, obstetricians, psychiatrists, psychiatric nurses, counselors, nutritionists, clinical psychologists and social workers should form the basis of treatment of the women with PMD. Multidisciplinary team approach of educating the women and their families about the causes, risk factors, predisposing factors, prevention, care, active treatment and providing supportive psychotherapy alongside continuous safety risk assessment for the woman and her infant (Aaron & Tekoa, 2012). Community assessment, primary preventive measures and pre-conception psychological care can only be achieved if all team players understand the uniqueness of each individual woman in her perinatal period and the subsequent willingness to participate in the care (Bledsoe &Grote, 2006)

The treatment options are varied and include psychosocial therapies, cognitive behavioral therapy, interpersonal psychotherapy- individual's interpersonal relationship and changing roles, addressing grief, disputes, role transition and interpersonal deficits. Group therapy increases support network as well as offering support and education (AWHONN, 2008). Collaboration with other international organizations, family and marriage encounters in

the care plays an important role in rapid recovery of women with PMD. Appreciating partners' contribution and utilization of peer support groups have also proved effective in the care strategies. The pharmacotherapy approaches should be undertaken with caution in view of breast feeding because most of the psychotropic medications are secreted in milk hence the effect to the infant (Fraser et el., 2010).

Midwifery care for women with mental disorders remains key in reducing the shortfalls between the midwives, obstetricians and the mental health care systems as well as promoting early diagnosis and prompt interventions (Bobbie, 2010). Within the East African region, a few studies have been carried out on postpartum mental disorders. For example a study carried out at Muhimbili National Hospital, Tanzania indicated that midwives played very important roles in caring for women with postpartum depression (Ndosi &Mtawali, 2002).

In Uganda, a study carried out revealed that Treatment of postpartum mental disorders focused on psychotherapy offered by midwives, traditional healers and divine interventions. The study further noted that midwives in Uganda have the dual role of offering the contemporary care alongside psychotherapy and pharmacotherapy (Nakku et al., 2006).

The studies carried out in Kenya have not been able to precisely document the exact figures of cases identified and the treatment given. For example in 2000, the extrapolated figures were estimated at approximately 65,000 women which has since been revised represents about 0.21% of all the births (WHO, 2015 updated report). The overall trend of the care strategy leans sluggishly towards counseling and psychotherapy and largely on pharmacotherapy. The role of the midwife seems to end in the ward and there is lack of

follow up of the diagnosed cases into the families and communities (Bobbie, 2010). In view of the haphazard and inconsistent midwifery care regionally and globally, it is important that this study critically examines the care given by the midwives at MTRH and makes recommendations that will help improve and sustain quality care for women with PMD. Research demonstrates that both individual and group counseling as well as cognitive-behavioral therapy is most effective. While the midwives play a major role in promoting health/help-seeking behaviors, they are met with barriers including and not limited to inappropriate assessments, insufficient knowledge about PPD, lack of skills and inaccessibility to health care by the patients (Dennis & Chung-Lee, 2006).

2.4: Complications of Postpartum Mental Disorders

Postnatal depression being the most common psychiatric disorder encountered by the pregnant women has detrimental effects on the infant and its emotional development, the woman and her family (Lisa & Cynthia, 2013). The midwife encounters various complications in the course of care. The complications include those affecting the infant, the woman and her family.

Infant: Impaired brain tissue, cognitive, emotional and psychological development. Long term impaired interpersonal relationship in later life. Malnutrition may cause poor growth outcomes due to ineffective breastfeeding in the event that the mother is unable to breast feed (Lisa & Cynthia, 2013).

Woman- Decreases the woman's ability to cope with demands of the baby and limits her capacity to engage positively in social interactions. Chronic recurrent depression increases hospital admissions accompanied by increased morbidity and mortality rates (Fraser et al, 2010)

Family: Poor acceptance, social stigma, lack of support, discrimination and marriage instability cannot go unmentioned because of their significance in helping the woman to cope (Pilyoung and James, 2007).

Community: social rejection. Dissociation; members of the community dissociate themselves from the affected family (Jenkin et al., 2010)

2.5: Role of Midwifery Professional

In Kenya, the midwifery programme prepares the midwife to offer services in different aspects and settings of reproductive health to women in their perinatal period, their infants and families (NCK, 2013). However, prenatal and postnatal care tends to become routine and it may be taken for granted that things are being done correctly, without their having been evaluated. Because of this, the Pan American Health Organization (PAHO, 2009) emphasizes that midwifery care for women during gestation, intrapartum, and puerperium requires nursing practices based on evidence to propose, from the very knowledge of the discipline to the revision of healthcare practices.

In summary, extensive literature review was cited from across the globe and locally to support my research. Thus, literature review has revealed that midwives though well trained to care for a prenatal woman, aspects of midwifery mental health care have not been well addressed. It therefore follows that empowering the midwives will improve women's health and ultimately reduce incidences of PMD.

2.6: Conceptual Model for Knowledge Attitude and Practice (KAP)

The model has been adopted from "The KAP Survey Model" (Knowledge, Attitudes, and Practices) designed by Médicins du Monde, 2011and adjusted to suit this study.

Description: Knowledge, Attitude and Practices (KAP) survey is a quantitative method that uses predefined standardized questionnaires that provide access to quantitative and qualitative information from participants. KAP surveys can also reveal misconceptions or misunderstandings deemed to be problems and potential barriers to behavior change. KAP survey is based on the concept of "opinion" and "declarative". KAP may reveal what was said, what is said and what is done but then the researcher must be careful to note the gaps between them. KAP survey measures the extent of a known situation and provides new tangents of a situation's reality. It can also enhance the knowledge, attitude, and practices of specific themes in health care. KAP helps establish the baseline (reference value) for use in future assessments and help measure the effectiveness of health education, knowledge and ability to change health-related behaviors (Médicins du Monde, 2011).

This model has been applied to this study by virtue of its functions of addressing what was said, what is said and what is done and identifying the gaps. This is basically the focus of this study. The model has helped in collecting valuable quantitative and qualitative data from the midwives. This information is intended to help in designing protocols and procedures to improve midwifery care with regard to PMD.

CHAPTER THREE: METHODOLOGY

3.1: Introduction

In this chapter, the process, tools and methods used to conduct the study are explained. The following were covered: the procedure used in selecting the participants, study design, study site, sampling technique, study population, data collection and data analysis.

3.2: Study Design

Descriptive cross-sectional study on the midwives' KAP in the management of women diagnosed with postpartum mental disorders was used. In this type of design, the researcher gets the detailed information with regard to the midwives' knowledge, attitude and practice (Houser, 2008) at the given time

3.3: Study Site

This study was conducted at Moi Teaching and Referral Hospital (MTRH), the second largest referral hospital in Kenya. It serves as the teaching hospital for the college of health sciences; Moi University, University of East Africa, Baraton (UEAB), the Kenya Medical Training College, Eldoret, St. Clare, Kaplong Mission Nurse Training School, MTRH Nurse Training Center and Ortum Medical Training College among others . The hospital has a total of 800 community health nurse/midwives deployed in different sections, units and wards. For purposes of this study, the following wards and units in the hospital were sampled.

Post-natal ward: The ward is situated in the main building of Riley Mother and Baby Hospital (RMBH) within MTRH. The hospital is one of its kind in East Africa. It caters for all the perinatal women within and without Uasin Gishu County. It is the main referral maternity hospital in the region and county. It is divided into two sections; normal

postnatal section (hostel) with a bed capacity of 30 structured into six cubicles, where mothers who delivered normally with no complications are observed for about six to eight hours and thereafter discharged home with their babies. The mothers whose babies are admitted in the newborn unit are also accommodated here. The second section is abnormal postnatal. It houses all postnatal mothers with complications (women at risk). It has a bed capacity of 35. Patients admitted in this section include mothers who have undergone caesarian sections for various reasons, women with medical conditions and any other women who require close observations and monitoring post childbirth. The ward has 28 midwives.

Postnatal clinic: The postnatal clinic is located on ground floor and next to the MCH/FP clinic. Postnatal women are examined at six weeks post childbirth to assess the involution of the uterus, adaptation and maternal coping mechanisms. Introduction to family planning methods and continuation of baby immunizations schedule are also addressed. The clinic is managed by 4 midwives among other staff. These midwives have only had basic knowledge on psychiatric nursing and not with regard to midwifery since there is no such curriculum in the Kenyan midwifery standards of practice.

Mental health unit: This unit is situated a few meters away from the rest of the units probably due to the nature of patients. It hosts all psychiatric patients, male, female and children. It is divided into male and female wards. It has a bed capacity of 26. The admissions to this unit come through accident and emergency unit or as referrals from other peripheral hospitals, private clinics or wards within MTRH. The unit has 22 nurse/midwives of whom the nurses have post basic psychiatric nursing but not mental health in midwifery.

Psychiatric outpatient clinic: This clinic is situated on the ground floor of the main MTRH/Moi University administration complex. All psychiatric patients including women with postpartum mental disorders are followed up in this clinic. These patients include discharges from the wards and referrals from other hospitals and private practitioners within and without Eldoret town and the neighboring countries of Uganda and Tanzania. The clinic is managed by 4 midwives among other staff. Other than the basic introduction to psychiatric nursing, these midwives have not been trained in midwifery psychiatry because the Kenyan curriculum does not cover it.

3.4: Study Population

A study population is defined as the entire set of subjects of interest to the researcher (Houser, 2008). In this study, the population will comprise all midwives who have been working at MTRH in the units and wards mentioned above for more than six months preceding the study and on duty during data collection time.

3.5: Sample size

This is defined as a subset of the population (least number of respondents to be interviewed in order to generalize the results). The sample size depends on the research question and objectives and the intended degree of accuracy and representativeness (Houser, 2008). There are different ways of calculating the sample size. However, in this study, all midwives working in the postnatal ward and mental health units, MTRH, will be respondents.

