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PSYCHOLOGICAL DISTRESS DURING ANTENATAL PERIOD: A CASE OF MBALA DISTRICT

BY

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LIST OF ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal Care
CSO	-	Central Statistics Office
DC	-	District Commissioner
DHMT	-	District Health Management Team
DMO	-	District Medical Officer
GDP	-	Gross Domestic Product
IEC	-	Information Education Communication
IRH	-	Integrated Reproductive Health
HIV	-	Human Immunodeficiency Virus
HMIS	-	Health Management Information System
PHC	-	Primary Health Care
PHO	-	Provincial Health Office
MOH	-	Ministry of Health
NGO	-	Non Governmental Organization
TB	-	Tuberculosis
WHO	-	World Health Organization

DECLARATION

I, HILDA NACHINGA KABANDA hereby declare that the work I have presented in this study for a Bachelor of Science degree in Nursing has not been presented either wholly or in part, for any other degree and is not being currently submitted for any other degree.

Signed:..... Date: 31/05/2011

(Candidate)

31 MAY 2011

Approved:..... Date: 31/05/2011

(Supervising Lecturer)

STATEMENT

I, HILDA NACHINGA KABANDA do hereby certify that this study is entirely the result of my own independent investigations. The various sources to which I am indebted are clearly acknowledged in the text and references.

Signed: ..... Date: 31/05/2011

DEDICATION

My study is dedicated to my Parents Mr. and Mrs. Sichinga , My husband Mr. Merrington Kabanda and my son Bupe Kabanda for their continuous spiritual and moral support in my success

ABSTRACT

Psychological distress during antenatal period is described as great pain, anxiety or sorrow: acute physical or mental suffering affliction, trouble. It is a common problem in pregnant women. Those that have it manifest with depression. In pregnancy, it is linked with complications like intrauterine foetal death, antepartum and post partum haemorrhages, premature delivery, and retarded foetal growth even maternal deaths.

The reason for choosing this topic was due to continuous number of cases of depression in pregnancy that were being recorded in health facilities both at the General Hospital and Health Centres (Mbala DHMT, 2009).

Aim of the study -The aim of this study was to explore the magnitude of psychological distress in pregnant women in Mbala district. The major hypotheses were that there is a relationship between psychological distress during antenatal period pregnancy and; social status, mental health services, chronic diseases, life events and domestic violence.

Methods used-The study was conducted in Mbala district at five health facilities in Mbala district in Zambia. A cross sectional quantitative design was used. The study population included 50 pregnant women accessing antenatal care services at the named health facilities. Probability and non probability sampling methods were used at one health facility and four health facilities respectively. Data was analyzed using a computer programme SPSS version 16.0.

Major findings -Major findings of the study were that out of 50 respondents, 20 (40%) had psychological distress. The study further revealed that there was an association between domestic violence, stressful life events and psychological distress.

Conclusion

The major conclusions from this study are that women suffer from psychological distress during antenatal period in Mbala District and that there are associations between life events and psychological distress, and between domestic violence and psychological distress. The

study further concludes that there is no association between psychological distress and chronic diseases and social status.

Implications – Major implications in this study are that mental health should be integrated into Integrated Reproductive Health and that special indicators should be developed and incorporated into the Health Management Information Systems.

CHAPTER ONE

1.0 INTRODUCTION

1.1.0 BACKGROUND INFORMATION

Zambia is s a landlocked country. It is situated south of the equator. The country shares boundaries with eight countries namely; Angola, Botswana, Democratic Republic of Congo, Malawi, Mozambique, Namibia, Tanzania and Zimbabwe. Zambia had a total population of 11,477,4475 million people in 2007 with an annual growth rate of 1.664 percent (CSO, 2007). Administratively, the country is divided into Nine Provinces and Seventy Two districts.

1.1.1 Socio-economic profile

The economy of Zambia depended so much on copper as a major source of foreign exchange. Peak production of copper occurred in 1969, when 720 000 tones of copper was produced, making Zambia the world's 4th largest copper producer. However, production has declined drastically since the mid 70's due to low copper prices. Despite this decline, copper and cobalt mining still contributed 10 percent of Zambia's GDP, representing 80 percent of export earnings. (Osei-Hwedie, 2005).

1.1.2 Health services in Zambia

The decline in the copper prices led to a decline in the economy. This subsequently negatively impacted on the provision of health services in Zambia. The standards of health care in the health facilities began to deteriorate leading to increased disease burden while the resources were not adequate to mitigate the impact. To save the situation from further deterioration, Zambia started reforming the health service in 1991. Primary Health care (PHC) was the approach chosen to drive health service provision. The vision was to provide all Zambians with equity of access to cost effective quality health services as close to the family as possible. This concept emphasized that the health services should be provided as close to the family as possible through community participation and at a cost that

individuals, families and community could afford. The emphasis was more on promotive and preventive rather than curative medicine. Before health reforms, most of the programmes were vertical and a lot of resources were required to run them. Due to limited resources, the government adopted the concept of integrating health services in order to optimize resources.

Some of the problems that were noted which needed attention through integration of health services were in the areas of maternal and child health. Some of the problems experienced by pregnant women were psychological problems which manifested with signs and symptoms of depression and were diagnosed as depressive disorders in pregnancy. (Mbala DHMT 2005). Depression in pregnancy is an indication of psychological distress which is a dangerous condition that leads to many complications which include; intrauterine foetal death or retardation, abortions, premature delivery, poor child development, antepartum and postpartum haemorrage, puerperal psychosis and maternal death. Mbala district has been recording a lot of complications in the area of maternal and child health some of which studies have attributed to psychological distress.

When the concept of integration of health services was introduced, it was envisaged that integration of health services would be done for all areas of priority. This lead to change of data capturing tools from Medical Form 47 (MF 47) to the current Health Management Information

System (HMIS) which was introduced in1998 in Mbala District. The MF 47 tool had weaknesses such as, only capturing one principal diagnosis. If a client had more than one diagnosis, only one diagnosis was written on the tool. This masked a lot of problems leading to none prioritization of such problems as information was either not available or inadequate which gave wrong indications that problem did not exist when it did (MOH, 2005).

1.1.3 Mental Health Services in Zambia

Historically, Zambia did not have formal mental health care. Mental health services were being sought from traditional healers. The lunacy ordinance was enacted in 1927, and it was subsequently followed by the Mental Disorders ordinance of 1951. In June 1962, the main mental hospital (Chainama Hills Hospital) was opened which provided guidance on mental health policy issues until 1974 when the Ministry of Health took over (MOH, 2005).

Despite the 1991 reforms of the health system in Zambia, mental health is still given low priority. This could be due to inadequate implementation of the mental health policy of 2005 especially in the area of integrating mental health into IRH. Besides this, mental health was not regarded as a priority (MOH, 2005). This is evident in by the fragmented manner in which mental health services are provided in the country and the limited budget allocations. Mental health services were allocated 0.4 percent of the total health budget. Most of the mental health services provided are curative in nature and based in tertiary health institutions. At primary health care level, there is either absence of, or fragmented health services (Mwape et al., 2010).

The vision to integrate mental health services in IRH was to promote mental health amongst pregnant women in Zambia which in turn would reduce maternal morbidity and mortality. One of the common conditions occurring in pregnant women is psychological distress. Integration of mental health services entails that a nurse, who is responsible for total health care of a person, must take care of the emotional aspect also of the client/patient (Nambi, 2006). This means that a nurse, who is providing health services to a pregnant woman, should be able to provide mental health services to the pregnant woman as opposed to just concentrating on the physical well being.

According to Hedegaard et al., (2008), provision of mental health services to pregnant women lead to reduction in psychological distress. In Zambia mental health services have not been integrated into IRH. This is evidenced by the new Health Management Information Systems (HMIS) whose tools for capturing mental health data do not address important indicators on mental health in pregnant women. This is the reason why the mental health

policy emphasizes that indicators to mental health shall be developed within the HMIS. Currently the new HMIS only addresses psychosis and neurosis under codes 1,122 to 1,139 of the new HMIS. This means that pregnant women attending ANC clinic are not asked questions that would reveal their psychological status.

In order to strengthen integration of mental health services into Integrated Reproductive Health (IRH), the Ministry of Health made amendments to the mental health policy such that the role of the community in mental health systems was clearly stated; that "the community through the neighbourhood Health Committees and relevant NGOs shall be empowered to champion and promote the art of being mentally healthy by creating environments supportive of mental health. Support for individual and family relationships at all levels of care shall be encouraged" (MOH, 2005:11). There were sporadic cases of psychological distress, but perhaps due to none prioritization of mental health services at national level, coupled with weak data capturing tools, the problem of psychological distress in pregnancy could not be given the due attention.

Though the cases might appear to be sporadic, they could be a "piece of ice berg" to the real situation in the community.

Cases of depression in pregnancy which is an indication of psychological distress, are being recorded in the health facilities year in and year out and interventions that are put in place usually have been addressing those that have been brought to the health facilities. Therefore, there is need to conduct a research in order determine the magnitude of the problem and its influencing factors.

No research has been done to establish if the problem of psychological distress during antenatal period and explore its influencing factors. The complications recorded in table 1, also indicated the need to conduct the study though this research was aimed at establishing whether psychological distress during antenatal period exists in Mbala or not as well as to explore the factors contributing to it. This study will contribute to the body of knowledge and will be a stepping stone for future researches especially that there is need to conduct a research to determine the association between psychological distress and the outcome of labour.

1.2 STATEMENT OF THE PROBLEM

Distress is described as great pain, anxiety or sorrow: acute physical or mental suffering affliction, trouble (Lionpronic, 2007).

Psychological distress arises from stress which is a subjective phenomenon and can be defined as an individual's physical and psychological response to a situation where they feel that the demands placed on them exceed their ability to cope. (Baba, 2009)

There are many definitions, however, for the purpose of this study; the second definition by (Lionpronic, 2007) is one that has been taken.

"Women that have psychological distress during pregnancy, manifest with depression. Several studies show that depression is common during pregnancy. (Kaaya et al, 2010).

Effects of psychological distress on pregnancy

Psychological distress in pregnancy is quite a dangerous condition that has been associated with intrauterine foetal death or retardation, abortions, premature delivery, poor child development, antepartum and postpartum haemorrage, puerperal psychosis and maternal death. Mbala district has been recording most of the complications of psychological distress.

Over a third of postnatal depressed women show high scores during pregnancy suggesting persistence of existing symptoms (Kaaya et al, 2010).

Studies done world wide have revealed that though some health workers do not take psychological distress in pregnancy as pathology, it is a dangerous condition to both mother and baby. Psychological distress is one of the causes of still births, premature delivery, post natal psychological distress and poor child development (Hedegaard et al., 2008).

A report by WHO (2008) indicated that low income countries have much higher prevalence rate of between 10 and 41 percent. However, this is dependent on the place and time of

perinatal period studied and instruments used (WHO, 2008).Another study that was conducted in South Africa and Tanzania revealed that between 41% and 43 percent of HIV positive pregnant women endorse symptoms equivalent to major depression in South Africa and Tanzania respectively (Kaaya 2010).

Mbala district has been recording cases of depression amongst pregnant women which is an indication of psychological distress.

Few studies examining prenatal depressive morbidity in Sub Saharan Africa show higher symptom endorsement (Kaaya 2010) and severity in pregnant women compared to non-pregnant women.

According to available records, a total of 4 depression cases were recorded amongst pregnant women from Tulemane and urban health facilities catchment areas in the year 2007 (Tulemane and Urban Clinic outpatient registers, 2007). Some other cases (22 women in 2009) of psychological distress that manifested with depression were captured through the police Victim support unit in Mbala where they were taken by relatives for counseling especially the victims of domestic violence (Mbala District, 2010).
In first quarter of 2010, Mbala General Hospital recorded two cases of depression in pregnancy. Treatment was given and counseling was done by midwives that are psychosocial counselors. In 2006, three cases of depression in pregnancy were recorded amongst two unmarried clients and one married client. One was referred to Mbala General Hospital while two were taken to Police Victim support for counseling as they were mute; they could not communicate with anyone (Tulemane health Centre register, 2006)..

In order to curtail the problem of depression, the district embarked on training nurses and midwives in psychosocial counseling so that while providing PMTCT services, they could also provide mental health services. A total of 23 nurses and midwives were trained in psychosocial counseling at Chainama in Lusaka and Mpika between 2003 and 2007. These interventions yielded very little results. This could be attributed to none integration of

mental health services into IRH and weak HMIS tools to capture psychological distress during pregnancy (Mbala DHMT, 2008).

Few studies examining prenatal depressive morbidity in Sub Saharan Africa show higher symptom endorsement (Kaaya 2010) and severity in pregnant women compared to non-pregnant women.

Table 1: Complications of delivery 2008

Period	Description	Total	Percentage	Remarks
1st qtr	Total deliveries	**234**	**100%**	-
	Premature babies delivered	50	21%	
	Still births	23	9.8%	10 were macerated still births
2nd Qtr	**Total number of babies delivered**	**217**	**100%**	
	Premature babies delivered	29	16.6%	
	Still births	36	7.8%	4 were macerated still births
3rd qtr	**Total number of babies delivered**	**260**	**100%**	
	Premature babies delivered	49	18.8%	
	Still births	40	15.3%	13 were macerated still births
4th qtr	**Total number of babies delivered**	**231**	**100%**	
	Premature babies delivered	32	14%	
	Still births	23	10%	9 were macerated still births
Totals 2008	**Total number of babies delivered**	**942**	**100%**	**36 macerated still births**
	Premature babies delivered	160	17%	
	Still births	122	13%	

Data source: Mbala General Hospital 2008 maternity delivery register

Table 1 shows that Mbala General Hospital recorded a total of 942 babies delivered.160 (17%) were premature births and 122(13%) were still births. Out of the 122 still births, 36 by were macerated still births. These cases were either referred by staff from health centres or self especially those that live within walking distance to the hospital. Though there was no proof to show that the still births shown in table 1, were as a result of psychological distress only, but other factors, like prolonged labour, placenta praevia, Placenta abruption, the researcher's assumptions are that some of them could have been due to psychological distress whose complications include; intrauterine foetal death (Hedegaard et al., 2008).

Besides this, no research has been conducted in Mbala to determine the associations between psychological distress and the outcome of pregnancy.

1.3 ANALYSIS OF INFLUENCING FACTORS

There could be several factors influencing psychological distress in pregnant women. These factors include socio-cultural factors, service related factors and disease related factors.

1.3.1 Socio-cultural and economic factors

Domestic violence/Abuse- Domestic violence/abuse is in many forms ranging from physical, sexual, economic and emotional. The United Nations defines violence against women as any act of gender-based violence or abuse that results in, or is likely to result in, physical, sexual or mental harm or suffering to women. This includes threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (WHO, 2009).

