

AFRICA UNIVERSITY
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FACTORS INFLUENCING PRETERM BIRTHS IN ZIMBABWE, A CASE OF
WESTEND HOSPITAL, ZIMBABWE

BY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR POST BASIC BACHELOR'S DEGREE IN NURSING
SCIENCE (HONOURS)

2022

Abstract

The rise in preterm births at West End in the past five years at West End has raised concerns. The research sought to understand the contributing factors to preterm births at one of the biggest hospitals in Zimbabwe. Utilizing a descriptive research design, the research provides statistical distribution of responses from various mothers who were conveniently sampled at the hospital Using a Rao soft sample calculator a total of 80 participants were sampled. Data was collected using a questionnaire with three sections namely: demographic data, factors that contribute to preterm births and the last section which covered possible ways of reducing preterm births. The collected data was analyzed. The study findings showed that 41% of the majority of the women were between the age of 31 and 35 years of age, 66% were married and 62% showed that they had gone through secondary education. The study findings also show that there is a lack of proper and standard prenatal care to the hospital and this has been contributing to preterm births as shown by the 40.2% of the respondents. More so, 34.8% of the respondents in the study found out that maternal smoking, while 60.9% showed that stress during pregnancy and previous preterm births were also among the causes of preterm births. The preterm births had a number of effects including delays in the cognitive development of a child as indicated with a 70.4%, with 19.2% respiratory distress syndrome and motor sensory impairment among others. In order to provide a solution to rising preterm births, the study recommends that there is need to continue educating the nurses and midwives through workshops and seminars or on job training ensure to quality service delivery and reduce number of preterm births and here is need for the Ministry of Health and Child Care in conjunction with hospital management to come up with strategies to motivate nurses and midwives through provision of incentives to nurses/midwives' order for them to have a positive attitude towards pregnant mothers and ensure that they are educated and attended to in detail when they come for ANC.

Key words: Preterm births, Westend, prenatal care, antenatal care, births

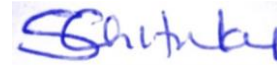
Declaration

I declare that this dissertation proposal is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for the award of a degree.

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f.g mugwisi 12/05/2022

Doctor Sibongile Chituku



Main Supervisor's Full Name

Main Supervisor's Signature (Date)

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Acknowledgement

First and foremost, I would like to thank God the Almighty for according me this great opportunity and strength to study and carry out this project. My gratitude goes to my supervisor Doctor Sibongile Chituku for assisting with constructive criticism during the course of this research. I would also like to thank Westend Hospital management for granting me permission to carry out the research at their institution and all the clients who participated in this study.

Dedication

I would like to dedicate this study to my family for bearing with me during my three-year study. The prayers of those who love me have strengthened me to sail through. Thank you for making this project a success.

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Definition of key terms

Preterm birth- Preterm birth is when a baby is born too early, before 37 weeks of pregnancy have been completed (Feresu, 2016).

Pregnancy: the state of carrying a developing embryo or fetus within a female body (Evan, 2019).

Blood pressure: It is the pressure of circulating blood on the walls of blood vessels. It is a reading expressed in terms of systolic pressure over diastolic pressure and is measured in millimeters of mercury (mmHg) (WHO, 2018).

Nursing: It is as art and science involved in promotion of health, prevention of illness, and the care of the ill, disabled and dying patients (Evans, 2019).

List of acronyms

WHO – World Health Organisation

MOHCC- Ministry of Health and Child Care

PROM- Premature Rapture of Membranes

SPSS – Statistical Package for Social Sciences

PTSD-Post Traumatic Stress Disorders

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CHAPTER 1 INTRODUCTION

1.1 Introduction

Preterm births remain one of the serious problems by health care practitioners caring for pregnant mothers in both developing and developed countries. The World Health Organisation (2020) argues that approximately 15 million babies are born too early every year and that prematurity accounts for more than 35% of infant mortality worldwide. The prevalence of preterm birth therefore presents a global challenge. In one of the research conducted by Chilengu (2016), it was found out that prematurity has been well studied in developed countries, data from developing countries is limited. This research therefore seeks to bring out the factors that influences preterm births in Zimbabwe with focus being put on Westend hospital which is one of the big private hospitals in Zimbabwe.