3.6: Sampling Technique

Census/Disproportionate Sampling. This is a sampling strategy used when the populations are composed of more than one subgroups that are vastly different in number. The number

of participants from each subgroup is determined by its relation to the entire population. In this study the sample was based on the ratios of midwives in the above stated wards and units. The population was divided into sub-populations as per the units mentioned above. It follows the stratified sampling process (Houser, 2008).

The total number of midwives in the selected areas was 64 sampled as indicated below:

Postnatal ward:	28 midwives
Postnatal clinic:	4 midwives
Mental health unit:	28 midwives
Psychiatric clinic:	4 midwives
Total	64 midwives

3.7: Exclusion criteria

Midwives who had either suffered a PMD or had relatives with PMD were excluded.

3.8: Inclusion Criteria

All midwives who had been working in the units stated above for more than six months preceding the study. This was because they were the midwives with longer experience in serving the women and also had a wider encounter with most of the women with PMD.

3.9: Data Management

This section will basically focus on processes of data management.

3.9.1: Study Instruments

A pre-coded semi-structured questionnaire was developed and then validated by the supervisors. The questionnaire was pre-tested during the pilot study carried out at Kakamega County hospital in the months of November and December, 2013. (Appendix

VII). The results of the pilot study revealed ambiguity in questions 3 (what is your level of academic education? Options were, certificate, diploma, BSc.N, MSc.N, PhD). This was corrected to read; "what is your level of professional qualifications?" Question 18 read 'In the course of your work, what complications/implications have you encountered'? The word 'implications' was deleted. The researcher administered the questionnaire to all eligible midwives who consented. The completed questionnaires were kept by the researcher under lock and key.

3.9.2: Data Collection

Triangulation approach of data collection was employed. The primary data was collected using a pre-coded researcher administered semi-structured questionnaire (Houser, 2008). Secondary data was collected from the patients' nursing records (nursing cardex). The researcher accessed the daily ward inpatient register, identified the names and In Patient numbers for patients admitted with any postpartum disorder in the previous one year (April 2013-April 2014), twenty four names were identified. This list of patients was then taken to the registry where the clerks assisted in retrieving the files. The data to be collected was based on the care provided by the midwives and included, mental status examination, counseling and health education, physical care of the patient; breast examination, hygiene, feeding, breast feeding. Data from properly completed questionnaire was entered into the SPSS program for analysis. All the 64 questionnaires were completed and returned. There was no spoiled questionnaire translating into 100% response rate. Data was collected and entered into the computer. Data cleaning and coding was done using the statistical package of social sciences (SPSS) and the t - test statistical test.

3.9.3: Data analysis

Data was analysed using the statistical package of social sciences (SPSS) version

3.9.4: Data Presentation

The analyzed data was presented in tables, descriptions, charts and graphs.

3.9.5: Bias minimization

The questionnaire was developed and approved by the supervisors. The questionnaire was pre-tested during the pilot study carried out at Kakamega County hospital in the months of November and December, 2013. The researcher interviewed ten (10) midwives, selected randomly by picking every alternate midwife who entered the nursing station; five midwives from the psychiatric ward and five from the postnatal ward. The results of the pilot study revealed ambiguity in questions 3 (what is your level of academic education? Options were, certificate, diploma, BSc.N, MSc.N, PhD). This was corrected to read; "what is your level of professional qualifications?" Question 20 read 'In the course of your work, what complications/implications have you encountered'? The word 'implications' was deleted. Generally, 65% of the midwives cited knowledge and skills inadequacy leading to inadequate care for the women diagnosed with PMD. Most midwives (70%) reported that basically the management was technical and that most of the psychosocial care was carried out by psychiatrists, counselors and social workers. This was followed by the actual study at MTRH, Eldoret (January to April, 2014).

Information bias; a pre-tested and validated standardized researcher administered questionnaire was used for the midwives and actual analysis of patient hospital records. All the contents of the questionnaire were explained to the midwives to facilitate relevant answers, which were recorded appropriately. Patient files were identified with permission

from the ward in charge and retrieved by the registry clerks. Data from the files was collected in the registry for purposes of confidentiality

3.9.6: Dissemination of Results

The researcher in this study will disseminate the findings as follows:

The researcher will forward a written report of the study findings and recommendations to the MTRH administration which can be accessed by midwives from the respective units for their perusal, information and commends. The researcher will publish the findings of the study in a peer reviewed journal in bid to share with other health caregivers in the perinatal period worldwide. The researcher will also invite comments from readers to help identify more areas for further research.

3.9.7: Study limitations

Few midwives in the units, the records used may not have been up to date or correctly documented, lack of midwifery protocols in the said wards and units for comparison.

3.9.8: Summary of the chapter

The chapter focused on all the steps of methodology. Emphasis was put on bias for better results. The limitations especially of the few midwives posed a challenge during data collection and therefore generalization may not be reached at.

CHAPTER FOUR: STUDY FINDINGS

4.1: Introduction

In this chapter the findings of the study have been presented on the basis of the study objectives and responses from the midwives working at MTRH and from the hospital records. These were divided into three variables; knowledge, attitude and practice. A target sample size of 'n'= 64 midwives was sampled for the study. Sixty four researcher administered semi-structured questionnaires were distributed as per calculations on page 26, representing 100% of the sample size. All questionnaires were successfully completed and returned translating into 100% response rate. Fifty seven female and seven male midwives responded. The findings were analyzed and the results were reported as indicated herein.

4.2: Demographic Data

	<29yrs	30-39yrs	40-49yrs	>49yrs
Number of midwives	7	25	25	7
100%	10.9	39.1	39.1	10.9

Table 1: Age of midwives in years

The age of the midwives was assessed so that it could help define the age characteristics. The results showed that most (39.1%, n=25) of the midwives were aged between 30-39 and 40-49 years; 39.1%-n=25, while 10.9%, n=7 were aged below 29 and 10.9%=7 above 49 years. This is demonstrated in figure1above.

4.3: Midwives' Marital Status

The findings showed that 66.7%, n= 43 of the midwives were married, 17.5%, n= 11 were single, whereas 7.9%, n= 5 constituted the seperated and 7.9%, n= 5 widowed as indicated in figure 1 below.

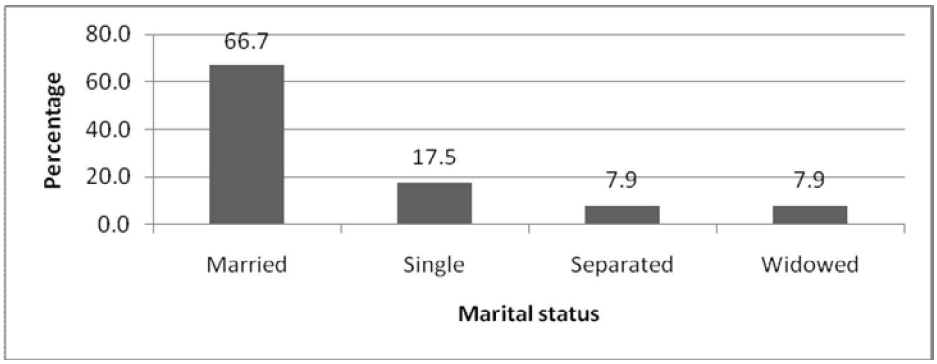

Fig 1: Marital status

4.4:Midwives' Professional Qualifications and Updates

The table below indicates that majority (71.9%, n= 46) of the midwives had diploma level of qualification, certificate (14.1%) n=9, BSc.N (12.5%) n=8 and MSc.N (1.2%) n=1. There were no midwives with PhD or trained as Kenya Registered Psychiatric Nurses (KRPN)/midwives . No midwife reported having attended any update on the management of postpartum mental disorders for period worked in the units. Worse still there was no evidence of a developed protocol in the wards and units as referrences for the care of women diagnosed with PMD.

	Certificate	KRCHN	KRPN	BSc.N	MSc.N	PhD	Updates	protocol
No.of midwives	9	46	none	8	1	none	none	None
%	14.4	71.9	nil	12.5	1.2	nil	nil	-

Table 2: **Professional qualifications and updates**

4.5: Midwives' Perceived Vulnerable Group by Parity

The midwives, 45.3%, n= 29 reported that, from their experience, the most vulnerable group of women likely to develop postpartum mental disorders were primiparas, closely followed by the multiparas 25%, n= 16, Nulliparas 6.3%, n=4, while 23.4%, n=15 of the midwives indicated that in fact all parities were vulnerable.

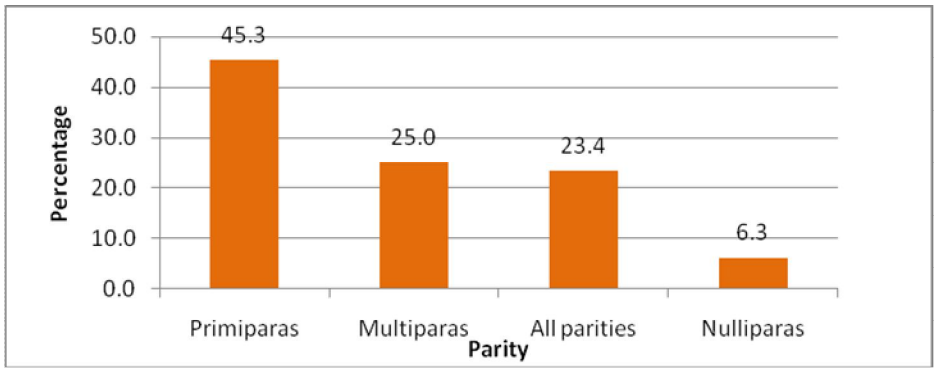

Fig 2: Midwives' perceived vulnerable group by parity

4.6: Knowledge of midwives in the management of women with PMD

4.6.1: Midwives' perceived categories of women diagnosed with PMD.

From figure 3 below, 54%, n=35 of the midwives reported that the categories of women admitted to the hospital with PMD were the married and staying with their spouses. Some midwives, 25.4%, n= 16 reported that some women admitted with PMD were single mothers, 17.5%, n= 11 of the midwives indicated that women admitted with PMD had separated with their spouses and 3.1%, n= 2 indicated that women often diagnosed with the mental disorders were divorced.