The facts are that violence against women is a major public health problem and a violation of human rights. Many women do not seek help or report violence when it occurs especially that violence by intimate partner is the most common forms of violence against women. Many women lack of access to education and opportunity, and low social status in communities are linked to violence against women. They need to know that a wide range of physical, mental, sexual and reproductive, and maternal health problems can result from violence against women.

The study that was conducted in Zambia by WH, 2009 on women's health and domestic violence, revealed that between 15 and 71percent of women reported physical or sexual violence by a husband or partner. Between 4 and 12 percent of women reported being physically abused during pregnancy.

Life events

Stressful events like death of spouse, child or close relative, previous maltreatment and difficult labour can be a strong stressor that if coping strategies fail, one may end up with psychological distress especially in pregnancy.

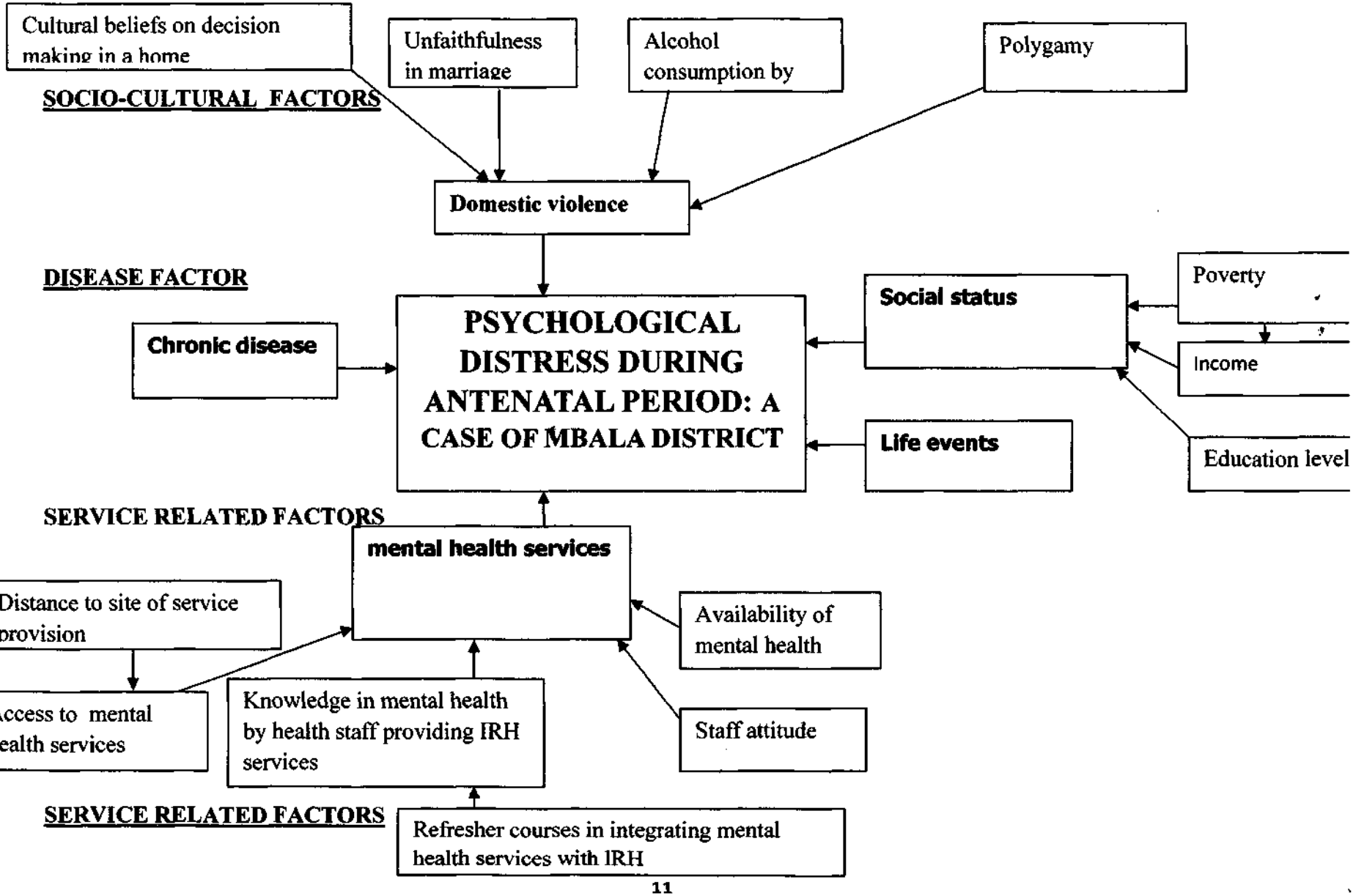
Disease related factors

Presence of chronic diseases – Chronic illnesses like hypertensive disorders, mental disorders, Tuberculosis, HIV/AIDS, Asthma, Diabetes in pregnancy, cardiac diseases can be a source of distress. A study done by Kwalombota, (2002) revealed that those who were informed for the first time about their HIV status, elicited more sigs and symptoms of psychological distress.

Service related factors

Non provision of mental health services to pregnant women could be contributing to psychological distress during pregnancy. A study conducted by Furbera et al. (2010) indicated that provision of mental health services leads to reduction of number of psychological distress.

1.4 PROBLEM ANALYSIS DIAGRAM



The diagram above explains the relationships between antenatal distress and postnatal distress. Antenatal psychological distress leads to postnatal distress. Antenatal and Postnatal distress lead to poor mother-baby bonding and affects child development in infancy, childhood and adolescence. Low social status, domestic violence, negative life events, presence of chronic disease/condition and non-provision of mental health services to pregnant women are risk factors to development of both antenatal and postnatal psychological distress

1.5 JUSTIFICATION

The purpose of this study is to explore the prevalence of psychological distress in pregnant women in Mbala district and the factors associated with it.

The reason for doing this study is that it will provide baseline data for future studies to be conducted in Mbala district and other parts of the country as well. This study will only look at the existence and magnitude of the problem of psychological distress during antenatal period but perhaps other studies will need have to look at the relationship between psychological distress and the outcome of pregnancy which could not be conducted due to limited time.

So far, no study has been conducted in Mbala concerning psychological distress during antenatal period and yet cases of psychological distress are being recorded in the district.

Cases of psychological distress in pregnancy are seen in health facilities being diagnosed as depression. Though the influencing factors are hypothesized to be Social status, availability of mental health services, chronic diseases, life events and domestic violence; the influencing factors are not clearly established. A research is needed to determine the magnitude of the problem of Psychological distress and the influencing factors during pregnancy and come up with strong interventions to deal with the problem which will include MOH coming up with strategies of implementing the mental health policy in terms of integrating mental health into IRH.

1. 6.0 RESEARCH OBJECTIVES

Research objectives are the specific accomplishments the researcher hopes to accomplish; by conducting the study" (Polit & Beck 2008). The research objectives answer research questions or test research hypotheses.

1.6.1 General Objective-

To explore the magnitude of psychological distress in pregnant women in Mbala district.

1.6.2 Specific objectives: In this study, the specific objectives are:

1.6.2.1 To establish the relationship between social status and psychological distress during antenatal period.

1.6.2.2 To explore the relationship between availability of mental health services and psychological distress during antenatal period.

1.6.2.3 To determine relationship between chronic diseases and psychological distress during antenatal period.

1.6.2.4 To establish the relationship between life events and psychological distress during antenatal period.

1.6.2.5 To determine whether domestic violence influences psychological distress in pregnant women during antenatal period.

1.7 HYPOTHESES

A hypothesis is a tentative explanation of the relationship between two or more variables (Basavantappa 2006). The hypotheses in this study are:

1.7.1 There is a relationship between social status and psychological distress during antenatal period.

1.7.2 There is a relationship between Mental health services and psychological distress during antenatal period.

1.7.3 There is a relationship between chronic disease and psychological distress during antenatal period.

1.7.4 Sad or distressing/stressful life events lead to chances of having psychological distress during antenatal period.

1.7.5 There is a relationship between domestic violence and psychological distress during antenatal period.

1.8 DEFINITION OF TERMS

1.8.1 Conceptual definitions

Psychological distress is defined as great pain, anxiety or sorrow: acute physical or mental suffering affliction, trouble (Lionpronic, 2007).

Psychological distress Psychological distress is defined as feeling of great worry or unhappiness; great suffering (Hornby, 2006).

For the purpose of this study, the first definition by Lionpronic (2007) is going to be used

Social status- Is defined as social professional position in relation to others (Hornby, 2006)

Mental health services are defined as beneficial activities which aim at overcoming issues involving emotional disturbance or maladaptive behavior adversely affecting socialization, learning or development (Medical dictionary 2009).

A chronic disease- Is defined as a disease that persists for a long period of time, usually with duration greater than three months (Medical dictionary 2009).

Life event- Means something important that happens in life (Hornby, 2006)

Domestic violence/Abuse- The United Nations defines violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (WHO, 2009).

1.9.0 Variables and cut off points

There are two types of variables in this study as follows:

1.10.1 Dependent Variable

"A dependent variable is that phenomenon in the hypothesis that, in the experimental study, to test the hypothesis, is not manipulated but is accepted as it occurs" (Basavanthappa, 2006:81). In this study the dependent variable is psychological distress during antenatal period

1.10.2 Independent Variables

The independent variable is that phenomenon in the hypothesis that, in the experimental study to test, the hypothesis, is factors that influence the problem under study. They are causal factors influencing the problem (Basavanthappa, 2007)..

The independent variables in this study are:

(i) Social status

(ii) Mental health services

(iii) Chronic disease

(iv) Life events

(v) Domestic violence

TABLE 2: CUT OFF POINTS OF VARIABLES

VARIABLES	CONCEPTUAL DEFINITION	OPERATIONAL DEFINITION	INDICATOR	CUT OFF POINT	Questions
Social status	**Social status-** Is defined as social professional position in relation to others (Hornby, 2006)	Number of meals per day Area of residence Source of energy used in a home	High social status Low social status	Able to score 6-7 points Able to score <6 points	5 to 7
Availability of Mental health services	**Mental health services** are defined as beneficial activities which aim at overcoming issues involving emotional disturbance or maladaptive behavior adversely affecting socialization, learning or development (Medical dictionary 2009).	Health talks on mental health during ANC clinics	Available of mental health services Non availability of mental health services	Yes response No response	8-9
Presence of chronic disease	**A chronic disease-** Is defined as a disease that persists for a long period of time, usually with duration greater than three months (Medical dictionary 2009).	Hypertensive disorders, diabetes mellitus, Asthma, Cardiac problem, mentally impaired, TB, HIV/AIDS	Chronic disease No chronic disease	Yes response to question 10 No response to question 10	10 to 11

Recent life events	**Life event-** Means something important that happens in life (Hornby, 2006)	Death of spouse/child/close relative, loss of job, loss in business/property	Life event No life event	Yes response to question 12 No to question 12	12 to 13
Domestic violence	**Domestic violence/Abuse-** The United Nations defines violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (WHO, 2009).	A relationship with a spouse that is not good Being beaten by intimate sexual partner/Husband Being insulted by Husband/intimate sexual partner Being shouted at by intimate relation Using unpleasant words to spouse Forcing sexual intercourse on the woman Spouse having extra marital affairs Having a husband who sleeps out for reasons not acceptable by wife	Domestic violence No domestic violence	Able to score 8-15 Able to score 0-7	14to 22

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is defined as a broad, comprehensive in-depth, systematic and critical review of scholarly publications, unpublished scholarly print materials, audio-visual materials and personal communications (Basavanthappa, 2007). It is a very important step in the research process which helps the researcher to identify both what is known and not known about the topic. Literature review also helps the researcher to examine methodologies, instruments and techniques that were used by other researchers. This chapter describes the literature on psychological distress and the independent variables which are Social status, Mental Health, chronic diseases, life events and domestic violence,

In this study the researcher reviewed literature on the relationship between Social status, Mental Health, chronic diseases, bad life events, domestic violence and psychological distress. Literature review was conducted for two main goals; to provide readers with an overview of existing evidence on the existing problem of psychological distress during antenatal period that is being addressed in this study and to develop an argument that demonstrates the need for this study to be conducted. The researcher therefore reviewed related literature such as critical care.

Overview of psychological distress during antenatal period

Psychological distress during antenatal period is a world wide phenomenon. It affects the outcome of pregnancy e.g. still births, premature delivery as well as long term effects on the development of the child in future.

2.2 Psychological distress

It is important that health workers begin to view psychological distress a a pathology that can lead to so many complications both on the pregnant woman and the foetus. A study which was conducted by Limlomwongse, liabsuetrakul, (2006) on psychological distress during perinatal period in Thailand revealed that out of a sample of 610 women in perinatal period, 20.5% had psychological distress. The study further showed that prenatal psychological distress results in post natal psychological distress. The study looked at perinatal period, however this study will look at psychological distress in antenatal women only. Another study that was conducted by Hedegaard et al (2008) on pregnant women in Denmark revealed that psychological distress in pregnant women leads to still births and premature deliveries. Psychological distress in pregnancy is pathology. There should be interventions to address it in order to reduce morbidity. Many women with psychological distress manifest with depression. A study that was conducted by Kaaya et al., (2008) revealed that women that have psychological distress during pregnancy manifest with depression. Several studies show that depression is common during pregnancy. The study concluded that there is limited information on the magnitude of perceived distress during pregnancy and meanings ascribed to that distress (Kaaya et al, 2010)

2.3 Social status

Social status has been associated with psychological distress during perinatal period. A study that was conducted by (Kessler 1979) at university of Wisconsin-Madson on stress, social status and psychological distress revealed that persons in socially disadvantaged statuses are particularly likely to exhibit symptoms of psychological distress. Another study that was conducted in France on unemployment and psychological distress one year after child birth, (Saurel-Cubizolles, 1999), after adjusting results unwanted pregnancy, marital conflicts, marital status, hospitalization of baby during the last year and others, the study revealed that psychological distress was specially linked to unemployment. The study further concluded that social regulations protecting employment during and after pregnancy is important. The study focused on contribution of unemployment to the psychological distress

2.4 Mental health

Stresses are very common in pregnancy especially that pregnancy itself can exert a lot of stress on the pregnant woman. During antenatal period, the stressed woman can easily progress to psychological distress of varying degrees from mild to moderate and the worst being severe hence the critical need for integrating mental health into IRH. Psychological distress is common in the antenatal period. A study that was conducted in England revealed that psychological distress existed in many forms ranging from mild, moderate or severe but that only those who suffer severe psychological distress are referred to the specialist mental health services. Those who suffer mild to moderate psychological distress are managed by the primary care services (Furbera et al., 2010). The study further revealed that psychological distress that is categorized as mild to moderate can be extremely debilitating for pregnant women. Identification of these women in clinical practice is crucial so that effective interventions can be targeted appropriately. Screening criteria that has the efficacy to identify depression and anxiety is needed (ibid). Recommendations were made that a multidisciplinary approach to the management of care is developed to address the range of experiences that pregnant women who suffer mild to moderate prenatal psychological distress may have (ibid).