1.2 Background of the study

Preterm births remain one of the global health concerns. In terms of prevalence, the World Health organisation highlights that 15 million children are born too early and also brings out that premature births account for more than 35% of infant mortality globally. Feresu (2016) brings out that whilst premature births are rampant globally, countries such as Mexico, Afghanistan, Argentina, Somalia, Central African Republic and DR Congo continue are mostly affected as they record around 85 deaths per 1000 as a result of premature deaths compared to developed nations like Sweden and the UK which have 7 and 6 deaths per thousand respectively.

In African, preterm births continue to be an issue on concern in maternal health. The World Health Organisation (2018) argues that preterm birth complications are the leading cause of death among children under 5 years of age, responsible for approximately 1 million deaths in 2015. It is argued that the preterm birth complications are the leading cause of death among children under 5 years and that these deaths can be prevented if cost-effective interventions are instituted (Evans, 2019).

In Zimbabwe, preterm birth is argued to be a common obstetric problem and an important contributor to infant mortality contributing to approximately 73 per 1000 (Feresu, 2016). Chitsiga (2010) contents that preterm births have been exacerbated by lack of proper nutrition among women and lack of proper maternal care due to braai drain. Whilst there

has been findings in other studies, it has been found out that the factors contributing to preterm birth vary from one area to another.

1.3 Statement of the problem

Preterm births continue to be witnessed in Zimbabwe despite the introduction of strict maternal health programme which emphasizes on ensuring that women deliver safe and sound babies. (Feresu, 2018) argues that the preterm delivery of infants has been and continues to be one of the most serious problems encountered in the care of pregnant women in both developed and developing nations. It is noted that the preterm births have been on the increase at Westend hospital in the past five years. Data from the Hospital shows that the increase in preterm births have also contributed to increased infant mortality. Table below shows the preterm births record at Westend hospital in the past five years.

Year	Number of preterm births
2017	65
2018	83
2019	88
2020	120
Total	356

Source Westend birth registry (2017-2020)

1.4 Research objectives

1.4.1 Broad Objective

The aim of the study is to bring out the factors influencing preterm births in births a Westend Hospital.

1.4.2 Specific objectives

The study seeks to:

1. Determine the factors contributing to preterm births at Westend hospital from 2021-2022
2. Explore the effects of preterm birth to mothers at Westend hospital from 2021-2022

1.5 Research Questions

1.5.1 Broad Research Questions

What are the factors influencing preterm births in births a Westend?

Specific research Questions

1. What are the factors contributing to preterm births at Westend hospital from 2021-2022?
2. What are the effects of preterm birth to mothers at Westend hospital from 2021-2022?

1.6 Significance of the study

This research will be organized with the anticipation that the findings would have deep significance for the enhancement of Ministry of Health and Child care to improve the maternal health care services in the country so as to reduce the prevalence of preterm births. It is hoped that the Ministry as the body overseeing the implementation of Health care policies will be called to action strict monitoring system for pregnant mothers and putting in place measure that are meant to reduce the prevalence of preterm births.

The research will contribute to the knowledge of factors contributing to preterm births in Zimbabwe and how these can be reduced as a way of reducing infant mortality. This will help communities to be aware causes of preterm births and design ways and means by which the preterm births and its effects can be minimized.

1.7 Delimitations

In terms of delimitation, the research will only focus on the factors contributing to preterm births at Westend Hospital and no other hospitals.

In the study, the researcher will be limited to questioners, interviewers and document analysis for data collection. Participants will be randomly chosen at Westend maternity department.

1.8 Limitations

The study will be conducted at one Hospital out of the 9 hospitals in Harare making it difficult to generalize the results. The research will also be limited to a sample as a result it will be persuasive instead of being conclusive. Participants may not be willing to disclose all the information that they feel is confidential to counter this, the researcher will ensure that issues of informed consent and confidentiality are emphasized to the participant.