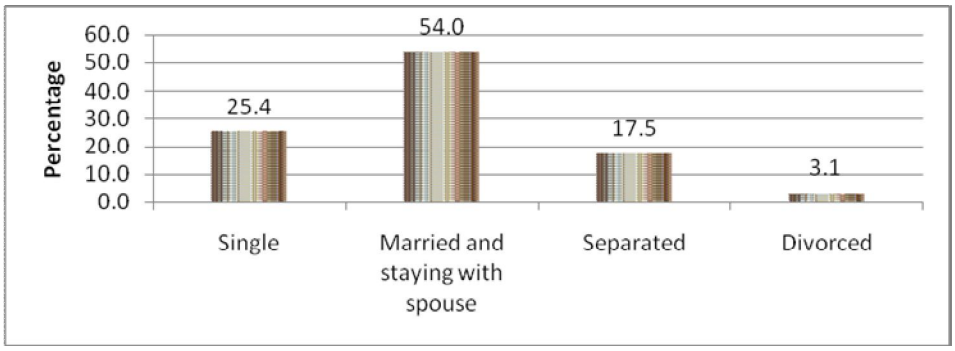

Fig 3: Midwives' perceived categories of women diagnosed with PMD

4.6.2: Midwives' perceived factors contributing to PMD

From the opinions of the midwives, majority 37.2%, n=24 reported that all the factors listed in the table below were likely to contribute to postpartum mental disorders. Strain and stresses of pregnancy, labour, childbirth and puerperium were also reported as contributing factors by 28.2%, n=18 of the midwives. The remaining midwives, 37.4%, n=24 had varied views as shown in the table below.

Perceived contributory factors	**%**	**Freq**
Perinatal Strain and stresses	28.2	18
Family history of mental illness	9.4	6
Poor social support system	11.0	7
Woman's previous history of mental illness	11.0	7
Morbidities	3.2	2
All of the above	37.2	24
Total	100	64

Table 3: Perceived factors contributing to PMD

4.6.3: Clinical features associated with PMD

The midwives, 67.2%, n=43 reported that women presented with impaired concentration, disturbed thought, mood swings, insomnia, agitation, restlessness and self neglect while the rest of the features constituted 9.4%, n=6, 6.2%,n=4, 3.1%, n=2 and 1.6%, n=1 as shown in table 4 below. Some midwives, 12.5%, n=8, reported that all women diagnosed with postpartum mental disorders presented with all the features outlined in the questionnaire.

Features of postpartum mental disorders	**Percentage**	**Freq.**
Impaired concentration, disturbed thought.	67.2	43
Feeling of guilt, incompetence and insomnia.	9.4	6
Suicidal ideation, confusion, self neglect.	6.2	4
Loss of appetite, loss of weight.	3.1	2
Restlessness, agitation, mood swings	1.6	1
All of the above	12.5	8
Total	**100**	**64**

Table 4: Clinical features associated with PMD.

4.7: Midwives' attitude towards women with PMD

4.7.1: Attitude of midwives on genuinity of women with PMD

Most (48.4%), n=31 of the midwives disagreed that most postpartum mental disorders were not genuine, a small number (4.7%), n=3 of the midwives totally agreed, 10.9% agreed with the statement that postpartum mental disorders are not genuine. 7.8% of the midwives were not sure.

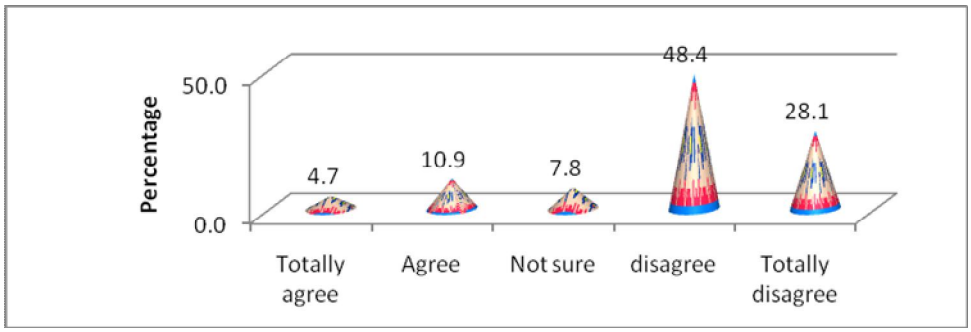

Fig 4: Attitude of midwives on genuinity of women with PMD

4.7.2: Midwives and Family roles

From the results, (47.6%), n= 30 of the midwives agreed that midwives were confronted with family and community roles from which women with PMD were admitted, 25.4%, n=16 totally agreed while those who disagreed, totally disagreed or were not sure constituted 14.3%; n=9, 9.5%; n=6, 3.2%; n=3 respectively.

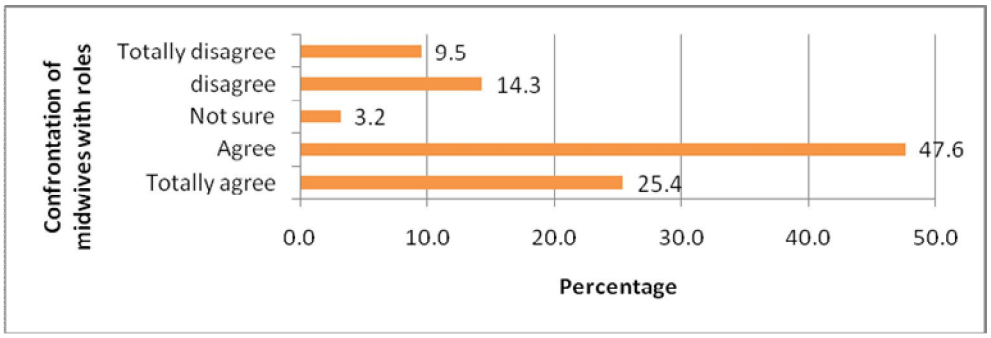

Figure5: Midwives and Family roles

4.7.3: Postpartum mental disorders and socioeconomic classes

Majority (68.8%), n=44 of the midwives agreed that women admitted with PMD cut across the socioeconomic classes, 18.8%, n= 12 totally agreed while those who disagreed, the ones not sure and those who totally disagreed constituted; 6.3%, n=4 4.7%, n=3 and 1.4%, n=1 respectively.

4.7.4: Midwives' view of the Family support system

Half (50%, n=32) of the midwives agreed that families and communities have not given enough support to women with postpartum mental disorders, one third of the midwives (32.8%, n=21 totally agreed with the statement, while the rest either disagreed or not sure had (9.4%, n=6) and (7.8%, n=5) respectively as indicated in figure 7 below.

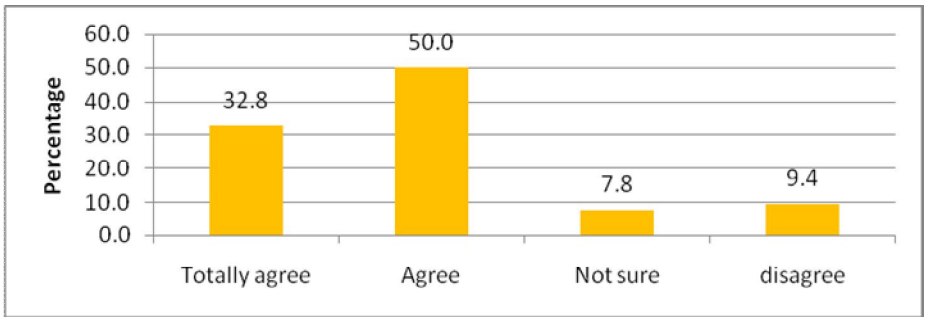

Fig 7: Midwives' view of the Family support system

4.8: Practice of midwives regarding management of women with PMD

4.8.1: Hospital work experience

Majority (32.8%, n=21) of the midwives indicated that they had worked in the hospital for between 1-5. 6-10 years; 32.8%, n=21, 11-15; 17.2%, n= 11, 16-20; 9.4%,n= 6, <1year 6.3%, n=4 and >21 years; 1.5%, n=1

4.8.2: Incidence of women diagnosed with PMD

During the survey the mean number of women cared for by the midwives for the previous six months was 7.5±SD. The range was 19 while the minimum and maximum values were 1 and 20. Twenty four women had been diagnosed with PMD in the previous six months.

Indicator	Value
Valid	24
Mean	7.5
Median	5.0
Mode	5
Std. Deviation	7.05
Range	1
Minimum	1
Maximum	20

Table 5: **Incidence of** W**omen diagnosed with PMD**

4.8.3: Midwife's role in the management of women diagnosed with PMD

The study showed that 27%, n=17 of the midwives offered psychological counseling to relatives, 23%, n=15 provided emotional support to the women and their relatives. Other midwives, (17%), n=11 reported caring for the women and their babies (no specific care was addressed) while in the wards. 13%, n=8 of the midwives reported that their main role was to ensure good nutrition for the women while a few (9%, n=6) of the midwives advocated for early diagnosis, management and 4.4%, n=3 preferred follow up of women with PMD.

4.8.4: Preventive measures for women at risk of developing PMD at MTRH

Counseling services were ranked high with 28%, n=18 of the midwives affirming that counseling was the major mode of prevention among other preventive measures. Others (22%, n=14) said that they advised the women and girls to avoid early marriages and pregnancies. Seventeen per cent of the midwives (n=11), were in favor of health education to the relatives. 11%, n=7 supported antenatal care and 8%, n=51 advocated for balanced diet.