The study concluded that 10-15percent of women suffer depression during pregnancy. Other studies indicate that rates of depression during pregnancy are higher than or as high as in post-natal periods (Evans et al. 2001; Josefsson et al 2001, in Kaaya S.F. et al, 2010). Over a third of postnatal depressed women show high scores during pregnancy suggesting persistence of existing pre-existing symptoms. Few studies examining prenatal depressive morbidity in Sub Saharan Africa (SSA) show higher symptom endorsement (Fatoye et al., 2004 in Kaaya 2010) and severity in pregnant women compared to none pregnant women in Nigeria and Uganda respectively. Adewaya et al. (2007) in Kaaya et al (2010) showed an 8.3% point prevalence of depressive disorder during late pregnancy in Nigerian antenatal clinic attendees. These studies prove the importance of the need to provide mental health services to pregnant women through integrating mental health services into integrated Reproductive Health.

2.5 Chronic diseases

Another study that was conducted in South Africa and Tanzania revealed that between 41% and 43% of HIV positive pregnant women endorse symptoms equivalent to major depression in south Africa and Tanzania respectively (ibid).

Studies show between 41% (Rochat et al., 2006 in Kaaya et al., 2010) and 43% (Intelman et al., 2007 in Kaaya et el., 2010) of HIV positive pregnant women endorse symptoms equivalent to major depression in south Africa and Tanzania respectively.

2.6 Life events

Sad or distressing life events are likely to have an influence on psychological distress during pregnancy. Life events like loss of dear ones, nursing a sick child or loss of job are some of the life events that may influence psychological distress. A study that was conducted by Melton et-al (2007) on recent life events and development of psychological distress revealed that life events influence development of psychological distress. Psychological distress is associated with life events. A study which was conducted by Williams & Williams (1978), indicated that life events are associated with wide range of disorders and distress. Though life events may be inevitable most of the times, they may have some adverse psychological impact on the pregnant women.

Another study which was conducted by Sautin et al (2007) a revealed that there was an associated between stressful life events and distress. Sautin (2010) though it was not carried out on pregnant women.

2.7 Domestic violence

The United Nations defines violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women,

including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (WHO, 2009).

In a 10-country study on women's health and domestic violence conducted by WHO,

Between 15 and 71 percent of women reported physical or sexual violence by a husband or partner.

Many women said that their first sexual experience was not consensual. (24% in rural Peru, 28% in Tanzania, 30% in rural Bangladesh, and 40% in South Africa).

Between 4 and 12percent of women reported being physically abused during pregnancy.

Polygynous marriages are both more likely to have a history of violence, and be victims of violence within the past year, controlling for marital duration. I also find a link between violence and men's alcohol consumption. Scholars of violence maintain that social isolation often accompanies violence, though the direction of causality is not clear

In many parts of Sub-Saharan Africa, spousal violence is considered an acceptable punishment that husbands inflict on their wives. Many women and men throughout Africa agree that a husband may be justified in beating his wife if she does not fulfill her domestic obligations.A better understanding of the factors that drive violence within households is critical, particularly in settings with high prevalence. This paper examines the economic and social

determinants of violence using a representative sample that spans three countries in East Africa:
Rwanda, Tanzania, and Zambia. The results of the paper have implications for the way economists model violence in the context of household decision-making, as well as practical implications for the design of interventions aimed at improving the status of women in less developed countries.Melissa González-Brenes (2004)

Though no research has been conducted in the district on psychological distress during antenatal period, the health facilities have been recording cases of depression in pregnant women (Mbala 2009).

Psychological distress during antenatal period is a world wide phenomenon. Several studies have been done world wide which have revealed the problem of psychological distress in

2.8 Conclusion

Literature review has shown that psychological distress during antenatal and post natal periods is a serious pathology that needs prompt interventions through provision of mental health services.

The studies that have been conducted on psychological distress during antenatal period, will increase the body of knowledge in terms of the causes and how prevention can be achieved.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

The research methodology is part of the research proposal. It usually consists of subjects, projects, and data analysis. It refers to the decisions the researcher must make concerning methods to e sued to address the research question. A research methodology includes; the research design and setting, study population, sample selection, data collection tools and techniques, pilot study and ethical considerations (Basavanthappa, 2007)..

3.2 Research design

Research design refers to the overall plan for addressing a research question, including specifications for enhancing the integrity of the study (Polit & Beck 2008). It includes specifications for enhancing the internal and external validity of the study and spells out the basic strategies that were adopted to develop information that is accurate and interpretable (Basavanthappa 2007). In other words it is a plan that guides the research process in; making observations, collecting data, analyzing data and presentation of findings.

A non interventional cross sectional descriptive quantitative study design was used. The study is a cross sectional because information obtained once from different areas without going back. Its purpose is to provide a picture of situations as they naturally happen as supported by Polit & Beck, (2008).

The study was Non-interventional study design because data was collected without introducing treatment. It is also a descriptive study because the purpose of the study was to observe, describe and document aspects of psychological distress in pregnant women. Further more, the study was quantitative because data was quantified in numerical values and percentages to facilitate statistical inferences Description and analysis of data was on psychological distress during antenatal period in Mbala district. The study did not involve manipulation and control. This information is supported by Polit & Beck, (2008).

3.3 Research setting

Research setting is the physical location and conditions in which data collection takes place in a study (Polit & Beck 2008)

This study was conducted in five health facilities, four of which conduct antenatal clinics in Mbala district and Mbala General Hospital which is a referral hospital for all complicated cases including pregnant women with risk factors that need expert management at the general hospital. The district is one of the seventy two districts in Zambia and one of the twelve districts in the Northern Province.

The district is approximately 1,067 kilometers away from Lusaka the capital city of Zambia and about 167km from the provincial capital (Kasama) (Mbala DHMT 2007). Mbala District shares boarders with Kasama, Mporokoso, Mungwi, Mpulungu, Nakonde District and the republic of Tanzania (Mbala DHMT 2009).

The district had a total population of 218, 871 according to CSO (2000) extrapolated at 3.9% annual growth rate for Mbala district. The expected number of pregnancies for the year 2010 was 11, 819 (Mbala DHMT, 2010).

Mbala district was conveniently selected. Due to limited financial resources, the researcher found it easy to conduct a research in a district where she lives.

Mbala General Hospital was conveniently picked as it is the only hospital in the district. The Health Centres were also purposefully selected due to easy accessibility as two of them (Urban and Tulemane Clinics) were within walking distances while the other two (Senga and Nondo) were along the main tarred road where accessibility to public transport was very easy,

3.4 .1 Study population

The study population established by the researcher, is any set of persons, objects or measurements having observable characteristics in common (Basavanthappa 2007). The study population comprised pregnant women who live in Mbala district. The study population consists of the "Target Population" and the "Accessible Population".

3.4.2 Target population

Target population is defined as the entire population in which the researcher is interested and he/she would like to generalize the results of the study (Polit and Beck 2008). The target population in this study comprised pregnant women who in live Mbala and who are likely to access antenatal care services in health facilities.

3.4.3 Accessible target population

Accessible population is defined as people available for a particular study (Polit & Beck 2008). In this study the accessible population were pregnant women that were available for the study. These were found accessing antenatal care services from five health facilities in Mbala district.

3.5 Sample selection

Sample selection is a process of selecting small number of respondents from the population to represent the entire population so that inferences about the population can be made (Polit & Beck 2008). In other words it is a process by which the study subjects are chosen from a large population.

To select the study subjects, the researcher used a simple random sampling method which is a probability sampling method at Tulemane Clinic. There were 26 women in total who had come for antenatal clinic care at Tulemane Health Centre. The researcher intended to interview eight (8) pregnant women. Women were in a queue. Therefore, they were counted

by the researcher. Every third person was co-opted to be interviewed. These methods of selection gave subjects an equal chance of being selected and participate in the study and also reduced biasness on the part of the investigator.

In the remaining four health facilities, that is Urban Clinic, Mbala General Hospital Senga and Nondo RHCs, the researcher used convenient sampling which is a non probability sampling method. Since the clients that had come for Antenatal clinic services were few, they were all included in the study. In total, there were Forty Two (42) subjects that were conveniently selected.

3.6 Sample size

There are some terminologies that are used in sample determination as follows:

Standard deviation is a measure which describes how much individual measurements differ on the average from the mean.

Confidence Interval: is a range of values which most likely encompasses the parameter (measurement).

Standard error- gives an estimate of the degree to which the sample mean varies from the population mean.

Sample size is calculated on the basis of the standard deviation, standard error and confidence interval or it can be computed using programmes like Epi info on the computer .

In this study, which is academic, the sample was chosen by the school authority at the department of Nursing sciences after taking into consideration the short period of time allocated for the study coupled with limited financial resources given to students by the Ministry of health Therefore, a sample size of 50 pregnant women was used.

3.7 Operational definition of terms

In this study, a pregnant woman was someone who had an antenatal card which indicated that she was pregnant by way of indicating the height of fundus with or without foetal heart. The researcher took into consideration that those in the first and part of second trimester (1-4 months old pregnancy) were likely not to have foetal heart sounds indicated on the antenatal card due to use of ordinary fetal scopes to detect fetal heart during antenatal care clinics.

Psychological distress- In this study, psychological distress refers to anxiety, depression, disturbed sleeping patterns like late or early insomnia. It also included thoughts of doing harm to self, and a state of helplessness either by verbalization or through actions showing loss of hope.

Social status- This referred to area of residence, source of energy used in a home and number of meals afforded per day. Those who were considered to be of low social status were those were residing in high density areas, those using charcoal or firewood as a major source of energy and those who could only afford two or less number of meals per day.

Mental Health services- Availability of mental health services in this study meant yes responses from the respondents to the question on whether nurses/midwives gave them health talks on mental health during antenatal care clinics.

Chronic disease- In this study, a yes response from respondents to a question on whether they had any of the listed chronic diseases or any specified condition like HIV/AIDS, TB, Hypertensive disorders, Asthma, Diabetes Mellitus, Cardiac conditions, presence of a psychiatric condition signified presence of a chronic disease.

Life events- in this study life events meant death of spouse/child/close relative, loss of job/income, eviction, loss of property, previous difficult labour and maltreatment by significant others, nursing sick relatives, being divorced or abandoned by an intimate sexual partner.

Domestic violence/Abuse -in this study domestic violence/abuse referred to being beaten, use of abuse language to the pregnant woman; insulting, shouting at the pregnant woman and use of unpleasant words by a husband /sexual partner. It also included husband sleeping out without acceptable reasons, husband having extra marital affairs and forced sexual intercourse by partner.

3.8 Data collection tool

A data collection tool is a measuring device used in gathering of information needed to address a research problem or to answer a research question (Polit and Beck, 2008). Data collection tool was developed with the assistance from the supervisor

A semi structured interview schedule tool was used in this study. This kind of tool provided the researcher an opportunity to ask questions and explore and clarify issues. Section A comprised questions on demographic data. Respondents were asked about their ages, marital status, religion and employment status. Section B consisted of question on social status while Section C contained questions on mental health services availability during antenatal care services. Section D comprised questions on chronic diseases, section E consisted of questions on life events while section F had questions on domestic violence. See Appendix 1 on page . The last section was section G which contained the Edinburgh Post natal Depression Scale to measure psychological distress.

3.9 Data collection techniques

Data collection technique is the actual method on how data was collected. It allows for systematic collection of information from respondents (Polit and beck 2008). The technique is the method it is defined as the method that the researcher uses to collect accurate and relevant data. Data collection techniques allow a systematic collection of information from respondents.

In this study, data was collected by using a semi structured interview schedule. Recommendation for clearance was obtained from the supervisor and clearance was obtained from Head of Department in the School of Medicine, Department of Nursing Sciences. Further permission was sought and obtained from

the District commissioner for Mbala district and the District Medical Officer for Mbala District Health Services. Further permission was obtained from Ward/Officers In-charge of health facilities where the study was conducted.

Respondents were greeted and the purpose of the study explained to them, on individual basis and that they were required to fill-in a consent form before answering the questionnaire. The researcher explained the non association of respondents' names on the consent forms and their signatures to the results. They were reassured about confidentiality and anonymity that serial numbers were used on the interview schedule and not their names. This enabled them to participate in the study freely and without fear. All respondents agreed to write down their names on the consent forms and signed. Those that were unable to write asked the researcher to write their names on their behalf while they endorsed using a thumb print. Then the researcher started asking questions, and jotting down responses. Where answers were not clear, probing was done. Then respondents were allowed to ask questions, some did ask while some said they had no questions. After the interview, each respondent was thanked for participating in the study.

3.10 Validity

Validity refers to " a quality criterion referring to the degree to which inferences made in a study are accurate and well-founded; in measurement, the degree to which an instrument measures what it is intended to measure" (Polit & Beck, 2008:768).

3.10.1 Internal validity- "concerns the validity of inferences which, given the existence of an empirical relationship, it is the independent variable, rather than other factors, that caused

the outcome (Polit & Beck, 2008). To ensure validity, a pilot study was conducted in Kasama district at Kasama urban clinic and modifications to the tool were done. Besides this, same instrument was used to all the respondents.

3.10.2 External validity- is one of the elements that the researcher needs to take into consideration before conducting a study. External validity is defined as that which inferences about observed relationships will hold over variations in persons, setting time or measure of the outcomes. External validity then concerns the generalizability of causal inferences and this is a critical concern for research that aims to yield evidence for evidence based nursing practice (Polit & Beck, 2008). It influences the significance if generalization is reduced. Threats to this validity include hawthorne's effect. In order to ensure external validity, the sample comprised pregnant women from different social-economic, political and religious backgrounds

3.11 Reliability

Reliability is the extent to which the instruments used, yields the same results on repeated measures (Basavanthappa, 2007). Following instructions on the interview schedule eliminated biases by administering the same interview schedule through out the study. Reliability of the instrument was measured by conducting a pilot study, and asking similar questions to all the respondents. This helped to eliminate biases and minimize the errors in the study.

3.12 Pilot study

A pilot study is the study carried out at the end of the planning phase of research, in order to explore and test the research elements (Basavanthappa, 2007). The objective of conducting a pilot study was to find out how clear and relevant the questions were, as well as to ascertain the appropriateness of terminologies used in the questionnaire. This also enabled necessary

adjustments to be made on the questionnaires before the major study was carried out. The pilot study was done in Kasama on 5 pregnant women at Kasama Urban Clinic.

3.13 Ethical and cultural consideration

Ethical consideration is the great care that is taken in research to ensure that rights of those humans used in the study are protected. In view of this, permission to conduct a study in Mbala District was sought from the District Medical Officer (DMO) who is in-charge of all health Facilities in the District. After he had approved that the study be undertaken, finally, authority was sought from the District Commissioner (DC) in Mbala. He is in-charge of the entire district. The nature and purpose of the study and how the findings will be utilized was explained to both the DMO and the DC.