1.9 Chapter Summary

This chapter served as an introduction to the study where it looked at the background to the study, statement of the research objectives, research questions, justification of the study, as well as definition of key terms. Based on the background in this chapter, the next chapter will focus on the review of related literature on the factors contributing to preterm births.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter reviews literature related to the contributors to preterm births at Westend hospital in Zimbabwe. The literature review is based on the research objectives and research questions. The chapter will also bring out the theoretical framework guiding the study as well as the global, regional and national.

2.2 Theoretical framework

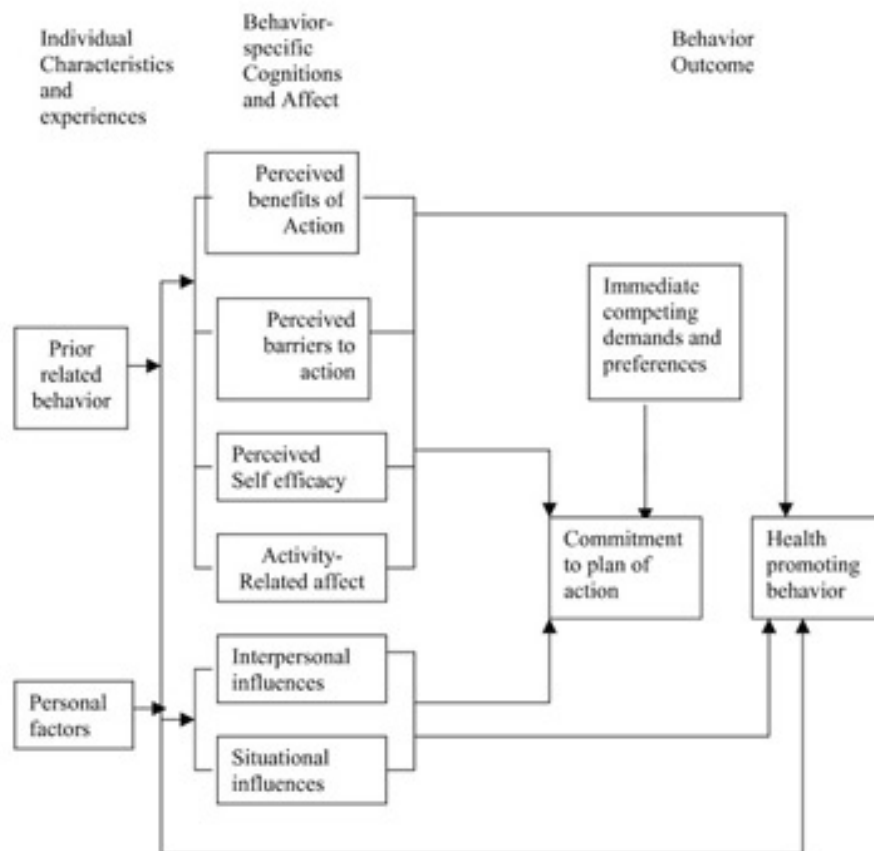


Figure 2:1: Pender's Health Promotion Model (Hussein, Abd El Salam, & Farid Amr, 2016)

The study will be guided by the Pender's Health Belief model which was originally developed to target individuals; however, the framework can be used to target families, groups, or communities (Khodavesi, Omid, Farakhi and Soltan, 2017) The HPM comprises three primary areas that can be used to assess health promotion behavior which are personal characteristics and experiences, behaviors-specific cognition and affect; and behavioral outcome. The models highlight that there are factors that inform that contribute to any given health outcome and these are individual factors, psychological factors. Biological factors, social cultural factors and prior related behavior.

This theory will be critical to understand the factors contributing to preterm birth among pregnant mothers at Westend hospital. It can be noted that there are psychological, experiences, biological and individual factors that can lead a mother to have preterm birth among pregnant mothers. An instance is that experiences with pregnancies may lead to mothers to register for antenatal care late citing that they have had children before whilst there are complications that may lead to preterm birth the same can be said about the biological background where a mother comes from a family with history of giving Birth to preterm babies. The HPM model therefore will be important in discussing and bringing in various factors that may lead to preterm births among women at Westend Hospital.