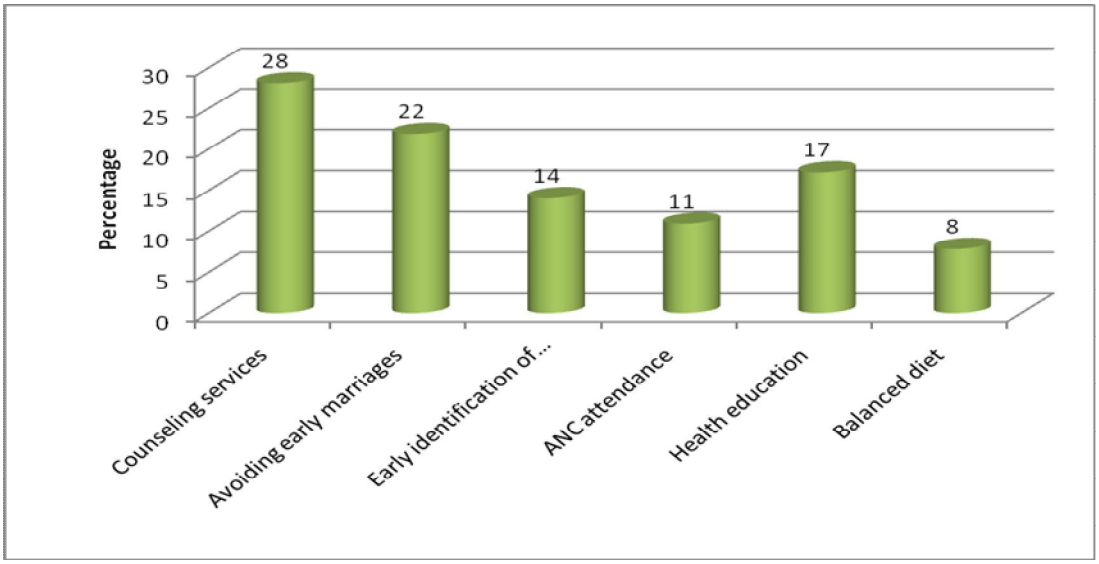

Fig 8: Prevention of postpartum mental disorders

4.8.5: Maternal Complications observed by midwives as a result of PMD

The most common complications reported by midwives were Poor nutritional status, abandoning their babies, Self care deficit, Peurperal sepsis and injury to self and baby.

Complication	**Frequency**	**%**
Poor nutritional status	12	19
Abandoned their babies	11	17
Injury to self, baby and staff	8	13
Lack of breast milk	3	5
Breast engorgement	6	9
Peurperal sepsis	9	14
Self care deficit	10	15
Refuse to take drugs or attend clinic	5	8
Total	64	100

Table 6: Maternal Complications

4.8.6: Complications to the infant

The complications to the infants were reported as follows; 35%, n=22; abandoned infants, maternal deprivation, infant rejection, infanticide, disowned infants, poor or no bonding. Malnutrition, low birth weight, poor weight gain and anemia were reported by 26%, n=17 of the midwives. Some midwives (14%, n=9) reported infections especially neonatal sepsis and diarrheal diseases following artificial feeds. 5%, n=3 hygienically unkempt infants. Others 20%, n=13.

4.8.7: Midwives' perceived Family implications

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Most of the midwives (31%), n=20 reported lack of family support, 23%, n=15 reported aggravated women's pre-existing mental disorders, family denial was reported by 19%, n=12, poor coping mechanism (14%, n=9) and financial constraints (13%, n=8) as depicted in the graph below.

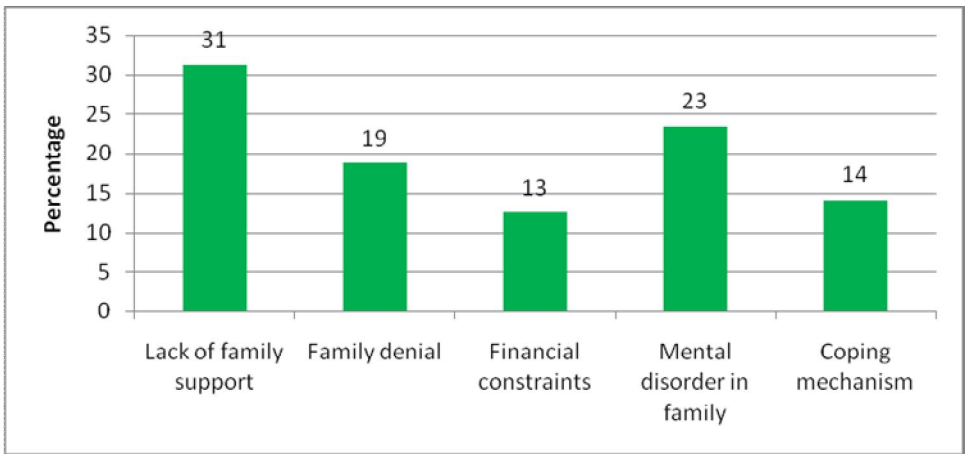

Fig 9: Perceived family implications

4.8.8: Management of complications by midwives

The midwives reported several ways that were used; Addressing individual causes of the stressful situations (9%, n=6), Admission to hospital (9%, n=6), administering iron supplements (8%, n=5) if anaemic, perinatal monitoring (3%, n=2) proper diagnosis and treatment (5%, n=3). Health education (17%, n=11), adherence to medication (16%, n=10), follow up (14%, n=9) and supporting the women (13%, n=8) while the rest of the measures constituted 6%, n=4 as demonstrated below.

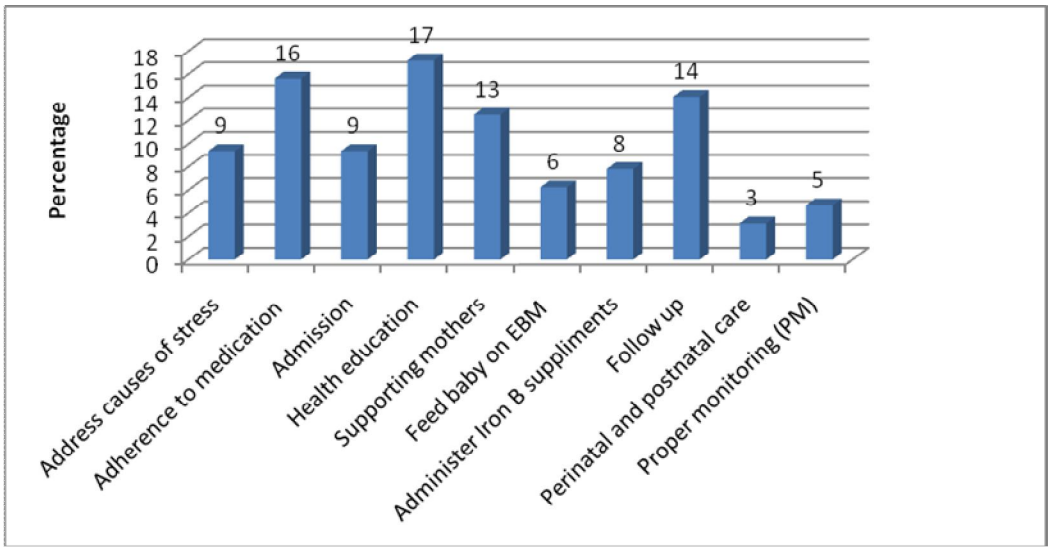

Fig 9: Measures taken to address the complications

4.8.9: Prevention of complications of PMD

Midwives (17%, n=11) indicated that the complications could be prevented through counseling, home visits (16, n=10) health education (14%, n=9) and social and support (13%, n=8) whereas the rest of the measures were below 10%, n=6, 9%, n=6, 6%, n=4, (3%), n=2 proper diagnosis and treatment (5%), n=3, (8%),n=5 as shown in the figure below.

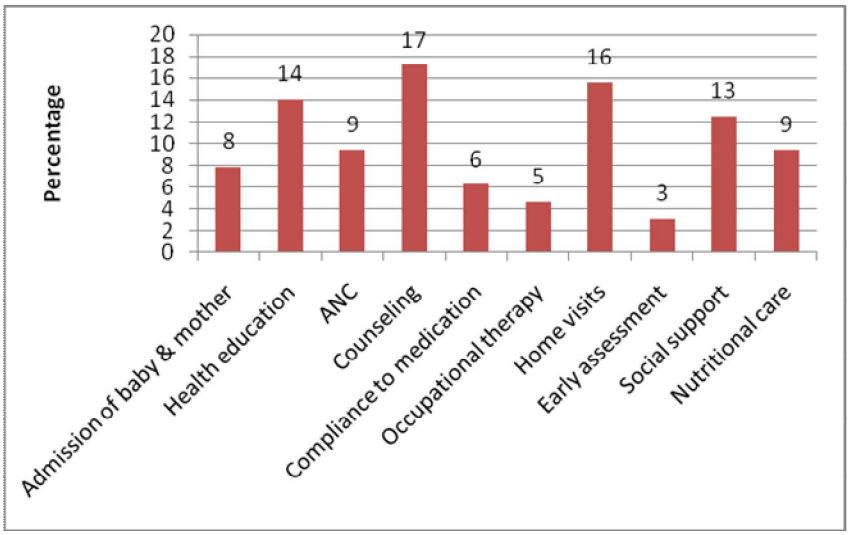

Fig 10: Prevention of complications of PMD

4.9:Outcomes of women with PMD

Thirteen midwives (20%), reported that PMD recurred with subsequent deliveries, 32%, n=20 indicated that women developed poor socialization. A smaller set of midwives (14%), n=9 indicated that the prognosis was good if the women are diagnosed and treated in time but also described it as poor in that "the women died from hunger and infection in neglected cases, or committed suicide or harmed themselves or others and when the condition worsened, they accidentally or intentionally took overdose of their usual drugs". Poor bonding was mentioned by 11%, n=7 of the midwives. Stigma 14%, n=9, poor coping strategies 9%, n=6

4.9.1: Follow up of women with PMD

Most (60%, n=38) of the midwives reported that women with PMD are usually booked for psychiatric clinic and follow up within two weeks of discharge, postnatal clinic follow up at six weeks and occasional home visiting by the social workers. Some midwives (20%, n=13) reported that women with PMD were transferred to the mental health ward to

continue management, (9%, n=6) of the midwives followed up the women through family therapy and nutrition support, (8%, n=5) noted that the women were mostly followed up by social workers in order to monitor drug compliance. Finally, other women with PMD and breast feeding were referred to gynecology ward for further management and to the psychological counselors for psychological support and follow up (3%, n=2).