Then at the Centres where data was collected, permission was sought from Officers in-charge to enhance cooperation from the staff.

After randomly and conveniently picking respondents, at one four health facilities respectively, written consents were obtained from them to prove that they had allowed the researcher to interview them.

The filled in consent forms were put in a separate envelope and later kept under lock and key so that no one accessed them.

In order to maintain confidentiality, no names were used on the interview schedule as it was on anonymity basis. All clients were greeted and explanation given on the kind of research and purpose of the research. It was clearly explained to them that they had the right to refuse to participate and that if at any given time they wanted to discontinue, they were going to be allowed without any reservations.

After interviewing the respondent, at the end, the clients were asked if they had any concerns either from the discussion or outside the discussion then at the end the respondents were thanked. Before the clients left, the researcher checked for the completeness of the

interview schedule. The filled in interview schedules were kept in a separate envelope and at the end of the day, all the filled in data collection tools were stored under lock and key

Some of the respondents with psychological distress were booked for counseling by the researcher since she is a psychosocial counselor. They were counseled at the end after attending to all clients. One client with psychological distress with history of being beaten by husband and absence of fetal heart sounds was referred to Mbala General Hospital and was escorted by the researcher to the Medical officer. This was done at the end of the interview session.

3.15 Plan for data analysis

"Data analysis is the systematic organization and synthesis of research data and testing of research data and, in quantitative studies; the testing of hypothesis using those data." (Polit and Beck 2008:751). The data was edited and corrected for completeness, uniformity and accuracy and then coded. Coding was done in the right column on the structured interview schedule.

Data were first analyzed manually using a data master sheet on flip charts and scientific calculator, then later on analysis was done using SPSS version 16.0. Data were entered in SPSS and analysis was done. X^2 and P values were calculated using SPSS programme on the computer. Non parametric tests were taken into consideration as the sample was small. Non parametric tests in SPSS are recommended on small samples ranging between 30-50 sample size.

3.16 Plan for dissemination of findings

Preliminary findings were disseminated to some DHMT members, the DMO inclusive. At a later stage, the findings will be disseminated to PHO and stakeholders both in the district and the province.

CHAPTER FOUR DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.0 Introduction

In this chapter the researcher discusses the analysis and presentation of the findings of the study. The purpose of the study was to explore the magnitude of psychological distress in pregnant women in Mbala district. This chapter describes the procedures used for analysis of data and presentation of findings.

4.1 Data analysis

According to polit & Beck (2008) data analysis is the systematic organization and synthesis of research data and the testing of research hypothesis using those data. The main purpose of data analysis was to derive meaning and interpretation from the research findings. Data were collected using interview schedule. The investigator used quantitative data. Role data wee collected, edited and rechecked for completeness, consistency and accuracy then coding was done. Data analysis was done in series; first it was analyzed manually using a a data master sheet on flip charts and scientific calculator, secondly data was analyzed using SPSS 16.0 and finally a stat calculator on Epi info version 3.5.2 was used to get the Chi squares, Odds ratio and P value to help in analysis.

4.2 **Quantitative data** is defined by Polit & Beck (2008) as information collected in the course of a study that is in a quantified or numeric form. Before data were entered on the data master sheet, they were checked for accuracy, completeness. The data collected were then entered on a data master sheet on a flip chart and tallied according to the logical sequence of which it was captured using structured interview. The data were then analyzed manually and later on by use of the computer using SPSS programme version 17.0. Later figures from cross tabulation tables were entered on Epi Info version 3.5.2 statistic calculator to get Chi square (X^2), Odds ratio and P value.

4.3 **Qualitative data** are information that was collected in the course of a study in narrative (non-numeric) form (Polit & Beck, 2008). Using qualitative method, data were

described and interpreted on the relationship between psychological distress and the variables social status, chronic diseases, life events and domestic violence. All opinions that were obtained from respondents were written down according to the way they were expressed. Similar opinions were grouped together to lessen the number of opinions obtained from respondents for easy analysis and presentation.

FREQUENT TABLES

4.1 SOCIAL DEMOGRAPHIC CHARACTERISTICS

Table 4.1: **Age categories of respondents characteristics of the sample (n=50)**

Age	**Frequency**	**Percentage**
16-20years	14	28
21-26 years	16	32
27-32 years	10	20
33-38 years	10	20
Total	**50**	**100**

The table above (Table 4.1) shows that 16 (32%) of the respondents were aged between 21-26years followed by those aged between 16-26years. This indicates that the younger age group in this study accessed ANC services more than the older group.

Table 4. 2: Marital status

Marital status	**Frequency**	**Percentage**
Married	48	96
Single	2	4
Total	**50**	**100**

48 (96%) of the respondents were married while 2 (4%) were single two (2) were single.

This shows that in this study, married women accessed ANC services more than single women being stigmatized by people who knew that they were not married.

Table 4.3: Religion

Religion	**Frequency**	**Percentage**
Christian	50	100
Total	**50**	**100**

All the respondents in the table were Christians indicating that Christianity is predominant religion among participants in the present study

Table 4.4: Employment

Employment	**Frequency**	**Percentage**
Employed	1	2
Not employed	49	98
Total	**50**	**100**

Majority 49 (98%) of the respondents as shown in table 4.4 said that they were not employed revealing that almost all participants in the present study were not employed

4.2 SOCIAL STATUS

Table 4.5: Residential area

Residential area	**Frequency**	**Percentage**
High density	46	92
Medium density	3	6
Low density	1	2
Total	**50**	**100**

According to information in table 4, majority of the participants in this study 46(92%) were from high density areas.

Table 4.6 Major source of energy used in a home

Source of energy	**Frequency**	**Percentage**
Electricity	5	10
Charcoal	10	20
Firewood	35	70
Total	**50**	**100**

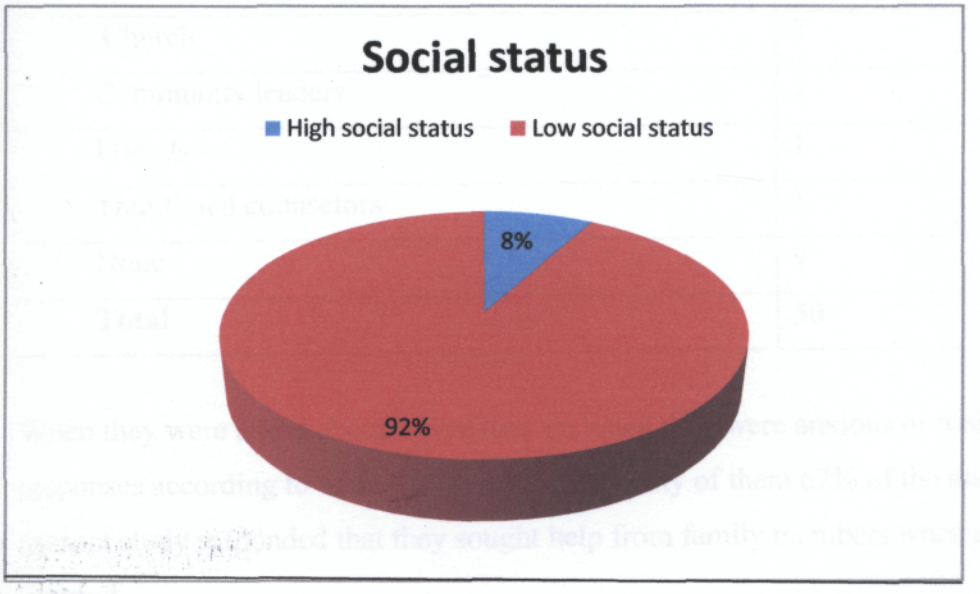
70% of the respondents as shown in table 4.6 were using firewood as a major source of energy in their homes,

Table 4.7: Number of meals afforded per day

Number Meals	Frequency	Percentage
3 meals	17	34
2 meals	29	58
1 meal	4	8
Total	**50**	**100**

The information in table 4.7 indicates that slightly above half of the respondents (58%) could afford only two meals in a day.

Figure 1: Social status category (n-50)



Majority of the respondents 46(92%) as shown in figure 1,had low scores on social status. This is an indication that majority participants in this study were of low social status

4.3 MENTAL HEALTH SERVICES

Table 4.8 Mental Health services

Mental Health	**Frequency**	**Percentage**
Not provided	50	100
Provided	0	0
Total	**50**	**100**

All respondents 50 (100%) responded that mental health services were not provided to them during antenatal care clinics. This is an indication of non integration of mental health services into Integrated Reproductive Health programmes.

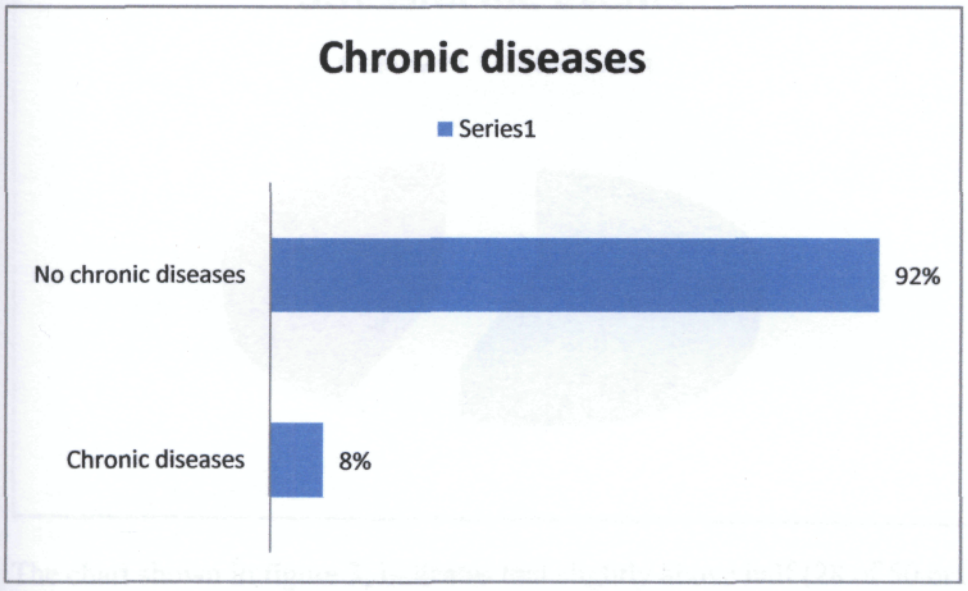
Table 4.9 Where they seek help when worried about something

Where they seek help	**Frequency**	**Percentage**
Family	31	62
Church	7	14
Community leaders	1	2
Friends	1	2
Traditional counselors	1	2
None	9	18
Total	**50**	**100**

When they were asked about where they go when they were anxious or worried, their responses according to table 4.9 reveal that majority of them 62% of the participants in he present study responded that they sought help from family members when anxious or worried.

4.4 CHRONIC DISEASES

Figure 2: Chronic diseases- Asthma, HIV/AIDS and Cardiac disease



Only four percent of the respondents reported having chronic diseases as shown in figure 2

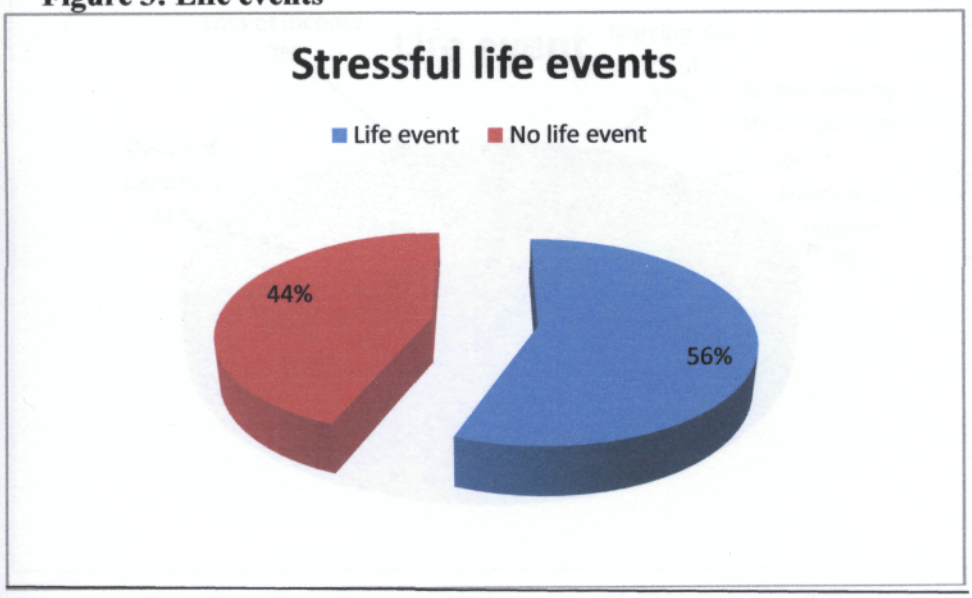
Table 4.10: Worried about the disease

Worrying about disease	**Frequency**	**Percentage**
Yes most of the time	0	0
Yes sometimes	2	50
Not very often	1	25
No	1	25
Not applicable	-	-
Total	**4**	**100**

Out of the total of 4 (25%) respondents that had chronic diseases, only 1 (25%)%) reported that she was not worried about the disease.

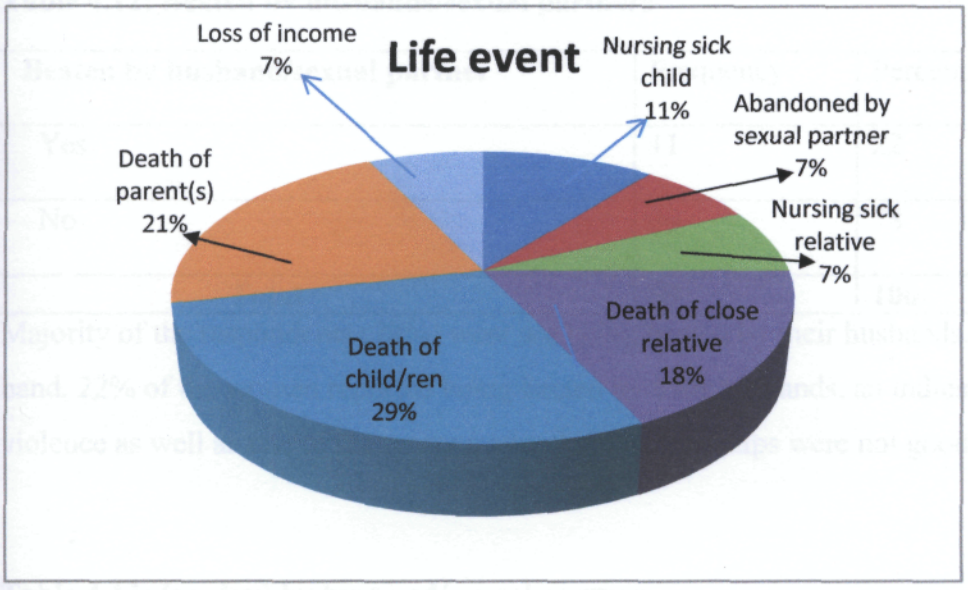
LIFE EVENTS

Figure 3: Life events



The chart shown in figure 3, indicates that slightly above half (28 of 50 or 56%) experienced stressful life events.