2.3 General overview of Preterm births

Research worldwide has shown concern for the long term effects of preterm births. This concern should be extended to the developing countries, such as Brazil, Nepal, and Africa at large as poor conditions of life can become an aggravating factor for biological vulnerability (WHO, 2015). Though survival of preterm infants has improved, however, this decrease mortality has resulted in increased numbers of infants with difficulties with all neurocognitive domains. The domains of neurocognitive function defined by the diagnostic and statistically manual impaired learning, vision and hearing loss and poor physical health aggregate as society burden, with estimated annual expenses of 26 billion USD dollars.

Arguably among the 14, 9 million preterm births in 2010, 60% occurred in sub-Saharan Africa and south Asia and 40% of all preterm births occurred in high income countries like Saharan (WHO,2019). Families and communities in the US, even those with access

to resources are often fraught by extensive special education, medical management and neuro psychiatric care these infants require throughout childhood adulthood.

Feresu (2019) contends that preterm birth is a major risk factor for children's development. It affects children's cognitive and intellectual development and is related to impairments in IQ executive functions and wellbeing, with these problems persisting in adulthood. The development of the CNS and brain begins early in gestation and continues into adulthood (Feresu, 2019). The overall growth of the brain is extremely pronounced in utero, with the brain weighing only 65% of its full term weight at 34 weeks gestation, thus signifying the exceptional change and maturation towards the end of pregnancy of third trimester.

2.4 Causes of Preterm Births

Preterm birth is defined as birth prior to 37 completed weeks, or 259 days, of gestation (WHO, 2019). As shown in Figure 1.1, preterm birth can be further subdivided according to severity (Goldenberg, 2018) near term (34-37 weeks gestation), moderately preterm (32-33 weeks gestation), very preterm (28-31 weeks gestation), and extremely preterm (less than 28 weeks gestation). Twenty-three weeks of gestation is considered to be the limit of viability for a preterm neonate, with the recommended clinical practice for infants born prior to this age, and those at less than 400g body weight, being the provision of palliative care only (AHA and AAP, 2013). Gestational age is conventionally determined by the timing of the mother's last menstrual period (WHO, 2017).

Preterm births remain a worldwide concern (WHO, 2020). Various scholars have attempted to come up with the potential causes of preterm births despite the fact that these vary from place to place and nation to nation. One of the findings in the study of preterm births among women in Australia, Goldenberg (2018) found out that preterm birth may occur due to the spontaneous onset of preterm labour, premature pre-labour rupture of membranes (PPROM), or may be clinically indicated due to maternal and/or fetal health risks; in each of these cases, the birth of the infant may be by vaginal or caesarean delivery. Whilst the findings are a reflection of the realities causing preterm births, there lacks a contextual research that has specifically looked at a specific hospital like Westend and brought out the cases of preterm births at that particular hospital.

It is this gap that this research seeks to address by bringing out the contextual causes of preterm births known and experienced by pregnant mothers at Westend Hospital.

It is also argued that lack of proper and standard prenatal care can also be identified as a contributor to preterm births (Feresu, 2019). In Feresu's (2019) study, the lack of prenatal care was associated with a twofold increase in the risk of pre-term birth. It was found out that there need to register early for prenatal care is crucial in reducing the risk of having preterm babies among pregnant mothers. The findings of this study was conducted at Parirenyatwa hospital are critical in giving the Zimbabwean picture of the causes of preterm birth, however, it is important to note that the context of private hospital and public hospitals in Zimbabwe are different hence the focus of this study will be to determine the factors contributing to preterm birth in a private hospital set up which is Westend hospital.

In another study of the causes of preterm births among women in Cote d'Ivoire, Kapeneta (2019) found out that the majority of preterm births (approximately 40%) occur due to spontaneous preterm labour, 25% occur following PPRM, and 35% are clinically indicated. Whilst all these are agreed to be causes, Goldberg (2018) who argues that while a large number of risk factors for spontaneous premature labour and PPRM have been identified as the major cause of premature birth.