4.9.2: Aspects of care not given to women with PMD

Antenatal counseling took the lead (19%, n=12), encouraging antenatal attendance (16%, n=10) treatment of other diseases (14%), n=9 and policy on marriage responsibilities (11%, n=7) family planning (sterilization).

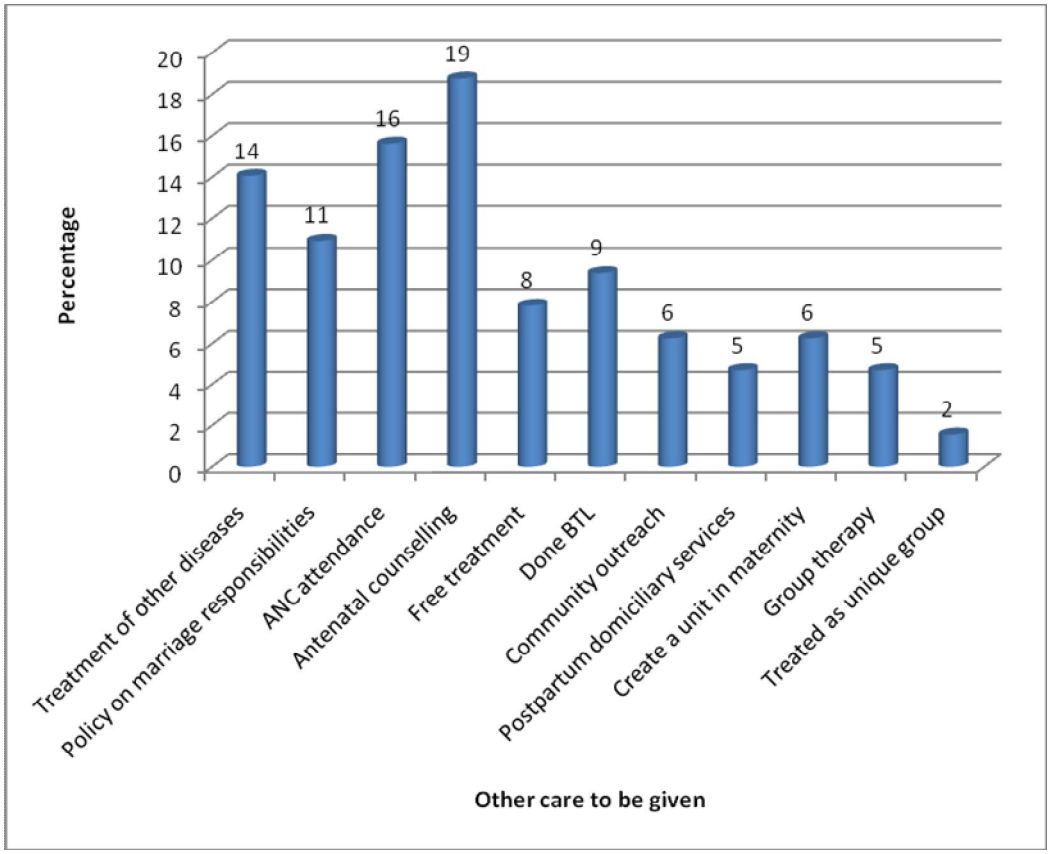

Fig 11: Other care not given to women with PMD

4.9.3: Screening services at MTRH

With regard to screening services, half (50%, n=32) of the midwives agreed that MTRH offers screening services for postnatal women to identify those either at risk of developing postpartum mental disorders or already have the conditions. The other half (50%, n=32) disagreed that there were such services citing such screening tools as Depression Screening Scale (PDSS), Edinburgh Depression Scale(EPDS), Beck Depression Inventory-ii(BDI-ii) and Structural Clinical Interview of DSM-IV R axis1 disorders) which were not available in the hospital.

Those who agreed argued that thorough and comprehensive history taking for the individual and family was a screening service constituted 31%, n=10 This was followed by 28%, n=9 of the midwives who reported that physical examination of all the women attended to in their units was part of the screening service. Still, 19%, n=6 of them listed psychological counseling as a screening service, while 13%, n=4 of the midwives felt that the government assessment forms used for admission of the psychiatric patients to the mental units were screening tools. 9%, n=3 said that admission and subsequent assessment was a way of screening these women.

4.9.4: Working environment

Majority of the midwives (34%, n=22) felt that the maternity ward environment was not conducive enough for nursing women with postpartum mental disorders and that there was need to identify a unit in maternity wing to address issues of post partum mental disorders separate from the rest of the normal postnatal women. While 22%, n=14 of the midwives were of the opinion that the hospital management should hire more medical specialists for better coverage and monitoring of the women, 16%, n=10 of the midwives felt that by virtue of the postnatal ward being upstairs (on 2nd floor with no protective rails) was a

major risk to the women who could easily jump down through the open spaces along the ramp, especially women with suicidal ideations. Other midwives (16%), n=10 suggested that instead of transferring the violent mothers to other units, the maternity ward could be modified to have lockable rooms for the security of the women. The remaining midwives (12%), n=8) encouraged the presence of caretakers who would take charge of the immediate environment of the patient.

4.9.5: Caring; a multidisciplinary approach.

Caring for women with postpartum mental disorders requires a multidisciplinary approach. According to the midwives, the following were the disciplines that played a role in providing care; psychological counseling was identified by 28%, n=18 of the midwives, mental health practitioners (psychiatry) was reported by 22%, n=14 of the midwives, 19%,n=12 of the midwives identified social worker, occupational therapy was reported by 14%, obstetricians had 11%, n=7 of the midwives acknowledging their participation and peer counseling (6%, n=4).

The roles played by these disciplines were reported as follows; 37%, n=24 of the midwives indicated that counselors played a vital role in this care as they counseled both the patients and their relatives, 25%, n=16 identified psychiatrists as other key players in managing the patients pharmacologically as they were the ones to whom these patients were referred for subsequent management. The social workers were identified by 18%, n=12 of the midwives; obstetricians were reported by 10%, n=6 of the midwives for their referral role. Occupational therapists played a minimal role because most of the patients stayed in the wards for fairly a short time as reported by 6%, n=4 of the midwives and lastly 4%, n=3 of the midwives felt peer counselors played an important role especially where the patients were of a younger age of below 25years.

4.9.6: Improving services and patient outcome

According to the midwives the following measures for improvement of services and patient outcome in providing a more approachable care system were suggested: provision of a separate ward for the women with PMD and their babies was suggested by 31%, n=20 of the midwives, 23%, n=15 of the midwives indicated that a multidisciplinary approach would be appropriate, training specialist psychiatry midwives was echoed by 20%, n=13 of the midwives while the rest were as shown in figure 12 below.

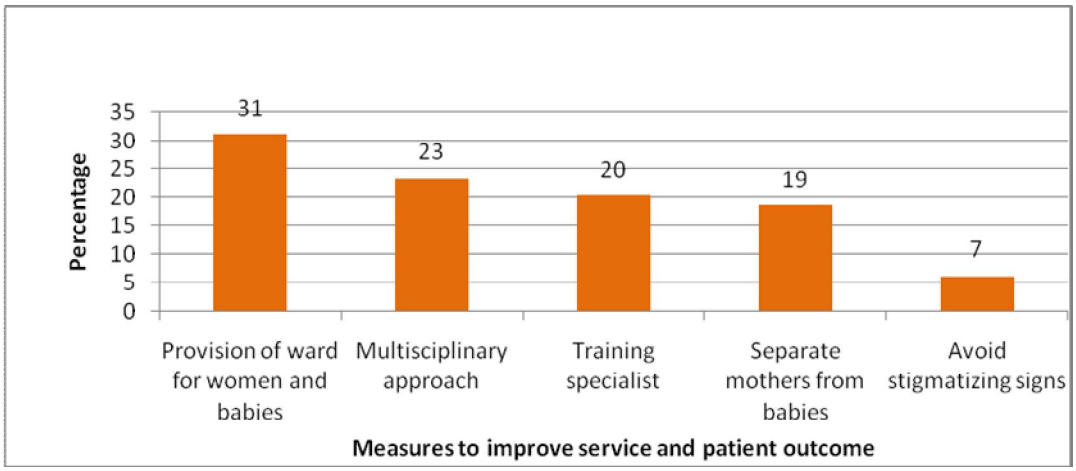

Fig 12: Improvement of services and patient outcomes

The effectiveness of these ways would not be readily evaluated as the follow up of these mothers was inconsistent. Almost all the midwives (95%) indicated that it was not easy to evaluate the effectiveness because almost all the patients were referred to psychiatrists who continued with the management. 5% of the midwives were not sure.

Part B: Analysis of hospital records

A total of 24 patient files were retrieved from the hospital registry. To do this, the IREC formal approval letter, plus the MTRH acceptance letter were presented to the ward in charges and registry management. The names and inpatient numbers for all the women who had been medically diagnosed with any postpartum mental disorder from the inpatient register were sampled. This information was then given to the registry clerk who assisted in retrieving the files. The variables focused on were the specific care given to the women with PMD by the midwives and documented.

From the results of hospital records, midwives concentrated more on administering drugs (79.1%, n=19) and taking vital observations (70%, n=17) but gave little attention to the key care. For instance in only six (25%) files, midwives attended to the hygiene of the women. the rest of the care was analyzed as indicated in table 7 below.