Figure 4-Types of life events



Out of a total of 28 respondents who had stressful life events, 8(29%) lost their children. The graph in figure 4 shows distribution of the types of stressful life events amongst 28 participants in his study that reported having experienced stressful life events.

Table 4.11: Relationship with husband

Relationship with husband/sexual partner	Frequency	Percentage
Good	24	48
Fair	20	40
Bad	6	12
Total	**50**	**100**

The information in table 4.11 reveal that 40% of the participants in this study reported that their relationships with their husbands/sexual partners were fair while 12% reported that their relationships were bad. This could mean that above half of the participants in this study were not relating well with their husbands/sexual partners.

4.6 DOMESTIC VIOLENCE

Table 4.12: Beaten by husbands/sexual partners

Beaten by husband/sexual partner	Frequency	Percentage
Yes	11	22
No	39	78
Total	**50**	**100**

Majority of the respondents (78%) were not being beaten by their husbands. On the other hand, 22% of the women reported being beaten by their husbands, an indication of domestic violence as well as one of the reasons why their relationships were not good.

Table 4.13: Insulted by husband/sexual partner

Insulted by husband/sexual partner	**Frequency**	**Percentage**
Yes most of the time	0	0
Yes some of the time	7	14
Not very often	8	16
No	35	70
Total	**50**	**100**

According to table 4.13, slightly below one third (30% or 15 in total) of the participants in this study were being insulted by their husbands/sexual partners either sometimes (7 or 14%) or not very often (8 or 16%). This indicates that a total of 30% of the respondents in this study were being verbally abused.

Table 4.14: Shouted at by husband/sexual partner .

Shouted at by husband/sexual partner	Frequency	Percentage
Yes most of the time	1	2
Yes some of the time	10	20
Not very often	11	22
No	28	56
Total	**50**	**100**

In total, below half (22 or 44%%) of the respondents in this study reported that they were being shouted at by their husbands/sexual partners ranging from being insulted most of the times (1 or 2%, sometimes 10 or 20% and not very often 11 or 22%. This could be an indication of verbal abuse.

Table 4.15: Use of unpleasant words by husband/sexual partner

Use of unpleasant words	Frequency	Percentage
Yes most of the time	5	10
Yes some of the time	18	36
Not very often	15	30
No	12	24
Total	**50**	**100**

A total of 38(76%) of the respondents in this study reported that their husbands/sexual partners used unpleasant words either most of the time (10%), or sometimes (36%) or not very often (30%) respectively. The use of unpleasant words could indicate domestic violence/abuse

Table 4.16: How she feels

How she feels	Frequency	Percentage
Sad/annoyed/ angry	31	82
Depressed	3	8
Like committing suicide	4	10
Not applicable	12	-
Total	**50**	**100**

According to information in the same table, out of a total of 38 participants in this study who reported that husbands/sexual partners were using unpleasant words at them, 4 or 10% of them reported that they felt like committing suicide while 3(8%) reported that they became depressed.

Table 4.17: Husband sleeps out without acceptable reasons

Husband sleeps out without acceptable reasons	Frequency	Percentage
Yes most of the time	1	2
Yes some of the time	3	6
Not very often	3	6
No	37	77
I don't know	4	9
Not applicable	2	
Total	**48**	**100**

Information in table 4.17 indicate that out of 48 married participants in this study, a total of 7 ported that their husbands slept out without acceptable reasons, either most of the time, (1or 2%, some of the time 3 or 6%, 3 or 6% not very often giving a total of 7or 15%. respondents. Interestingly, 4 or 9% of the women said they did not know.

Table 4.18: Husband has extra marital affairs .

Husband has extra marital affairs	Frequency	Percentage
Yes	5	10
No	29	63
I don't know	14	27
Not applicable	2	-
Total	**48**	**100**

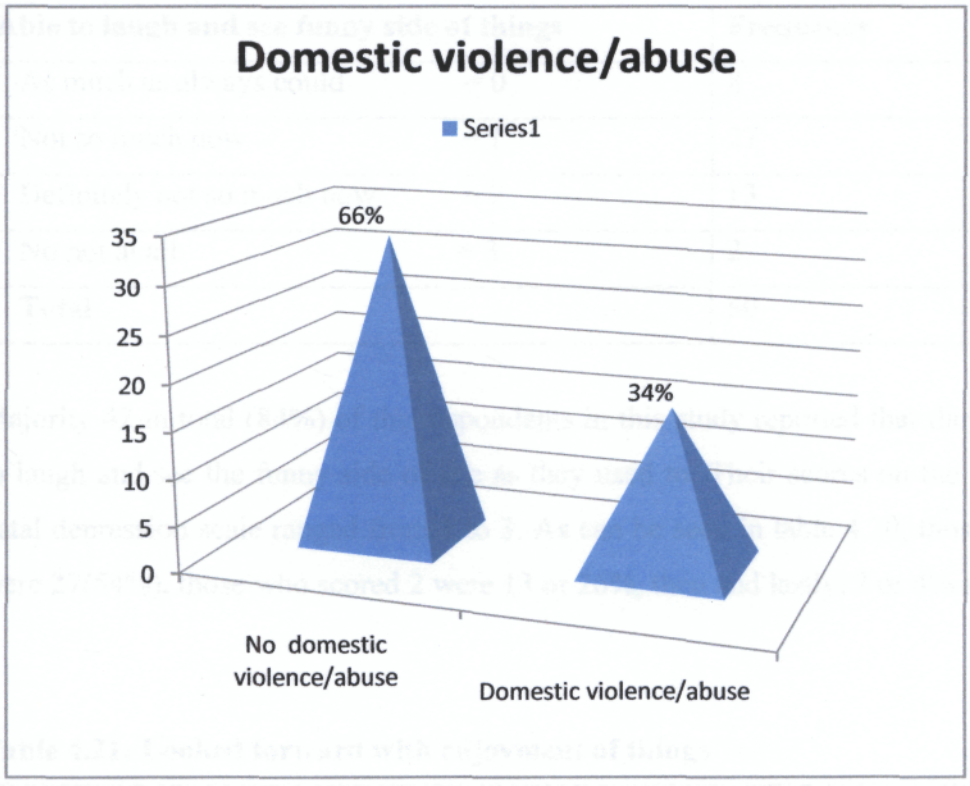
Most of the respondents (63%) said that their husbands did not have extra marital affairs, while 27% of the respondents reported they did not know if their husbands had extra marital affairs.

Table 4.19: Husband/sexual partner forces sex on her

Husband/sexual partner forces sex on her	**Frequency**	**Percentage**
Yes most of the time	0	0
Yes some of the time	32	64
Not very often	8	16
No	10	20
Total	**50**	**100**

Majority (80%) of the respondents in this study reported that their husbands/sexual partners forced them to have sexual intercourse with them either sometimes (64%) or not very often (16%) respectively. This indicates another form of abuse/violence

Figure 5: Domestic Violence



The figure above indicates that (17 or 34%) of participants in this study, had high scores on domestic violence denoting that they were experiencing domestic violence/abuse.

4.7 PSYCHOLOGICAL DISTRESS CHARACTERISTICS OF THE SAMPLE (N=50)

Edinburgh Post natal depression scale

The Edinburgh depression scale (EDPS) by Cox J in 1978. It is a widely used tool to measure psychological distress in perinatal period. It was developed for screening postpartum women in outpatient, home visiting settings or at the eight to six weeks post partum examination. It has been utilized among numerous populations including United States women and Spanish speaking in other countries. The EDPS consists of 1o questions. Responses are scored 0, 1, 2, or 3 according to increased severity of the symptom. The total score is determined by adding together the scores for each of the ten items. Validation studies have utilized various threshold scores in determining which women were positive and in need of referral. Cut off scores ranged from Nine to Thirteen points (Cox et al, 1978.)

Table 4.20: Able to laugh and see the funny side of things as much as always I could

Able to laugh and see funny side of things		Frequency	Percentage
As much as always could	= 0	8	16
Not so much now	= 1	27	54
Definitely not so much now	= 2	13	26
No not at all	= 3	2	4
Total		**50**	**100**

Majority 42 in total (84%) of the respondents in this study reported that they were not able to laugh and see the funny side of life as they used to. Their scores on the Edinburgh post natal depression scale ranged from 1 to 3. As can be seen in table 4.20, those who scored 1 were 27(54%), those who scored 2 were 13 or 26%, then and lastly, 2 or 4% scored 3 each.

Table 4.21: Looked forward with enjoyment of things

Looking forward to enjoyment of things		Frequency	Percentage
As much as I ever did	= 0	8	16
Rather less than I used to	= 1	26	52
Definitely less than I used to	= 2	13	26
Hardly at all	= 3	3	6
Total		**50**	**100**

Majority 42 in total (84%) of the respondents in this study reported that they were not able to look forward with enjoyment of things as much as they ever did. Their scores on the Edinburgh post natal depression scale ranged from 1 to 3. Table 4.21, shows that those who scored 1 were 26(52%), those who scored 2 were 13 or 26%, and lastly, 3 or 6% scored 3 each.

Table 4.22: I have blamed myself unnecessarily when things went wrong

Unnecessary self blame when things went wrong	Frequency	Percentage
Yes most of the time =3	2	4
Yes some of the time =2	24	48
Yes not very often =1	20	40
No never =1	4	8
Total	**50**	**100**

Information in table 4.22 reveals that in total, 46 or 84% of the respondents in this study reported that they blamed themselves unnecessarily when things went wrong. Their scores on the Edinburgh post natal depression scale 1 to 3. The table shows that those who scored 1 were 20 (40%), those who scored 2 were 24 or 48%, and lastly, 2 or 4% scored 3 each.

Table 4.23 I have been **anxious or worried for no good reason**

Anxious or worried for no good reason	Frequency	Percentage
No not at all =0	4	8
Hardly ever =1	7	14
Yes sometimes =2	35	70
Yes very often =3	4	8
Total	**50**	**100**

A total of 46 (92 of the participants in this study reported that they had been anxious or worried for no good reason. Their scores on the Edinburgh post natal depression scale ranged from 1 to 3. Table 4.21, shows that those who scored 1 were 7(14%), those who scored 2 were 35 or 70%, and lastly, 4(8%), scored 3 each.

Table 4.24 I have felt scared or panicky for no very good reason

Felt scared or panicky for no very good reason	Frequency	Percentage
Yes quite a lot =3	1	10
Yes sometimes =2	30	36
Not, so much =1	6	30
No not at all =0	13	24
Total	**50**	**100**

A total of 37 (74%) of the participants in this study reported that they had felt scared or panicky for no very good reason. Table 4.24 shows scores on the Edinburgh post natal depression scale which ranged from 1 to 3. Those who scored 1 were 6(12%), those who scored 2 were 30 or 60%, and lastly, 1(2%), scored 3.

Table 4.25: Things have been getting on top of me.

Things have been getting on top of me.	Frequency	Percentage
Yes most of the time haven't been able to cope =3	3	6
Yes sometimes haven't been coping as usual =2	30	60
No most of the time I have coped quite well =1	4	8
I have been coping as well as ever = 0	13	26
Total	**50**	**100**

A total of 37 (74%) of the participants in this study reported that they had felt scared or panicky for no very good reason. Table 4.25 shows scores on the Edinburgh post natal depression scale which ranged from 1 to 3. Those who scored 1 were 4(8%), those who scored 2 were 30 or 60%, and lastly, 3(6%), scored 3.

Table 4.26: I have been so unhappy that I have had difficulty sleeping

Unhappy and difficulty sleeping	Frequency	Relative frequency
Yes most of the time =3	5	10
Yes sometimes =2	15	30
Not very often =1	11	22
No, not at all =0	19	38
Total	**50**	**100**

31 (62%) of the participants in this study reported that they had been so unhappy that they have had difficult sleeping. Table 4.26 shows scores on the Edinburgh post natal depression scale Those who scored 1 were 11(22%), those who scored 2 were 15 or 30%, and lastly, 5(10%), scored 3.

Table 4.27: I have felt sad or miserable

I have felt sad or miserable	Frequency	Relative frequency
Yes most of the time =3	6	12
Yes quite often =2	19	38
Not very often =1	12	24
No, not at all =0	13	26
Total	**50**	**100**

37 (74%) of the participants in this study reported that they had felt sad or miserable. Table 4.27 shows scores on the Edinburgh post natal depression scale Those who scored 1 were 12(24%), those who scored 2 were 19 or 38%, and lastly, 6(12%), scored 3.

Table 4.28: I have been unhappy that I have been crying

Unhappy and crying	**Frequency**	**Relative frequency**
Yes most of the time =3	4	8
Yes quite often =2	22	44
Only occasionally =1	9	18
No, never = 0	15	30
Total	**50**	**100**

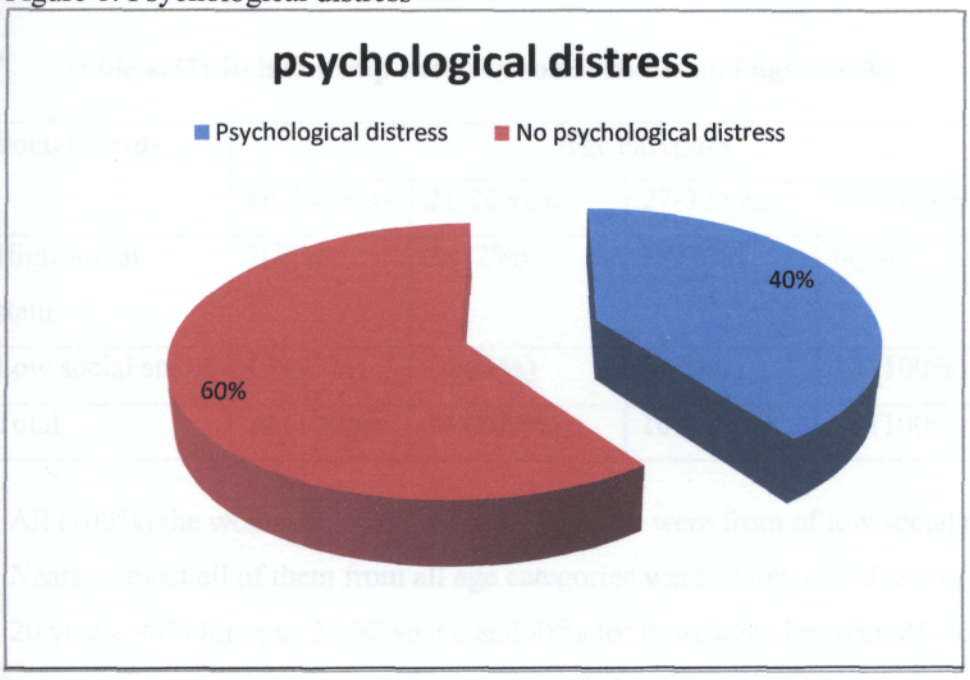
A total number of 35(70%) of them said they were so unhappy that they had been crying. The information in table 4.28 indicate the following scores on the Edinburgh Postnatal Depression Scale; 9 (18%) scored 1, 22 (44%) scored 2 and 4 or 8% scored 3

Table 4.29: The thought of harming myself has occurred to me

The thought of harming myself has occurred to me	Frequency	Relative frequency
Yes most of the time =3	3	6
Sometimes =2	14	28
Hardly ever =1	5	10
Never =0	28	56
Total	**50**	**100**

22 (44%) of the participants in this study reported that the though of harming themselves had occurred to them. Table 4.29 shows scores on the Edinburgh post natal depression scale Those who scored 1 were 5(10%), those who scored 2 were 14 or 28%, and lastly, 3(6%), scored 3.