Other scholars like Kihandwe (2015) have observed that factors such as maternal race (highest risk in black and Indigenous women, lowest risk in Hispanic and east Asian women), previous preterm delivery, a short time interval between pregnancies, low maternal body mass index, maternal smoking, multiple pregnancy, maternal stress, and also maternal medical conditions such as depression, cervical incompetence, thyroid disease, asthma, diabetes, and hypertension are the major causes of premature births especially in the African communities. It is argued that the African communities awash with cultural and religious beliefs presents the highest number of women having preterm births (WHO, 2018).

The most significant contributor to preterm birth is intrauterine infection (including chorioamnionitis), which may be involved in up to 40% of preterm births (Goldenberg

2018). Clinical indications for preterm delivery include risk factors for maternal and fetal health such as pre-eclampsia, placental abruption, placenta praevia, chorioamnionitis, intrauterine growth restriction (IUGR) and abnormal amniotic fluid levels (oligohydramnios or polyhydramnios); in these cases, labour will be medically induced, or an emergency caesarean will be performed.

Moreover, study by Gennaro, York and Brooten (2019) found out that mothers who signaled having stressful moments and depression during their pregnancies constituted the majority of mothers who had preterm births. It was indicated that stress and depression have been widely cited as major cause of preterm births among women. In support of Visco (2014) in a study of risk factors contributing to preterm births found out that 9 out of 10 mothers who indicated that they at once had depression moments of more than 2 months experienced preterm births. Whilst it cannot be disputed that stress and depression can cause preterm births, the lack of contextualization of the study findings presents a gap that needs to be filled when one is bringing out the causes in Zimbabwe.

Fraleigh (2017) studied the relationship between a preterm mothers' experiences of a stressor event and chronic sorrow. It was found out that mothers who reported feelings of helplessness, frustration, depression, anger and irritability when they were pregnant were most likely to have preterm births hence there is need for counselling of mothers in order for them to successfully deal with depression. Mothers indicated that their stressor event were critical and affected their gestation period leading to preterm births.

In another study, Godson (2015) opines that previous experiences of giving preterm births remains one of the most frequent factors contributing to preterm births among mothers. Whilst conducting a study at Makelele hospital, Godson (2015) found out that causes of preterm births are often repetitive with 75% of the mothers who had preterm birth indicating that it was not their first time. It remains unclear whether it is the same case with Westend hospital and whether the experiences are repetitive among mothers in Zimbabwe.

Studying factors contributing to preterm births among women attending private hospitals in Singapore, Henderson (2016) found out that women with health-related and pregnancy-

related problems were showed that they had at least had preterm birth. He further argues that these women are mostly better prepared for the experience than women who delivered early unexpectedly. The findings of Henderson though they heavily generalize, brings out the contextual realities on the causes of preterm births among women. It remains unclear whether the realities found in these studies can be linked to the factors causing preterm births among mothers at Westend hospital in Zimbabwe.

2.5 Effects of Preterm Birth

While preterm has been argued to be widespread in communities, its effects continue to be felt at different levels in life. Various scholars have researched on the effects of preterm births on the mother, child and the community at large. A reviewed of related literature has found out that preterm birth can put enormous strain on the family, particularly if the baby is seriously ill (Henderson, 2016). This psychological stress caused on the family due to preterm birth can either have long term or short term effects to the development of the family.

Henderson (2016) argues that the neo-natal unit is an unfamiliar environment in which parents can feel lost and frustrated. The effects of a preterm birth on parental stress are exacerbated by caesarean section and by either no or limited contact with their baby soon after birth. In studies largely based on single sites/hospitals the risk of anxiety, depression, post-traumatic stress disorder (PTSD) and poorer overall well-being have been documented as significantly increased in parents of preterm babies, with these ill effects reported to persist for a considerable time especially following very preterm birth (Henderson, 2016)

In highlighting the effects of preterm birth on the child, Lasiuk and Comaeu (2015) argues that babies born preterm are at increased risk of a range of poor outcomes including respiratory distress syndrome, necrotising enter colitis and neonatal sepsis. It is further argued that in the long-term, preterm babies are more likely to experience motor and sensory impairment, delay in cognitive development and behavioral problems than babies born at term (Padeen, 2015). Having found out the effects, it remains unclear whether this may have an effect in causing preterm births again in the future.