File no.	H/Education	Counseling	Administer drugs	Assist with b/feeding	Hygiene	Nutritional care	Vital obs	Care of the baby
1	Yes	Yes	Yes	No	No	No	Yes	No
2	No	No	Yes	No	No	Yes	Yes	No
3	No	Yes	Yes	Yes	No	No	Yes	No
4	Yes	No	No	No	Yes	No	No	No
5	No	Yes	Yes	No	Yes	Yes	Yes	No
6	No	No	Yes	Yes	No	No	No	No
7	Yes	No	Yes	Yes	No	No	Yes	No
8	Yes	Yes	Yes	No	Yes	No	No	Yes
9	Yes	No	Yes	No	No	No	Yes	No
10	No	Yes	Yes	No	No	No	Yes	No
11	No	No	Yes	Yes	No	No	Yes	No
12	Yes	No	Yes	No	No	Yes	Yes	Yes
13	Yes	No	No	No	No	No	No	Yes
14	No	Yes	No	No	No	No	Yes	No
15	Yes	No	Yes	No	No	No	No	No
16	No	Yes	Yes	Yes	Yes	Yes	Yes	No
17	Yes	No	Yes	Yes	Yes	No	Yes	No
18	No	No	Yes	No	No	No	Yes	Yes
19	No	Yes	No	No	No	Yes	No	No
20	Yes	No	Yes	No	No	No	Yes	Yes
21	No	No	Yes	Yes	No	No	Yes	No
22	No	No	Yes	No	Yes	No	Yes	Yes
23	Yes	No	Yes	Yes	No	No	Yes	No
24	No	Yes	No	No	No	Yes	No	No
T/Yes:	11=45.8%	9=37.5	19=79.1	8=33.3	6=25	6=25	17=70.8	6=25
No:	13=51.2	15=62.5	5=20.9	16=66.7	18=75	18=75	7=29.2	18=75

Table 7: specific care given to the women with PMD by the midwives and documented.

4.9: Outcome of treatment of women with PMD

From the records, 89%, n=21 of the mothers were discharged alive while 11%, n=3 died. Most of those who died were referrals from the peripheral health facilities who were admitted when they were already in critical conditions due to various delays. From the records, of the 67%, n=16 of the women who delivered in the year 2010 and were diagnosed with a postpartum mental disorder, 33%, n=8 had recurred mental disorder in 2013 when they came to give birth again.

Some (44.4%, n=11) of the patients were hospitalized for 7 to 10 days, 22.4%, n=5 stayed in the ward for up to 15 days, 22.2%, n=5; 10days and 11.%, n=3; 13days. The records also showed that 85%, n=21 of all the women who were diagnosed with PMD were referred to psychiatrists, 5%, n=1 were referred to social workers/counselors while 10%, n=2 were not accounted for (lost to follow up).

4.9.1: Medical diagnosis

Post-partum depression ranked highest (55.6%, n= 13) post traumatic stress syndrome (23.3%, n=6 and peurperal psychosis (11.1%, n=3, postpartum blues 10.0%,n=2. However no method of diagnosis was indicated.

In conclusion, the chapter focused on specific aspects of midwifery care for women diagnosed with postpartum mental disorders from the KAP perspective. The results have also given light as to how women with postpartum mental disorders are managed at MTRH.

CHAPTER FIVE: DISCUSSION

5.1: Introduction

Midwives can make a difference in maternity mental health care if well prepared (Vik et al.; 2009). However, the readiness of midwives for this role requires motivation and continuous support in terms of updates, provision of resources and procedure manual guidelines. Improved understanding of perinatal mental health is essential for midwives to provide improved specialist care and to ensure that vulnerable women and their families have appropriate access to mental health, family and community support services. Midwives find it difficult to make decisions regarding the treatment of women with PMD. They view them as difficult to handle, usually resisting care and aggressive (McCauley, 2011)**.** It is estimated that 65,000 Kenyan women suffer PMD per year but little has been documented about their management.

The objectives of this study were to determine the knowledge, attitude and practice of midwives in the management of women with PMD at Moi Teaching and Referral Hospital. This study focussed on the roles of midwives in the management of women diagnosed with postpartum mental disorders. This was divided into three parts; (i) Assessment of the knowledge of the midwives about postpartum mental disorders. (ii) Attitude; this basically addressed the way the midwives perceived women with postpartum mental disorders and (iii) Practice; management. The findings of this study will help make a step forward in realizing the importance of midwifery care for women diagnosed with postpartum mental disorders, an area that not been given attention.

5.2: Midwives' Demographic Data

Most of the midwives (39.1%) were in the age bracket of 30-39 and 40-49 years. This demonstrates a mature group of midwives providing the service and also having served for more than six months. This then means that the standard of care would therefore be expected to be very high considering the long experience of the midwives. This finding agrees with the one in an Indonesian study conducted by Titaley et al., (2010), which showed that most women preferred being assisted by service providers who had been in service for many years.

The study findings also showed that 66% of the midwives were married. Most of the midwives (71.9%) had attained a diploma, 14.1% had certificates, 1.5% had masters of Science in Nursing. None of the midwives had attained a PhD in Nursing this is evident that midwifery education is still at basic training, meaning that critical thinking and decision making may not be possible without depending on the doctors as the training of the majority (diploma and certificate) nursing cadres does not prepare the midwives to be critical thinkers and decision makers (NCK, 2013)

5.3: Midwives' Knowledge on PMD

During this study, the midwives reported marital status at 41.7% among other socio-demographic characteristics associated with PMD, meaning that the disorders occured more commonly amongst the married women. This finding compared with studies conducted by Fisher (2011) that correlated unstable marital relationships with postpartum depression. Most of the midwives (45.3%) indicated that from their experience and knowledge, the most vulnerable parity was primipara (delivering for the first time). These are relatively young women, probably in their years of crises, trying to adjust to transition to motherhood amid other responsibilities. The midwives (25%) also indicated that

multiparas were fairly affected. While this was the midwives' view, it contrasts the study carried out by Blabey (2009) in Alaska which showed that mental disorders during the postnatal period were high in multiparas than in primiparas where only 13% of the women presenting with postpartum depression were primiparas.

The midwives (54.0%) indicated that the category of women most diagnosed with PMD was the group of women 'married and staying with their spouses'. In interpreting this finding, one would say that life with a family seems more stressful than when one is single. In an article by Scott (2014), she notes that 'working through marriage problems in a healthy way can be very challenging as the stressors come from different sources including finance, bearing and rearing children, poor inter-couple communication and relationship and lack of spouse support'. It may therefore seem that marriage could be a precipitator and not a protector against postpartum mental disorders.

In this study, the midwives (37.6%) indicated women presented with history of poor social support and individual woman's previous history of mental illness and morbidities, noting that these were likely factors that largely contributed to the occurence of postpartum mental disorders. This compares with the findings in a study conducted by Beck (2006) where stressful life events, positive personal/family psychiatric history, poor social support and stresses were related to mental disorders during childbirth. Likewise, another study by Robertson et al., (2004), established that the strongest predictors of postpartum depression included stressful life events during pregnancy and early peurperium, poor social support and existence of previous history of depression.

The study results also indicated that most midwives (67.2%) reported impaired concentration, mood swings, insomnia, agitation, restlessness and self neglect as clinical

and psychiatric features associated with postpartum mental disorders. The profile of symptoms compare to those of a study by Farlex (2013) in which postpartum depression was characterized by mood swings, irritability, anxiety, decreased concentration, insomnia, tearfulness and laughter.

5.4: Attitude of midwives towards PMD

Attitude may be defined as a way of thinking or feeling about, or viewing someone or something as reflected in the person's behaviour. Attitude can be negative (unfriendly or rude or hostile) or positive (friendly or good) (Oxford English Dictionary, 2010). In this research study attitude will be used to mean 'a way of thinking or viewing'. That is, how the midwives view and think about women suffering from postpartum mental disorders.

Throughout the world, mental disorders in the perinatal period have not been emphasized because carers have not been keen despite the efforts of World Health Organization. Many effective interventions for the treatment of women with postpartum mental disorders are available yet the proportion of those who need the mental care has remained high with the treatment gap remaining wide probably because most mothers suffer in silence and therefore their postnatal mental disorders go undiagnosed and untreated (Dabrowski, 2011).

In this study, 48.4% of the midwives agreed with the suggestion that most postpartum mental disorders were genuine, 25.5% disagreed with the statement. This simply translates into an attitude of not caring in some midwives, despite the fact that it is true the women may be genuinely unwell and in need of help. It was also reported that 23% of the midwives gave low priority to the management of women with PMD. This finding compares with a study carried out by Amankwaa, (2003) which indicated that midwives

and obstetricians had a tendency to normalize depressive symptoms and dismiss them as self-limiting. A Qualitative study carried in the U.S.A found out that after depressed mothers made the decision to seek professional help, they felt disappointed, frustrated, humiliated and angry due to their interactions with healthcare providers. This is reflected in one of the midwives' statement in this study, *"the midwives take a low profile in the management and care of the women diagnosed with postpartum mental disorders"*. In an Australian study conducted by Cindy (2011), the women also complained that after being referred or admitted to the health facilities, they did not have sufficient time with their practitioners, their mental problems were not adequately addressed, they were not examined properly and that they were not referred to relevant services as necessary. They also felt that the midwives displayed disinterest and "patronizing attitudes," which increased their feelings of worthlessness and guilt in their inability to cope and that their depressive symptoms were given only cursory attention and on this note the women were not adequately managed. Cindy's study compares with the findings of this study where 23% of the midwives said they gave low priority to mothers with postpartum mental disorders. This is also agreeable with this study indicating that women were referred to psychiatrists for medication instead of being offered the midwifery care as evidenced by the low profile taken during decision making on how the women should be managed. The decisions seem to have been left to the doctors. This compares with the study by Susan et al., (2008) in which it was found that many mental health nurses referred the women to doctors. In a Kenyan study by Musandu et al.; (2006), it was reported that midwives with more education and those who had received continuing education showed a tendency towards more friendly attitude.