Figure 6: Psychological distress



Out of a total of 50 respondents, 20(40%) of the respondents had high scores on the Edinburgh postnatal depression scale. Figure 6 shows that they were beyond the cut off point an indication of psychological distress.

Table 4.30: Distribution of study variables (n=50)

Variable	Mean	Standard deviation	Range
Social status	2.78	1.31	1-7
Mental health services	0	0	0
Chronic disease	0.08	0.27	0-1
Life events	0.56	0.50	0-1
Domestic violence	5.60	3.95	0-15
Psychological distress	13.2	6.25	1-27

Social status levels ranged from 1 to 7 (mean= 2.78; SD 1.31). All respondents did not receive mental health services during antenatal care services at the clinic. Chronic disease ranged from 0 to 1(mean=0.08, SD 0.27). Life events ranged from 0 to 1 (mean=0.56; SD 0.501). Domestic violence level ranged from 0 to 15 (mean = 5.60; SD 3.95). Psychological distress levels ranged from 1 to 27 (mean =13.12 SD 6.25).

CROSS TABULATION TABLES

Table 4.31: Relationship between social status and age (n=50)

Social status	Age category				Total
	16-20 years	21-26 years	27-32 years	33-38 years	
High social status	1(7%)	2 (12%)	1 (10%)	0(0%)	4 (8%)
Low social status	13 (93%)	14(88%)	9 (90%)	10 (100%)	46 (%)
Total	14 (100%)	16 (100%)	10 (100%)	10 (100%)	50 (100%)

All (100%) the women aged between 33-38 years were from of low social status. However, Nearly almost all of them from all age categories were of low social status(93% for ages 16-20 years, 90% for ages 27-32 years, and 88% for those aged between 21-26 years.

Table 4.32: Relationship between chronic disease and age

Chronic disease	Age				Total
	16-20 years	21-26 years	27-32 years	33-38 years	
Chronic disease	0 (0%)	1(6%)	3 (30%)	0 (0%)	4 (8%)
No chronic disease	14(100%)	15(94%)	7 (70%)	10 (100%)	46 (92%)
Total	14 (100%)	16 (100%)	10 (100%)	10 (100%)	(100%)

Majority 46(92%) did not have chronic diseases. However 3(30%) of the respondents with chronic disease, were aged between 27 to 32 years.

Table 4.33 Age in relation to experiencing stressful life events

Age category	16-20years	21-26years	27-32years	33-38years	**Total**
Stressful life event	6(21%)	4(14%)	9(32%)	9(32%)	28 (56%)
No stressful life event	8(36%)	12(55%)	1(5%)	1(5%)	22 (44%)
Total	**14(100)**	**16(100%)**	**10(100)**	**10(100%)**	**50(100%)**

Slightly above 3/5 (32%) of the respondents aged between 27-32years and 33-38years had experienced stressful life events. This could mean that as people grow older, the responsibilities increase also.

Table 4.34: Age in relation to type of stressful life events

Type of stressful event	Age category				Total
	16-20 years	21-26 years	27-32 years	33-38 years	
Nsg sick child	0(0%)	0(0%)	2(20%)	1(10%)	3(6%)
Abandoned by sexual partner	2(14%)	0(0%)	0(0%)	0(0%)	2(4%)
Nsg sick relative	0(0%)	1(6%)	1(10%)	0(0%)	2(4%)
Death of close relative	1(7%)	1(6%)	1(10%)	2(20%)	5(10%)
Death of child(ren)	3(21%)	1(6%)	2(20%)	2(20%)	8(16%)
Death of parent(s)	0(0%)	0(0%)	3(30%)	3(30%)	6(12%)
Loss of income	0(0%)	1(6%)	0(0%)	1(10%)	2(4%)
Not applicable	8(57%)	12(75%)	1(10%)	1(10%)	22(44%)
Total	14(100%)	16(100%)	10(100%)	10(100%)	50(100%)

Out of 14 participants that were aged between 16-20 years, 3 (21%) lost their children. 3 is the highest crude figure amongst respondents that lost children from all categories of age groups as can be seen from table 4.34

4.35: Relationship between domestic violence and age

Domestic violence	**Age**				**Total**
	16-20 years	21-26 years	27-32 years	33-38 years	
Domestic violence	3(21%)	4 (25%)	5 (50%)	5 (50%)	17 (34%)
No domestic violence	11(79%)	12(75%)	5(50%)	5 (50%)	33 (66%)
Total	**14(100%)**	**16 (100%)**	**10 (100%)**	**10 (100%)**	**50 (100%)**

According to information in table 4.35, domestic violence was observed more (50%) amongst participants, who were aged between 27-32 years and 33-38years,

Table 4.36: Age in relation to psychological distress

Psychological Distress	Age				Total
	16-20 years	21-26 years	27-32 years	33-38 years	
Psychological Distress	5(36%)	1(6%)	6(60%)	8(80%)	20(40%)
No psychological Distress	9(64%)	15(94%)	4(40%)	2(20%)	30(60%)
Total	**14(100%)**	**16(100%)**	**10(100%)**	**0(100%)**	**50(100%**

The highest (80%) frequency of psychological distress as indicated in table4.36 was recorded amongst participants in age group of between 33-38 years followed by age group 27-32years. These are the same age groups with high domestic violence as revealed in table 4.35

Table 4.37: Relationship between Psychological distress and Relationship with husband/sexual partner

Psychological distress	Good	Fair	Bad	Row total
Psychological distress	4 (17%)	11(55%)	5 (83%)	20 (40%)
No psychological distress	20(83%)	9 (45 %)	1(17%)	30 (60%)
Total	24 (100%)	20 (100%)	6(100%)	50 (100%)

Information in table 4.37 shows that 5(83%) of those who reported that the relationships with their husbands/sexual partners were bad, had psychological distress, while 11(55%) of those who said the relationship was fair had psychological distress and only 4(17%) of those who had good relationships with their intimate partners had had psychological distress.

Table 4.38: Relationship between Psychological distress and being beaten by husband/sexual partner

Psychological distress	Yes	No	Row total
Psychological distress	7 (64%)	13(33%)	20 (40%)
No psychological distress	4(36%)	26 (67%)	30 (60%)
Total	11 (100%)	39 (100%)	50 (100%)

Table 4.38 shows that 7(64%) of the participants who reported that they were being beaten by their husbands/sexual partners had psychological distress while 33% of those who were not being beaten had psychological distress. This means that there could be a relationship between wife beating and psychological distress.

Table 4.39: Relationship between Psychological distress and being insulted by husband/sexual partner

Psychological distress	Yes most of the time	Yes sometimes	Not very often	No	Row total
Psychological distress	0(0%)	5(71%)	4(50%)	11(31%)	20 (40%)
No psychological distress	0(0%)	2(29%)	4(50%)	24(69%)	30 (60%)
Total	0 (0%)	7(100%)	8(100%)	35(100%)	50 (100%)

According to information in table 4.39, the study revealed that the highest percentages on psychological distress amongst participants in this study, was noted amongst those who reported that they were being insulted by their husbands/sexual partners i.e. Development of psychological distress 71% for those who were insulted sometimes and lastly 50% for those who were insulted not very often.

Table 4.40: Relationship between Psychological distress and being shouted at by husband/sexual partner

Psychological distress	Yes most of the time	Yes sometimes	Not very often	No	Row total
Psychological distress	1(100%)	7(70%)	5(45%)	7(25%)	20 (40%)
No psychological distress	0(0%)	3(30%)	6(55%)	21(75%)	30 (60%)
Total	1(100%)	10(100%)	11(100%)	28(100%)	50 (100%)

Information in table 4.40, reveal that one participant who reported that she was being shouted at by her husband most of the time had psychological distress (i.e. 100%). participants that were insulted sometimes, and not very often, 70% and 45% had psychological distress respectively. This indicates that in this study, psychological distress occurred more amongst those that were being insulted.

Table 4.41: Relationship between Psychological distress and use of unpleasant words by husband/sexual partner

Psychological distress	Yes most of the time	Yes sometimes	Not very often	No	Row total
Psychological distress	4(80%)	12(63%)	3(21%)	1(8%)	20 (40%)
No psychological distress	1(20%)	7(37%)	11(79%)	11(92%)	30 (60%)
Total	5(100%)	19(100%)	14(100%)	12(100%)	50 (100%)

Information in table 4.41, reveal that one 4(80%) of the participants who reported that their husbands/sexual partners use unpleasant words at them most of the times while 12(63%) of those whose husbands used unpleasant words at them had psychological distress. The table shows that frequency of psychological distress was more amongst those whose husband/sexual partners were using unpleasant words at them.

Table 4.42: Relationship between Psychological distress and husband sleeping out without acceptable reasons

Psychological distress	Yes most of the time	Yes sometimes	Not very often	No	I don't know	Not applicable	Row total
Psychological distress	1(100%)	3(100%)	2(67%)	9(24%)	3(75%)	2(100%)	20 (40%)
No psychological distress	(0%)	0(0%)	1(33%)	28(76%)	1(25%)	0(0%)	30 (60%)
Total	1(100%)	3(100%)	3(100%)	37(100%)	4(100%)	2(100%)	50 (100%)

Findings in this study as can be seen in table 4.42 show that only 9(24%) of those who reported that their husbands were not sleeping out without acceptable reasons had psychological distress. This indicates that in this study, psychological distress was occurring more in participants whose husbands were sleeping out without acceptable reasons as can be seen from the table.

Table 4.43: Relationship between Psychological distress and husband having extra marital affairs

Psychological distress	Yes	No	I don't know	Not applicable	Row total
Psychological distress	4 (80%)	8(28%)	6(43%)	2(100%)	20 (40%)
No psychological distress	1(20%)	21 (72%)	8(57%)	0(0%)	30 (60%)
Total	5 (100%)	29 100%)	14(100%)	2(100%)	50 (100%)

Table 4.43 indicates that 28% of the participants, who reported that their husbands did not have extra marital affairs, had psychological distress. This indicates that psychological distress was more amongst those who reported that their husbands had extra marital affairs as can be seen from the table

Table 4.44: Relationship between Psychological distress and social status

Psychological distress	Social status			Significance
	Low social status	High social status	Total	
Psychological distress	20 (43%)	0 (0%)	20 (40%)	X^2 2.899
No psychological distress	26 (57%)	4 (100%)	30 60%)	P Value 0.89
Total	46 (100%)	4 (100%)	50 (100%)	

The findings in Table 4.44 shows that in this study, 20 (43%) of participants from low social status had psychological distress while none (0%) of those from high social status had the distress. The calculated Chi- Square value is 2.899 and the P value 0.89.This means that there is no relationship between low social status and psychological distress during antenatal period. This result may be attributed to the low number of participants in the high means category.

This is an indication that the null hypothesis has been accepted.

Mental Health services

Cross tabulation could not be done as all the participants in this study reported that mental health services were not provided to them during antenatal care clinics. However as earlier alluded to in table 4.8, 20 (40%) of the participants in this study had psychological distress.

Chronic diseases

Table 4.45: Relationship between Psychological distress and chronic diseases

Psychological distress	Chronic disease			Significance
	No chronic disease	Chronic disease	Total	
Psychological distress	18 (39%)	2(50%)	20 (40%)	X^2 0.181
No psychological distress	28 (61%)	2 (50%)	30 (60%)	P Value 0.670
Total	46 (100%)	4 (100%)	50 (100%)	

The findings in table 4.45 reveal that 2 (50%) of participants with chronic diseases had psychological distress. The calculated Chi- Square value 0.181 and the P value 0.670. This means that there is no relationship between chronic diseases and psychological distress during antenatal period, indicating that the null hypothesis has been accepted.

Life events

Table 4.46: Relationship between Psychological distress and life event

Psychological distress	Stressful life events			Significance
	No life event	Stressful Life event	Total	
Psychological distress	3 (14%)	17(61%)	20 (40%)	X^2 11.337
No psychological distress	19 (86%)	11 (39%)	30 (60%)	P Value 0.01
Total	22 (100%)	28 (100%)	50 (100%)	

Table 4.46 shows that out of the total number of participants who had experienced stressful life events, 17 (61%) of them had psychological distress and the remaining 11 (39%) did not experience psychological distress. Among those participants who did not experience any stressful life events, only 3 or 14 percent experienced psychological distress. Therefore there is a significant relationship between life event and psychological distress (X^2 =11.337 p=0.01).

Domestic violence

Table 4.47: Relationship between Psychological distress and Domestic violence

Psychological distress	Domestic violence			Significance
	No domestic violence	Domestic violence	Total	
Psychological distress	8 (24%)	12 (71%)	20 (40%)	X^2 10.042
No psychological distress	25 (76%)	5 (29%)	30 (60%)	P Value 0.002
Total	33 (100%)	17 (100%)	50 (100%)	

Table 4.47 reveals that study has revealed that 12 (71%) of participants who experienced domestic violence, also experienced psychological distress while 8 (24%) of those who did not experience domestic violence had psychological distress. Therefore there is a significant relationship between psychological distress and domestic violence (X^2 =10.043; P =0.002)

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

5.1 Introduction

The discussion of findings in this chapter is based on the research analysis of responses from 50 respondents who accessed antenatal care services in Mbala district. Forty two of the respondents were conveniently selected while eight were randomly selected.

The sequence of this chapter comprise characteristics of the sample, discussion of each variable in the study, implications of the findings, recommendations, dissemination of findings, limitations of the study and conclusion.

5.2.0 Characteristics of the sample

5.2.1 Age

The purpose of the study was to explore the magnitude of psychological distress in pregnant women in Mbala district and explore influencing psychological distress. The semi structured interview schedule elicited information on the demographic characteristics of the respondents. Respondents' age ranged from 16 to 38 years. This could be attributed to limited number of Centres that were conveniently sampled. Thirty two percent of the respondents were aged between 21-26 years.