Further studies on the effects of preterm births on the child shows that pre term births affects the cognitive performance of children and interaction difficulties are reported to be manifold. A system review of twenty-three studies dealing with social development in children between 0 and 17 years of age revealed 16 out of 21 studies reporting more peer problems and social withdrawal in preterm children compared to full term children. (Ritchie et al, 2015).

It is brought out that at approximately two years of age, children born preterm already have lower social competence like listening to parents or playing with other children. (Alduncin et al, 2014 Johnson et al, 2015). This means that children born prematurely are more likely to show more externalising behaviors than their full term peers, imposing special challenges on their social environment (Allotey. Zamora, Kalidindi, 2015). This shows that the effects of preterm births are deep and largely affects children in their development.

Highlighting another effect of preterm birth on a child, Kalidinh (2015) found out that preterm born children need consistent and continuous follow up in their work. The need for an expanded follow up mechanism is argued to be, key moment for the child's development, because it requires skills that have not been previously demanded, which might be impaired. It is important to consider that follow-up only until to 2 years of age is insufficient for the detection of development problems such as bimanual skills, behaviour, and visual-motor integration abnormalities (Mataratzis, 2010).

2.6 Reducing the risk of preterm births

While it has been noted that preterm births have been a major challenge for health practitioners, a number of researches have been conducted to ensure that the risk of having preterm births is reduced. Ickovics (2016) argues that the number of visits for ANC needs to be increased and controlled in order to reduce the risk of preterm birth among pregnant mothers. While it remains a viable solution, it is solemnly up to pregnant mothers to fulfill the obligation to go for continuous visits until they give birth.

Feresu (2019) have suggested counselling mothers' in order to reduce the risk of preterm births especially among mothers who will be delivering for the first time.

It is argued that young mothers are susceptible to stress disorders and depression and would need special attention when they come for ANC booking. This can be a way of dealing with one of the causes of preterm births. However, it is not clear whether Westend Hospital has the counselling for pregnant mothers programme or has the capacity to institute such a programme.

2.7 Research Gap

Though there is available literature bringing out the factors that may influence preterm births in other hospitals and countries, there is a lack of a particular study focusing on the causes of preterm births at Westend hospital. The lack of a context specific research at Westend brings out the need for this research.

2.8 Chapter Summary

This chapter presented the existing literature pertaining to factors causing preterm births among women at Westend hospital. The literature review was underpinned in the Nola Pender's Health Promotion Model. The chapter also highlighted the propositions of the Health Promotion Model as well as the rationale for using the model in investigating the factors leading to preterm births at Westend hospital.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter looks at the methodological framework of the study. It brings out the study design study population, description of study site description, study population as well as the required sample size for this study and sampling techniques. The chapter also illuminates the data collection procedures and the tools that was used for data collection. The ethical considerations and data management and analysis will also be included in this chapter.

3.3 Study Design

Creswell (2013) states that research design can be defined as a strategy in integrating components of a research in a logical manner. This research adopted a descriptive design. It involves observing and describing the behaviors of participants in an accurate manner. In this study descriptive survey design was used to describe the factors influencing preterm births at Westend hospital in Harare

3.2 Study Setting

The study was conducted at Westend Hospital in Harare. Westend hospital is a private Hospital with various departments including maternity, medical/surgical and emergencies among others. It is a 120 bed hospital catering mostly for patient in the middle class status. The rationale behind choosing Westend is informed by the rise in number of preterm births and the researchers proximity to the study area.