5.5: Practice by midwives

Practice can be defined as the actual doing again and again, performance, application, use of an idea, belief or method as opposed to theories about such an application or use (Oxford English Dictionary, 2010). In this study, 'practice' will be used to denote the care given to women diagnosed with PMD at MTRH. Most midwives (48%) agreed that maternal, infant and familial complications were common amongst postnatal women diagnosed with PMD. These findings compare with studies by Laurie & Paula (2013) and Murray (2009) which stated that 'mental health problems during the perinatal period have significant impact on the baby, mother and family'. With this in mind, there is need for follow up and integration of mental health care into midwifery practice in order to manage the women holistically. Most midwives (68.8%) indicated that women admitted with PMD cut across all socioeconomic classes. As much as this was a clear indication that the social class may not influence the occurrence of the PMD, it contrasted a study by Pract (2012), in which he concluded that strong socio-economic inequalities in perinatal mental illness are related to the occurrence of the PMD. Therefore midwives at MTRH need to offer services across all social divides since anyone woman can suffer from PMD. It was also reported by 50% of the midwives that families and communities did not give support to women with PMD, One of the midwives commented "*watu wao wanawaachanga hivyo tu*" meaning "the relatives of the patients do not attend to them".

Findings in this study showed that 25% of midwives reported to have assisted in feeding the babies on expressed breast milk (EBM). However, they added to say that due to heavy workload visa vie the shortage of staff, the relatives could be given instructions to feed the babies. This care is similar to the one in a study conducted by Alexandria (2013), who argued that the process of breastfeeding was often based on the habits, standards and

behaviors that existed in a given society. From the findings, psychological counseling to both the women and their relatives were reported by most of the midwives (37.4%) to be the primary care given to the mentally ill mothers. These findings contrast with a study by Boots Family Trust Alliance, (2013) in which counseling of the mentally ill mothers was rated at 13%. This information confirms the fact that managing PMD is diverse and requires multidisciplinary approach.

Other midwives advocated for avoiding early marriages, giving health education to the women and their relatives, early identification of indicators and adequate treatment, regular antenatal attendance and monitoring, and advice on balanced diet as important preventive measures. This is evident in a study by Mental Health Foundation, (2014) whose recent evidence suggests that good nutrition is essential for mental health development. In this study, several complications were cited. The midwives (67%) indicated that women with PMD were separated from their infants as well as their families. The women were also reported to have poor eating habits and deficient bathing habits. These results compare with a study by Lisa and Cynthia (2013) where the woman was physically separated from the rest of the family, had restrictions for eating, bathing, going up and about her duties and for engaging in sexual relationship.

Over 67% of the midwives reported that babies were abandoned, some babies were malnourished, anemic, infected with diarrheal diseases and pneumonia while others had low birth weight and poor weight gain. Most babies are started on artificial feeds early in life thus contributing to gastrointestinal problems, especially those whose mothers failed to establish lactation. Other midwives (33%) felt that there was mismanagement of the infants, neonatal morbidity and mortality especially where relatives took up the care.

The measures to address these complications were cited as being through addressing the individual causes of the stressful situations, giving health education, counseling on adherence to medications, perinatal monitoring, psychosocial support, admitting those who have already developed the disorders and caring for the baby while ensuring the baby feeds only on mothers breast milk. This contracts an article by Mom (2013), who suggests that a baby born of a mother with postpartum mental disorder should be allowed to feed on formula. However, these complications could be prevented through, counseling, carrying out home visits, encouraging social support, occupation therapy for those admitted, early postnatal assessment and treatment and nutritional care. This is similar to a study by O'Hara (2014) which showed that mothers who had had previous psychiatric disturbances or at risk should be monitored closely including early and prompt referrals to relevant clinicians. The outcomes of women diagnosed with PMD included PMD recurrence with subsequent pregnancies, socializing poorly (16%), 14% indicated that the prognosis was good if well managed; women progress to complete recovery.

Majority, (60%) of the midwives had their clients booked for psychiatric clinic for follow up by the psychiatrists, meaning that the midwives did not follow up the mothers themselves. A few women (9%) were visited in their homes by the social workers, while others would be given drugs and the appointment to psychiatric clinic. The rest of the midwives reported that some women were transferred to the mental wards or allowed to go home with the relatives on request. Minimal yet very important nutritional and psychological counseling was carried out. There is no report of family therapy having been given to the families of the affected. This finding contrasts an article by Mcginty (2008) that talked about a case management framework for mental health clinicians. From the findings several disciplines cared for women with PMD ; midwives, psychological

counselors, mental health practitioners, social workers, occupational therapists, obstetricians, psychiatric nurses, psychiatrists, clinical psychologists and peer counselors. The concept of collaborative management comprising all the above should form the basis of treatment for women with PMD. i.e. Multidisciplinary team approach of educating women, their families and community about the causes, risk factors, predisposing factors, prevention, care, active treatment and providing supportive psychotherapy alongside continuous safety risk assessment for the mother and infant (Aaron & Tekoa, 2012). This study established that midwives preferred health education, counseling, giving medication and separating the babies from their mothers as most of these babies were nursed in NBU. This was compared with a study by Bobbie (2010), in which it was noted that the role of the midwife was key and included physical, psychological and social care while the obstetricians were complementary to this care, only referring the women for psychiatric management.

When midwives were interviewed on the availability of screening services for the mentally disturbed postnatal women, the results showed that 50% of the midwives were in agreement while the other 50% disagreed. Those in agreement supported their answer by noting that history taking, physical examination, psychological counseling and provision of the government assessment forms were all forms of screening. On the hand, those who disagreed, argued that there were varieties of specific tools and instruments as well as checklists on the market purposely for screening individuals for risk of mental disorders and that the hospital did not provide any of them. This statement was fully in agreement with the Cochrane reviews, Cochrane database (2014) which indicated in part the various screening instruments, tools and procedures were available on the market.

According to this study, the unique roles of the midwives included ‘health education’, counseling, care of the baby, care of mother’s hygiene, tackling stigma, supporting breast feeding, nutritional care, facilitating fast delivery of services, identifying risk factors and helping women to build trusting relationships. This compares with a study published in the association of women’s health obstetric and neonatal nurses (AWHONN, 2008), in which health education was given more weight. Nurses and midwives were expected to be knowledgeable in order, to provide support for the women and their families, be able to carry out screening tests for the women, be able to administer medication, assess and recognize risk factors and act promptly. According to Hogg (2011), “Universal services; midwives, general practitioners, obstetricians etc have an important role in identifying mothers at risk of or suffering from perinatal mental illnesses and ensuring that the women get the support they need at the earliest opportunity”.

In conclusion of this chapter, there is dire need for the hospital to design protocols on the management of postpartum mental disorders, women at risk, diagnostic and assessment procedures and PMD screening instruments as well as consider hiring specialist psychiatrist midwives as change agents to supplement the current care being provided.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1: Introduction

This chapter focuses on conclusions and recommendations that are meant to benefit all the stakeholders hence improve the midwifery care for women with postpartum mental disorders.

6.2: Conclusion

The findings are fairly evident that the midwives i). Demonstrated that there are knowledge and skills gaps amongst the midwives, ii). That the attitude of the midwives towards the care of women with postpartum mental disorders tends to lean more on the negative hence the low profile taken while providing care and the referrals to other disciplines iii). That although the midwives may be competent the actual practice and care provided to the women with postpartum mental disorders has been met with shortfalls and challenges such that the midwife has not offered the expected patient care in this respect. It is apparent from this study that many midwives avoid providing care for women with PMD. Although the majority of midwives who participated in this study were experienced, with at least more than 5 years in midwifery practice in MTRH, it did not clearly reflect. However, despite this experience, there is a distinct lack of recognition of their role in assessing the mental health problems of women under their care. In some instances, it is seen as the role of other health professionals such as social workers, psychiatrists, nutritionists, doctors, counselors among others. However, the lack of recognition of the need to understand and provide for women with PMD is of concern that needs to be addressed within midwifery education and clinical practice.

This study has clearly identified the need for midwives to have further education and training in mental health assessment and midwifery mental illness care. Those midwives in practice clearly require more knowledge and skills and this deficit needs to be addressed.

It is also evident that in MTRH, postpartum mental disorders are more common in women who are married and live with their spouses and have also given birth for the first time (primipara). This then calls for keen antenatal care, mental disoredrs awareness and screening. It is also significant to know on the contrary that PMD were less common amongst women who had never given birth to aviable baby (nulliparas). These are the mothers one would expect to suffer from the disorders more due to the stress of pregnancy losses. The strain and stresses of pregnancy, labour, childbirth, breastfeeding and puerperium were positively identified as factors that largely contributed to the development of postpartum mental disorders mongst the postpatum women at MTRH.

In this study, the effects of postpartum mental disorders were threefold; to the babies, the mothers and the family. In the previous studies in other regions and in this current study, midwives have been noted to encounter challenges from the families and communities as these two parties shifted their roles of caring for their mentally ill patients to the institutions. It is also true from the study that postpartum mental disorders are not only limited to certain classes of women but that they cut across all the socioeconomic classes. In this respect, poor coping mechanism, lackof family support and individual pre-existing stresses contributed largely to the emotional stresses of the women. Caring for women with postpartum mental disorders proved to be a challenge that required a multidisciplinary approach. Along with the other findings, it was noted that there were deficiencies in the knowledge and skills of the midwives hence the low profile taken while caring for women with postpartum mental disorders as indicated in the hospital records.

There is no clear evidence that the midwives carried out specific or tangible follow up for women with postpartum mental disorders but instead referred all of the women to other disciplines. Similarly, there was no evidence of positive health education to the women, their relatives or the community from the midwifery perspective or point of view.

6.3: Recommendations

6.3.1: Psychiatry midwifery education

There is need for the Nursing Council of Kenya to spearhead the development of a module or course specifically to train psychiatric specialist midwives who will understand the concepts and principles for caring for the women with PMD.

The hospital through the Clinical Nurse Educators should organise to have the midwives go for updates in psychiatry. The Institutions of Higher Learning can develop curriculae on advanced specialist psychiatry midwifery training at Masters level.

Finally, the midwives should take the initiative to improve their competencies by enhancing knowledge and skills when handling the women with PMD through continuing professional development (CPD). There is need for provision of easily accessible and affordable in-service programmes for all midwives in areas/topics related to perinatal mental illnesses.

6.3.2: Midwifery Practice

That the hospital puts structures in place for follow up of these patients and recomment ways of promoting and strengthening the family and social support systems. The hospital needs to develop an assessment tool as well as provide screening services within the comprehensive package of antenatal care. There is need to step up the counseling services by embracing community strategy so that all women in their perinatal period are reached.