5.2.2 Marital status

The study sample comprised women only as the focus was on psychological distress during pregnancy.

Almost all (96%) of respondents were married

5.2.3 Religious affiliation

Regarding religious affiliation, all the respondents were the Christians. This could be because the commonest religion in Zambia is Christianity which is evidenced by the declaration of Zambia as a Christian nation during the second republic.

5.2.4 Employment

Almost all (98%) were not employed. This could be attributed to small sample size and fact that Mbala is one of the rural districts where majority of the people are not in formal employment (Mbala District, 2010).

5.3 DISCUSSION OF VARIABLES

5.3.1 Social status

In this study, questions on the social status were included in the semi structured interview schedule. Residential area, source of energy and number of meals afforded per day were used to measure social status. Majority (92%) of the respondents were from high density, which could mean that since their residential areas were highly densely, there is likelihood of having more pregnant women compared to areas that are sparsely populated. Most of respondents (70%) use firewood as a major source of energy used in a home. Over half (58%) of respondents afforded two meals per day). Figure 1 on page 34 gives a summary of the findings on social status. Overall, the study revealed that majority (92%) of respondents were of low social status.

The findings also showed that social status was not associated with psychological distress ($X^2 = 2.9$, P value = 0.89). Forty Three percent of them experienced psychological distress during antenatal period while amongst those from high social status (8%) none had psychological distress.

The findings do not support a study that was conducted by Kessler (1979) at university of Wisconsin-Madson on stress, which revealed that social status and psychological distress

revealed that persons in socially disadvantaged statuses are particularly likely to exhibit symptoms of psychological distress. The difference in the two findings could be attributed to a small sample size in this study.

Another study that was conducted in France on unemployment and psychological distress one year after child birth, (Saurel-Cubizolles, 1999), revealed that psychological distress was specially linked to unemployment. The study further concluded that social regulations protecting employment during and after pregnancy is important. The study focused on contribution of unemployment to the psychological distress

Due to the observed differences between this study and other studies, the researcher suggests that further studies to be carried out on a bigger sample size than the Fifty which was used in this study. Further recommendations are that another study be conducted in an urban setting since Mbala is a rural district.

5.3.2 Mental Health services

The present study findings revealed all respondents reported that that mental health services were not provided to them during antenatal care services in the clinics. Forty percent of the respondents had psychological distress.

The study findings further reveal that many respondents (82%) reported that when anxious about something, they sought help from family, Church,, community leaders and friends. This indicates that problems requiring interventions through provision of mental health services are prevalent.

Despite the 1991 reforms of the health system in Zambia where emphasis was on integration of services, mental health is still given low priority. This is evident from the fragmented manner in which mental health services are provided in the country and the limited budget allocations, where only (0.4%) of the total health budget was allocated for mental health services. (Mwape et al 2010) For example the Mbala Medium Term Expenditure Framework (MTEF) Plan for the year 2010-2012, does not clearly state the activities to address mental health services. Most of the mental health services provided are curative in nature and based

in tertiary health institutions. At primary health care level, there is either absence of, or fragmented health mental services.

Many health services have been integrated into integrated reproductive health. An example of such is malaria programmes where mothers are given Intermittent Presumptive Treatment (IPT), Insecticide Treated Bednets (ITNs), Information, Education and Communication on priority areas or health thrusts like Malaria, Tuberculosis, environmental health, HIV/AIDS, Integrated Reproductive Health (IRH). However, mental health services have not been integrated into IRH. A study that was conducted in England revealed that psychological distress is classified as mild, moderate or severe but only those who suffer severe psychological distress are referred to the specialist mental health services. Those who suffer mild to moderate psychological distress are managed by the primary care services such that they do not progress to severe distress (Furbera et al., 2010). This study shows the importance of providing mental health services to pregnant women through integrating them into integrated Reproductive Health. Though no research has ever been done in Mbala to make a comparison on the magnitude of the problem of psychological distress, the magnitude (40%) of psychological distress revealed by the present study is high compared to similar studies done in other countries. A study that was conducted in Tanzania on understanding women's experiences of distress during pregnancy in Dar es salaam, revealed that (1o-15%) suffer depressive disorders during pregnancy or in the first postnatal year (Evans.et al, 2001; Josefsson et al., 2001). Romano (2007). from university of Minnesota stated that prevention of psychological distress, promotion of mental well-being and prevention of occurrence of the problem, delays onset of the symptoms. Therefore provision of mental health services would prevent occurrence of psychological distress in pregnant women

Although pregnancy is considered a normal state, it is a vulnerable period in a woman's life because of exposure to a series of physical, mental and socially adverse conditions. The earlier these conditions are recognized and addressed, the greater the chances of minimizing their impact (Romano, 2007). This entails the need to develop tools aimed at capturing physical, mental, and socially adverse conditions during antenatal period. For example, in order to recognize depression in pregnant women during antenatal care clinics, introductory

questions can be asked and appropriate interventions instituted if diagnosis of depression has been made and data should be captured in the HMIS tools.

Arising from the findings in this study, it is necessary that a longitudinal experimental study is conducted to explore the relationship between mental health and psychological distress.

5.3.3 Chronic diseases

Pregnancy itself can be a source of stress though in itself may not be associated with psychological distress unless there are other underlying factors.

The results in this study reveal that (8%) of the chronic diseases. The study further reveals respondents with chronic diseases had psychological distress. The findings in this study, (X^2 =0.181 P value=0.67) show that there is no relationship between chronic diseases and psychological distress during antenatal period. The findings could be attributed to small sample size especially that only (8%) had chronic diseases.

Other studies have revealed that chronic diseases like HIV/AIDS particularly increases the potential for distress in women screened for vertical transmission of HIV infections. A study that was done in Zambia by Kwalombota (2002) on pregnant women in Zambia informed for the first time of HIV positive status revealed higher percentage endorsements on depressive symptoms than women with prior knowledge while those that had prior knowledge of their HIV positive status showed low depressive symptoms. The findings in this study partly agree with the findings of Kwalombota (2002) in that kwalombota's findings denoted that where they had prior knowledge, the depressive symptoms were either low or not there.

Another study that was conducted in South Africa and Tanzania revealed that between 41% and 43% of HIV positive pregnant women endorse symptoms equivalent to major depression in south Africa and Tanzania respectively (Kaaya et al., 2010). The findings in the current study are different from the findings of Kaaya et al (2010).

Due to small sample size in the current study, it would be important that a study is conducted on a larger sample to determine the relationship between Chronic diseases and psychological distress during antenatal period.

5.3.4 Life events

Stressful life events are quite common and inevitable such that if there is no adequate coping mechanisms, one may end up with psychological distress. (Alexander, 2008) The highest number of respondents with psychological distress in this study was found amongst those that lost close relatives, children and parents.

In this study an association has been found between psychological distress, (X^2=11.38, P =value 0.0007) and an indication that there is a strong relationship between stressful life events and psychological distress. A study that was conducted by (Sautin et al) on a sample of 1,038 respondents revealed that there was an associated between stressful life events and distress. The current study findings are similar to the study by Sautin (2010) though it was not carried out on pregnant women. Another similar study conducted by Williams & Williams (1978), indicated that life events are associated wide range of disorders and distress. These findings are supported by the findings in the current study. In another similar study that was conducted by Melton et-al (2007) on recent life events and development of psychological distress, the findings revealed that life events influence development of psychological distress.

From the researcher's own experience, many people (pregnant women inclusive) experience stressful life events like death of beloved ones. It is important that a study be conducted to determine the relationship between life events and out come of pregnancy. The findings could then be used to help policy makers and other stake holders to mobilize resources and put in interventions to integrate mental health services and Integrated Reproductive Health.

5.3.5 Domestic violence

Domestic violence, also known as domestic abuse, spousal abuse, can be broadly defined as a pattern of abusive behaviors by one or both partners in an intimate relationship such as marriage. Domestic violence has many forms including physical aggression (hitting, kicking, biting, shoving, restraining, slapping, throwing objects), or threats thereof; sexual abuse; emotional abuse; controlling or domineering; intimidation; stalking; passive/covert abuse (e.g., neglect); and economic deprivation (Wikipeia, 2010)

(Markowitz, 2000). In the last decades, a number of studies have described the impact of violence on women's health to the point that the WHO has defined violence as one of the most important health risk factors for women of reproductive age. Researchers have addressed the question of violence during pregnancy, showing it is frequent and may negatively affect both woman's physical and mental health and the health of the baby (Romito et al 2010).

The findings in the current study reveal that (35%) of the respondents were experiencing domestic violence. Seventy six percent of respondents reported that their husbands/sexual partners used unpleasant words. When asked about how they felt when unpleasant words were used at them, 8% reported that they felt depressed while 10% reported that they felt like committing suicide.

The study further revealed and that (71%) of those that were experiencing domestic violence had psychological distress. The Chi square 10.04, P value0.002) indicate that there is a strong association between domestic violence and psychological distress. These results support the findings in a study that was conducted in Trieste by Romito et al (2010) on the relationships between physical violence, verbal abuse and women's psychological distress during the postpartum period revealed that there was a strong relationship between domestic violence and psychological distress during postpartum period. "Measures aimed to identify and end violence against women around pregnancy could contribute to the improvement of women's mental health post-partum" (Romito et al, 2010)

Another study that was conducted in Northern Ireland by Dorahy et al (2007), on Psychological distress revealed that there was associated between domestic violence and

psychological distress. Those that were experiencing domestic violence had high signs of and symptoms of depression than those who were not experiencing domestic violence.

5.4 Implications for the health care system

5.4.1 Nursing practice

The study findings reveal that there is a relationship between, life events and psychological distress as well as between domestic violence and psychological distress. This implies that there should be more counseling of the pregnant women who come for antenatal services and that such services should be captured in the HMIS tools. As a result, many women will be able to reveal problems that could be stressing them so that through psychosocial counseling, the stresses may not culminate into psychological distress and thus jeopardize the mental wellbeing pregnant women. Therefore strategies should be put in place to implement the mental health policy which was ratified in 2005.

Counseling services should not only be confined to women under Prevention of Mother to Child transmission of HIV (PMTCT), but other areas that need integration like mental health services.

5.4.2 Nursing administration

Psychological distress during antenatal period is a big challenge to both the wellbeing of the mother and baby. Therefore there is need to improve staffing levels in the health facilities that are providing antenatal care services. There is also need to train more nurses in mental health so that pregnant women can be provided with mental health services.

The influencing factors that this study has revealed,(domestic violence and stressful life events) are not uncommon. Some of them like nursing a sick relative or death of a close relative may even be inevitable, but what may matter is how they are addressed so that from being stressed, the pregnant woman does not progress to psychological distress.

5.4.3 Nursing education

Since psychological distress is related to, mental well being, it is necessary that a comprehensive component of mental health within integrated reproductive health services be included in the school curriculum. This also implies that the Ministry of Health should consider putting in place strategies to implement the mental health policy of 2000 and educating nurses and community agents on importance of mental health services integration into IRH, otherwise the government might end up spending more resources on solving problems that would be solved through promotion of mental health through integration of mental health services into IRH

5.4.4 Nursing Research

Many efforts are being put in place to promote health, prevent disease as well as to cure diseases in pregnant women. However, this requires addressing all parameters of clients' risk factors that would jeopardize both their lives and those of their babies.

There is need to conduct this research on a big sample that would allow drawing a statistical inference to the general population..

There is need for a follow up of a longitudinal study to determine the relationship between psychological distress during antenatal period and the outcome of pregnancy. The problem has been identified, but the impact of the problem on both mother and baby is yet to be scientifically proven in Mbala district or even in any other part of the country

5.5 Recommendations

Ministry of Health

There is need for MOH to train more nurses in Mental Health.

Clear tools should be developed and indicators should be formulated and incorporated the Health Management Information System. The tools should aim at capturing psychological all degrees of distress ranging from mild, moderate and severe so that appropriate interventions can be put in place. The current indicators in HMIS under codes 1,122 to 1,139 are not adequate to detect psychological distress during antenatal period.

Mbala District Health Management

Mbala District Health Management Team needs to conduct in-service raining for members of staff in mental health services. There is also need to develop local tools to capture data on psychological distress in pregnant women while waiting for ideal tools to be developed through MOH.

Since domestic violence/abuse has come out to be one of the influencing factors of psychological distress, intersectoral collaboration should be strengthened especially with concerned stakeholders and departments like Ministry of home affairs Victim support unit in order to alleviate the problem.

Health workers

Health care workers especially nurses and midwives who have been trained in psychosocial counseling should take a leading role in providing mental health services.

There is need to integrate mental health services into IRH so that mental health is promoted in women both during antenatal period.

5.6 Dissemination of the findings

The researcher intends to disseminate findings to Mbala DHMT members and District Development Coordinating Committee though meetings and to the provincial health Office and the District medical officers during the inter district review meetings.

5.7 Limitation of the study

This study has a number of limitations. The sample was small, so results should be taken with caution as generalization of the results can not be made to the population of expected pregnant women which stands at t 12, 280 in the year 2011 (Mbala DHMT, 2011). The suggested is that a similar study be conducted in future on a bigger sample size.

Not many studies have been conducted on psychological distress during antenatal period in the region. Literature could not be found on studies done in Zambia on psychological distress during antenatal period.

5.8 Conclusion

This study was conducted to explore the magnitude of psychological distress in pregnant women in Mbala district. This study concludes that that the problem of psychological distress does exist in Mbala. Furthermore the study concludes that there is a relationship between life events and psychological distress, and between domestic violence and psychological distress during antenatal period. High scores on Edinburgh Post natal Depression Scale which was used to measure psychological distress in 50 respondents were recorded amongst those who had experienced stressful life events and those who were experiencing domestic violence.

According to this study there was no significant relationship between chronic diseases and psychological distress and between social status and psychological distress during antenatal period.

The major implications in this study is the need to integrate mental health services into integrated reproductive health and to develop tools for capturing data on psychological distress on pregnant women accessing antenatal care services.

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APPENDIX I: INTERVIEW SCHEDULE

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF NURSING SCIENCES

INTERVIEW SCHEDULE FOR ANTENATAL WOMEN

TOPIC: PSYCHOLOGICAL DISTRESS DURING ANTENATAL PERIOD: A CASE OF MBALA DISTRICT

Serial No. [ ]

Date:.....

Place:.....

INSTRUCTIONS TO INTERVIEWERS

Do not write clients' names on the interview schedule

Write the responses according to your own opinion

Insert a tick [✓] in the space provided for questions with alternatives

Write the responses from respondents by filling in the blank space, for questions that require explanations.

The answers will not be communicated to other people as the information respondents shall provide shall be treated with confidentiality.

SECTION A: DEMOGRAPHIC DATA

Fill in the space provided

For official use only

For official use only

Age

1. How old were you on your last birth day?

2. Marital status

a) Single [ ]
b) Married [ ]
c) Widowed [ ]
d) Cohabiting [ ]

3. Religion

a) Christian [ ]
b) Moslem [ ]
c) Hindu [ ]
d) Others (specify).....

4. Employment status

a) Employed [ ]
b) Not employed [ ]

SECTION B: SOCIAL STATUS

5. Residential area

a) High density /low cost [ ]
b) Medium density/medium cost [ ]
c) Low density /high cost [ ]

6. Major source of energy used in a home

For official use only

a) Electricity [ ]
b) Solar system [ ]
c) Charcoal [ ]
d) Firewood [ ]
e) Others specify:.....

7. How many meals do you afford per day?

a) 3 or more meals per day [ ]
b) 2 meals per day [ ]
c) 1 meal per day [ ]
d) On alternate days [ ]

SECTION C: MENTAL HEALTH SERVICES

8. Do nurses/midwives give you health talks on mental health during antenatal care clinics?

a) Yes [ ]
b) No [ ]

9. Where do you seek help from when you are sad, worried or anxious about something?

a) Elderly people in the family [ ]
b) Church leaders [ ]
c) Health staff at the clinic [ ]
d) Community leaders [ ]
e) Friends [ ]
f) Traditional counselors [ ]
g) None [ ]

h) Any other specify.....

.....

.....

SECTION D: CHRONIC DISEASES

10. Do you suffer from any of the following diseases/conditions in pregnancy?

a) Diabetes mellitus [ ]
b) High Blood pressure [ ]
c) Asthma [ ]
d) Cardiac disease [ ]
e) Arthritis [ ]
f) HIV/AIDS [ ]
g) TB [ ]
h) Others specify:.....

.....

11. If your answer to question 10 is yes, do you worry about it?

a) Yes most of the time [ ]
b) Yes some of the time [ ]
c) Not very often [ ]
d) No never [ ]

SECTION E: LIFE EVENTS

12. Have you ever experienced a stressful situation in your life; before or during this time that you are pregnant?

a) Yes [ ]

b) No [ ]

13. If your answer to question 12 is yes, what type of a stressful event was it?

a) Nursing a sick child [ ]

b) Nursing a sick husband [ ]

c) Nursing a sick relative [ ]

d) Death of a close relative [ ]

e) Loss of a job [ ]

f) Eviction [ ]

g) Divorce [ ]

h) Diagnosed HIV positive [ ]

i) Others specify:.....

.....

.....

SECTION F: DOMESTIC VIOLENCE/ABUSE

14. How has been the relationship with your husband/sexual partner?

a) Very good [ ]

b) Good [ ]

c) Fair [ ]

d) Bad [ ]

15. Does your husband/sexual partner beat you?

a) Yes [ ]

b) No [ ]

16. Does your husband/sexual partner insult you?

a) Yes Most of the time [ ]
b) Yes some of the time [ ]
c) Not very often [ ]
d) No never [ ]

17. Does your husband/sexual partner shout at you?

a) Yes Most of the time [ ]
b) Yes some of the time [ ]
c) Not very often [ ]
d) No never [ ]

18. Does your husband/sexual partner use any unpleasant words that cause you to be depressed in one way or the other?

a) Yes most of the time [ ]
b) Yes some of the time [ ]
c) Not very often [ ]
d) No never [ ]

19. If your answer to question 18 is not 'd', how does this make you feel?
Explain.....

.....

20. Does your husband/sexual partner sleep out without acceptable reasons?
(applicable only to those whose answer to question 2 is either b or d)

a) Yes Most of the time [ ]
b) Yes some of the time [ ]
c) Not very often [ ]
d) No never [ ]
e) I don't know [ ]

21 Has your husband got extra marital affairs? (only applicable to those whose answer to question 2 is b)

a) Yes [ ]
b) No [ ]
c) I don't know [ ]

22. Does your spouse/sexual partner force you to have sexual intercourse with him?

a) Yes most of the time [ ]

b) Yes some of the time [ ]

c) Not very often [ ]

d) No not at all [ ]

SECTION G: PSYCHOLOGICAL DISTRESS

Edinburgh Postnatal Depression Scale (EPDS)

This tool was developed by Cox to measure psychological distress in postnatal and pregnant women

23. I have been able to laugh and see the funny side of things

0 As much as I always could ☐
1 Not quite so much now ☐
2 Definitely not so much now ☐
3 No not at all ☐

24. I have looked forward with enjoyment to things

0 As much as I ever did ☐

1. Rather less than I used to ☐
2. Definitely less than I used to ☐
3. Hardly at all ☐

☐

25. I have blamed yourself unnecessarily when things went wrong

3.Yes most of the time ☐

2. Yes some of the time ☐

1 Yes not very often ☐

0 No never ☐

☐

26. I have been anxious or worried for no good reason

0 No not at all ☐

1 Hardly ever ☐

2.Yes sometimes ☐

3 Yes very often ☐

☐

27. I have felt scared or panicky for no very good reason

3.Yes quite a lot ☐

2.Yes sometimes ☐

1. No, not much ☐

☐

0.No not at all ☐

28. Things have been getting on top of me

3. Yes, most of the time I haven't been able to cope at all ☐

2.Yes, sometimes I haven't been coping as well as usual ☐

1.No most of the time I have coped quite well ☐

0.No, I have been coping as well as ever ☐

29. I have been so unhappy that I have had difficulty sleeping

3.Yes, most of the time ☐

2. Yes, sometimes ☐

1 Not very often ☐

0. No, not at all ☐

30. I have felt sad or miserable

3.Yes, most of the time ☐

2.Yes, quite often ☐

1.Not very often ☐

0.No, not at all ☐

31. I have been so unhappy that I have been crying

3.Yes, most of the time ☐

2.Yes, quite often ☐

1.Only occasionally ☐

0.No, never ☐

32. The thought of harming myself has occurred to me

3.Yes, most of the time ☐ ☐

2.Sometimes ☐

1.Hardly ever ☐

0.Never ☐

Thank you for your cooperation

End of interview

APPENDIX II: INFORMED CONSENT

PYCHOLOGICAL DISTRESS DURING ANTENAL PERIOD IN WOMEN IN MBALA DISTRICT

INTRODUCTION

I, Hilda Nachinga Kabanda; a student of Bachelor of Science in Nursing at the University of Zambia is kindly requesting for your participation in the research study mentioned above. It is important to establish the level of psychological distress in pregnant women. Before you decide whether or not to participate in this study, I would like to explain to you the purpose of the study, any risks or benefits and what is expected of you. Your participation in this study is entirely voluntary. You are not under obligation to participate; you may choose to participate or not to participate. If you decline to participate, no privileges will be taken away from you. If you agree to participate, you will be asked to sign this consent in front of some one. Agreement to participate will not result in any immediate benefits.

PURPOSE OF THE STUDY

The study will obtain information on the psychological distress in pregnant women and the factors that determine this psychological distress. This is important, as the data from the study will assist health care managers to find ways and means of providing mental health services to pregnant women

PROCEDURE

After you have signed the consent form, and have had a chance to ask questions, you will be asked questions concerning your psychological status. You will also be given a chance to make suggestions on how you think psychological distress can be prevented or reduced during antenatal period.

RISKS AND DISCOMFORTS

No risks and discomfort is involved apart from the fact that your time will be used in answering questions and the presence of the observer. Answering questions will take approximately 30 minutes.

BENEFITS

By taking part in this study, you will be able to provide us with information that will help relevant authorities and policy makers to come up with strategies and policies that will help improve the mental health status of pregnant women. No monetary favours will be given in exchange for information obtained.

CONFIDENTIALITY

Your research records and any information you will give; will be confidential to the extent permitted by law. You will be identified by a number, and personal information will not be released without your written permission except when required by law. The Ministry of Health, the University of Zambia Research Ethics Committee or the school of Medicine may review your records again this will be done with confidentiality

INFORMED CONSENT FORM

The purpose of this study has been explained to me and I understand the purpose, the benefits, risks and discomforts and confidentiality of the study. I further understand that:

If I agree to take part in this study, I can withdraw at any time without having to give an explanation and that taking part in this study is purely voluntary.

I_____(Names)

Agree to take part in the interview.

Signed:_____ Date:_____ (Participant)

Signed:_____ Date:_____ (Witness)

Signed:_____ Date:_____ (Researcher)

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS

1. Hilda Nachinga Kabanda, University of Zambia, Department of Nursing Sciences, P.O. Box 50110, Lusaka. Cell: 0977419952

2. Mrs. C. Ngoma University of Zambia, Post Basic Nursing Department, P.O. Box 50110, Lusaka. Telephone No. 252453, 0966 652879
3. The chairman, Research Ethics Committee, University of Zambia. P.O. Box 50110. Lusaka

ANNEX III: RESEARCH PROJECT WORK SCHEDULE JUNE 2010 TO APRIL 2011

S/N	TASK TO BE PERFORMED	DATES	DAYS	RESPONSIBLE PERSON
1	Literature review	Continuous	Continuous	Principal investigator
2	Development and finalization of research proposal	14th June – 15th August 2010	60 days	Principal investigator
3	Clearance from school	4th October – 11th October 2010	8 days	Principal investigator
4	Printing the research proposal	13th -15th Sep 2010	3 days	Principal investigator
5	Permission to conduct pilot study	18th-27th October 2010	10 days	Principal investigator
6	Pilot study	28th Oct 2010	1 day	Principal investigator
7	Amendments to the data collection tool	29th -31st October 2010	3 days	Principal investigator
8	Data collection (Main study)	4th -9th November 2010	6 days	Principal investigator
9	Entering data	15th 21st November 2010	7 days	Principal investigator
10	Dissemination of preliminary results to DHMT and stakeholders	24th - 25th November 2010	2 days	Principal investigator
11	Data analysis	29th Nov – 29th December 2010	31days	Principal investigator
12	Report writing	2nd Jan- 30th January 2011	32 days	Principal investigator
13	Submit 1st Draft report to DNS	31st January 2011	1day	Principal investigator
	Collect report from supervisor	16th February 2011	1 day	Principal investigator
14	Submit corrected copy	28th February 2011	1 day	Principal investigator
15	Collect report from supervisor	21st March 201	1 day	Principal investigator
16	Submit two bound copies	25th March 2011	1 day	Principal investigator
17	Collect of report from Supervisor	31st March 2011	15days	Principal investigator
18	Submit five bound copies	6th April 2011	1 day	Principal investigator
19	Monitoring research project	Continuous	Continuous	Principal investigator

ANNEX IV: RESEARCH BUDGET PROPOSAL

S/N	Description	Unit cost	Qty	Days	Total cost
	Stationary				
1	Reams of paper	40,000	5	1	200,000
2	Pencils	300	8	1	2,400
3	Printer Toner	700,000	1	1	700,000
4	Box file	25,000	2	1	50,000
5	Production of research documents	100,000	5	1	500,000
6	Production of research summaries	10,000	4	1	40,000
7	Photocopying	250	100	1	25,000
8	Rubbers	1,000	4	1	4,000
	Sub total				**1,521,400**
	Secretarial				-
9	Entering data	50,000	10	1	500,000
	Sub total				**500,000**
	Personnel costs				-
10	Meal Allowances officers	50,000	3	10	1,500,000
11	Meal Allowances Driver	50,000	1	10	500,000
	Sub total				**2,000,000**
	Transport costs				-
12	Fuel in Litres	8,000	25	10	2,000,000
	Sub total				**2,000,000**
	Snacks for dissemination of findings				-
13	Drinks crates	72,000	6	1	432,000
14	Milk	6,000	5	1	30,000
15	Mineral water	3,000	50	1	150,000
16	Biscuits	8,000	20	1	160,000
	Sub total				**772,000**
	GRAND TOTAL				**6,793,400**

BUDGET JUSTIFICATION

The proposal budget was outlined as follows :

STATIONERY

Stationery was required of research for typing research proposal, printing interview schedules, writing draft and final copies

Printer toner was needed for printing interview schedules, research proposal, draft and final copies of research.

SECRETARIAL SERVICES

There was need for secretarial services especially during entering data to enable researcher present preliminary findings at the quickest possible time.

PERSONNEL

The researcher needed money for lunch snacks and drinks during debriefing meetings with District Health Management Team (DHMT) members and other unforeseen situations that were encountered during data collection.

ANNEX V: GANTT CHART

TASK TO BE PERFORMED	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March
Literature review										
Development and finalization of research proposal										
Clearance from school										
Printing research proposal										
Permission to conduct pilot study										
Pilot study										
Amendments to the data collection tool										
Data collection (Main study)										
Entering data										
Data analysis										
Report writing										
Draft report to DNS										
Submission of report										
Publication of research findings to relevant authorities										
Monitoring research project										

University of Zambia
School of medicine
Department of Nursing sciences
P.O. Box 50110
Lusaka

27th September 2010

The Provincial Medical Officer
Northern Province
P.O. Box 420026
Kasama.

UFS The District Medical Officer
Kasama District Health Services
P.O. Box 410056
Kasama

UFS The Head of Department
Department of Nursing Sciences
P.O. Box 50110
Lusaka

Dear Sir

RE: REQUEST FOR PERMISSION TO CARRY OUT A PILOT STUDY

I am a 4th year student at the University of Zambia, school of medicine in the Department of Nursing Sciences.

I am required to conduct a research study in the final year of training. My research topic is **"Psychological distress during Antenatal period".** The target populations are pregnant women in Mbala district.

This is in partial fulfillment for the award of Bachelor of Science degree in nursing. The target populations are pregnant women in Mbala district. A pilot study is required to be conducted in a setting different from where the study will be conducted. The purpose of conducting the pilot study is to test the tools I will use in the study in Mbala. I am hereby requesting for permission to carry out the pilot study at any of the health centres within the district. I will be very grateful if my request if my request will be taken into consideration

Thanking you in anticipation.

Yours faithfully,

Hilda Nachinga Kabanda

University of Zambia
School of medicine
Department of Nursing sciences
P.O. Box 50110
Lusaka

15th September 2010

The District Commissioner
Mbala District
P.O. Box 420002
Mbala

UFS The District Medical Officer
Mbala District Health Services
P.O. Box 420075
Mbala

UFS The Head of Department
Department of Nursing Scien
P.O. Box 50110
Lusaka

Dear Sir

RE: REQUEST FOR PERMISSION TO CARRY OUT A RESEARCH STUDY

I am a 4th year student at the University of Zambia, School of Medicine in the Department of Nursing Sciences.

I am required to conduct a research study in the final year of training. My research topic is **"Psychological distress during Antenatal period".** The target populations are pregnant women

This is in partial fulfillment for the award of Bachelor of Science degree in nursing.

I am hereby requesting for permission to carry out the study.

I will be very grateful if my request if my request will be taken into consideration

Thanking you in anticipation.

Yours faithfully,

Hilda Nachinga Kabanda