There is need for the midwives to consistently update themselves by attending continuing professional development sessions on the care of women with PMD.

6.3.3: Research

A more comprehensive KAP research study, involving midwives and reproductive health personnel on peri-natal mental disorders should be conducted. There is also need to carry out a needs assessment study and possible capacity enhancement for the midwives. A study on community involvement in the care of women with perinatal mental disorders.

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APPENDICES

Appendix 1: Institution Consent

Moi University

College of Health Sciences

School of Nursing

Dept. Midwifery and Gender

Date: 25th Nov.2013

THE DIRECTOR

MOI TEACHING AND REFERRAL HOSPITAL

BOX 3, ELDORET

Re: Institution Consent

My name is Anne Kabimba Wawire, a Master of Nursing student from Moi University, School of Nursing, Department of Midwifery and Gender.

It is the requirement of this course that a student collects detailed information from her specified research study site and presents the same information for purposes of learning and examination.

The information collected will be kept confidential and not be used for any other purpose other than the stated.

I kindly request for your approval to allow me collect information from the midwives working in the following areas; antenatal clinic, postnatal ward and clinic, gynecology ward, psychiatric ward and clinic, accident and emergency unit for this purpose.

Thanks in advance.

Kabimba Anne Wawire

SN/PG MNH/02/12

Appendix II: IREC Approval letter to carry out the research

INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE (IREC)

MOI TEACHING AND REFERRAL HOSPITAL
P.O. BOX 3
ELDORET
Tel: 33471//2/3

MOI UNIVERSITY
SCHOOL OF MEDICINE
P.O. BOX 4606
ELDORET
Tel: 33471/2/3

Reference: IREC/2013/233
Approval Number: 0001152

27th March, 2014

Ms Kabimba Anne Wawire,
Moi University,
School of Nursing,
P.O. Box 4606-30100,
ELDORET-KENYA.

INSTITUTIONAL RESEARCH & ETHICS COMMITTEE
27 MAR 2014
APPROVED
P. O. Box 4606-30100 ELDORET

Dear Ms. Wawire,

RE: FORMAL APPROVAL

The Institutional Research and Ethics Committee has received your request for approval of your study titled:-

"The Role of Midwives in the Management and Care of Women Diagnosed With Postpartum Mental Disorders at MTRH".

Your proposal has been granted Formal Approval Number: FAN: IREC1152 on 27th March, 2014.You are therefore permitted to begin your investigations.

Note that this approval is for 1 year; it will thus expire on 26th March, 2015. If it is necessary to continue with this research beyond the expiry date, a request for continuation should be made in writing to IREC Secretariat two months prior to the expiry date.

You are required to submit progress report(s) regularly as dictated by your proposal. Furthermore, you must notify the Committee of any proposal change (s) or amendment (s), serious or unexpected outcomes related to the conduct of the study, or study termination for any reason. The Committee expects to receive a final report at the end of the study.

Sincerely,

PROF. E. WERE
CHAIRMAN
INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE

cc:	Director	-	MTRH
	Principal	-	CHS
	Dean	-	SOM
	Dean	-	SPH
	Dean	-	SOD
	Dean	-	SON

Appendix III: MTRH approval letter to conduct study in the hospital

MOI TEACHING AND REFERRAL HOSPITAL

Telephone: 2033471/2/3/4
Fax: 61749
Email: director@mtrh.or.ke
Ref: ELD/MTRH/R.6/VOL.II/2008

P. O. Box 3
ELDORET

27th March, 2014

Ms. Kabimba Anne Wawire,
Moi University,
School of Nursing,
P.O. Box 4606-30100,
ELDORET-KENYA.

INSTITUTIONAL RESEARCH & ETHICS COMMITTEE
27 MAR 2014
APPROVED
P. O. Box 4606-30100 ELDORET

RE: APPROVAL TO CONDUCT RESEARCH AT MTRH

Upon obtaining approval from the Institutional Research and Ethics Committee (IREC) to conduct your research proposal titled:-

"The Role of Midwives in the Management and Care of Women Diagnosed with Postpartum Mental Disorders at MTRH".

You are hereby permitted to commence your investigation at Moi Teaching and Referral Hospital.

DR. JOHN KIBOSIA
DIRECTOR
MOI TEACHING AND REFERRAL HOSPITAL

CC - Deputy Director (CS)
- Chief Nurse
- HOD, HRISM

Appendix IV: Consent for pilot study at Kakamega County Hospital

Moi University

College of Health Sciences

School of Nursing

Dept. Midwifery and Gender

Date: 28th Nov.2013

THE MOH

KAKAMEGA COUNTY HOSPITAL

BOX P/B

KAKAMEGA

Approved 3/12/13

Re: Pilot study consent

My name is Kabimba Anne Wawire, a Master of Nursing student from Moi University, School of Nursing, Department of Midwifery and Gender.

Whereas it is the requirement of this course that a student collects detailed information from her specified research study site, it is also a requirement that a pilot study is carried out in a similar context to help validate the data collection tool.

The information of this pilot study will be kept confidential and only used as intended above.

I kindly request for your approval to allow me collect information from the midwives working in the following areas; postnatal ward, psychiatric ward and accident/ emergency unit.

Thanks in advance.

Kabimba Anne Wawire

SN/PG MNH/02/12

Appendix V: Midwives Consent:

Study Title: Knowledge, Attitude and Practice of midwives in the management of women with postpartum mental disorders at Moi Teaching and Referral Hospital, Eldoret, Kenya.

Investigator: Kabimba Anne Wawire

My name is Kabimba Anne Wawire, a Master of Nursing student from Moi University, School of Nursing, Department of Midwifery and Gender. I am exploring on Knowledge, Attitude and Practice of midwives with regard to postpartum mental disorders at MTRH. The information you will give will benefit you as well as other midwives by helping in improving the care for the women with postpartum mental disorders. The study and its procedures were approved by the appropriate committees and the review board of Moi University (IREC). The interview procedure will take about 5-10 minutes and therefore you might feel a little tired. Procedure will be led by the researcher while you respond to questions. The information obtained will be coded and confidential and only used for academic purposes. You're at liberty to join, withdraw or terminate your participation in the study any time. You are also free to ask any questions or seek clarifications. You can contact me on +254725411421. If you accept to participate, please check box 1 for 'yes' and if not, check box 2 for 'No' | 1 | | 2 |

Respondent's signature…….. Date……..

I have explained this study to the midwives and sought for their informed consent.

Investigator's signature……
Date……..

Kabimba Anne Wawire

SN/PG/MNH/02/12

Appendix VII: Researcher Administered Questionnaire

Knowledge, attitude and practice of midwives in the management of women with postpartum mental disorders at Moi Teaching and Referral Hospital, Eldoret, Kenya.

Demography

(Tick all that apply)

1. What is your current age in years? □<20 □ 20-29 □ 30-39 □ 40-49 □>49

2. What is your marital status? □ Married □single □separated □ divorced □widowed

3. What is your level of professional qualification? □Certificate □Diploma □BSc.N □MSc.N □PhD

4. From your experience, what parity is most vulnerable? □Nulliparas □ Primiparas □multiparas □ all parities

KNOWLEDGE

5. What category of women's marital status is often diagnosed with postpartum mental disorders? □Single □Married and staying with spouse □Separated □Widowed □ Divorced

7. From your opinion, what factors contribute to postpartum mental disorders?

□ Perinatal strain and stresses □ Family history of mental illness. □ Morbidities □ Poor social support system □ All of the above

8. What are the clinical and psychiatric features associated with postpartum mental disorders MTRH

□ Impaired concentration/disturbed thought.

□ Feeling of guilt, incompetence, insomnia

□ Suicidal ideation, confusion, self neglect

□ Loss of appetite, loss of weight

□ Restlessness, agitation, mood swings

□All of the above

9. Does the hospital (MTRH) offer screening services for postnatal women to identify Women at risk of developing a mental disorder? Yes/No. if yes, which ones?.....

10. Are the hospital's maternity facilities and environment conducive for the care of Women with PMD? Yes/No. give

ATTITUDE

11. In your opinion, most of the postnatal mental disorders are not genuine

1. Totally agree. 2. Agree 3. Not sure 4. Disagree 5. Totally disagree

12. Midwives are confronted with family and community roles from which these women with postpartum mental disorders admitted at MTRH come.

1. Totally agree. 2. Agree 3. Not sure 4. Disagree 5. Totally disagree

13. The maternal, infant and familial complications of postpartum mental disorders amongst postnatal women at MTRH are common?

    1. Totally agree. 2. Agree 3. Not sure 4. Disagree 5. Totally disagree

14. The women admitted at MTRH with postpartum mental disorders cut across the socioeconomic classes.

    1. Totally agree. 2. Agree 3. Not sure 4. Disagree 5. Totally disagree

15. In your opinion, the families and the community have not given enough support to these women with postpartum mental disorders?

    1. Totally agree. 2. Agree 3. Not sure 4. Disagree 5. Totally disagree

PRACTICE

16. How long have you worked in this facility?

17. On average, how many women with postpartum mental disorders do you care for in a period of six months?

18. What has been your role as a midwife in the management of women with postpartum mental disorders?

19. What preventive measures do you employ for women at risk of developing postpartum mental disorders?

20. In the course of your work, what complications have you encountered?

Maternal……

Infant……

Family.……

21. How did you address the complications?

22. In what ways can these complications be prevented?

23. In your own words, how can you describe the outcome of these women with postpartum mental disorders after discharge?

24. How are these women with postpartum mental disorders followed up?

25. If given a chance, what other care would you like given that is not being done for these women with postpartum mental disorders?

26. Does MTRH offer screening services for postnatal women to identify those at risk of developing PMD? Yes/No. if yes, which ones?

27. Are the hospital's maternity facilities conducive for the management of women with PMD?

28. Caring for women with PMD requires a multidisciplinary approach. **True/False**

If true, what are the disciplines involved?