3.4 Study population and Sample

3.4.1 Population

Population refers to a group of people or items about which or from which, information is gathered (Quist 2013). According to Burns and Grove (2015), a population is defined as all elements that meet the sample criteria for inclusion in a study. The study population for this study was nurses and pregnant mothers visiting Westend hospital maternity wards

3.5 Inclusion and Exclusion Criteria

3.5.1. Inclusion criteria

Pregnant women aged between 18 and 45 years was eligible for inclusion into this study. All pregnant women visiting Westend hospital maternity ward was included in the study.

3.5.2. Exclusion criteria

All referrals at the time of data collection and pregnant women who are unable to communicate and or are critically ill was excluded from the study.

3.4.3 Sample size

There are approximately 100 pregnant women visiting Westend hospital per fortnight. In order to calculate the sample size, the study utilized the Rao soft sample calculator in calculating the study sample, at 95% degree of confidence as well as 5% margin of error and a response distribution of 50%. The sample size of the study was 80 participants according to the calculations below.

$$\begin{aligned} n &= \frac{N}{(1 + Ne^2)} \\ &= \frac{100}{(1 + 100 (0.05^2))} \\ &= 80 \end{aligned}$$

3.6 Data Collection

3.6.1 Data collection

A data collection plan details how the study was implemented (Burns & Grove, 2014). It is necessary to provide the ground work implementation of data collection process. Burns and Grove (2014) further outlines that data collection plan includes selection of a setting, selection of sample, development of supportive relationship with staff working in the area.

Although the researcher is employed at the site and works there, permission to carry out the study was sought from the Hospital Administrators and Executive. It is crucial to ask for permission at the site of study as these individuals can influence the possibility of obtaining an adequate sample.

3.6.2 Data collection tools/instrument

In this study, a questionnaire was used as a research instrument. Two questionnaires were constructed, one in English and the other one in Shona for the sake of those who do not understand English. Questionnaires can be used for descriptive or explanatory research (Saunders et al., 2012).

The questionnaire had three (3) sections. The first section which covered the demographic data where the respondent's variables such as age, marital status, education, occupation were analyzed; the second section constituted the factors that contribute to preterm births. The last section covered the possible ways of reducing preterm births among mothers in Zimbabwe.

Pilot Study

A pilot study or pre-test refers to a trial administration of an instrument to identify flaws. When a questionnaire is used as a data gathering instrument, it is necessary to determine whether questions and directions used are clear to the respondents and whether they understand what is required from them. This is referred to as pretesting of a questionnaire, according to Creswell (2013).

After consultations with the supervisor, the researcher pre-tested the questionnaire at Mbuya Nehanda Maternity ward at Parirenyatwa hospital.

Reliability and Validity

3.7.1. Reliability

Reliability is the degree of consistency with which an instrument measures the attribute it is designed to measure.

Reliability can also be measured by minimizing sources of measurement error like data collector bias. In order to determine whether a research is reliable or not, one needs to consider the different threats to reliability including: participant error, participant bias, and observer error and observer bias, (Johansson et al, 2010).

3.7.2 Validity

The validity of an instrument is the degree to which an instrument measures what it is intended to measure. Content validity refers to the extent to which the instrument represents the factors under study. To achieve content validity, questionnaires included a variety of questions factors contributing to preterm births at Westend hospital. The questionnaires were submitted to the research supervisor for verification.

3.8 Data collection procedure

The researcher followed all the recommended standards and guidelines of data collection process. Permission was sought from the Africa University Ethical Review Committee according to the university's ethical data collection procedure. Permission was also granted from the relevant authorities at Westend Hospital in Harare. Questionnaires were distributed to the study participants by the investigator after giving an informed consent. Participants answered questions on their own. Data was collected over 7 working days and each questionnaire took about 20-30 minutes to complete. Covid -19 infection prevention guidelines were observed by both the investigator and participants. Thereafter the collected questionnaires were collected by the researcher and locked them away for privacy purposes and to ensure safety.

3.9 Data Presentation and analysis

Data analysis is a process consisting of counting, classification and grouping of individual's pieces of data so that a broad pattern of data is described. For the purpose of the study frequencies, percentages, graphs, and tables was used to present the results. Data was entered into a Microsoft excel and imported into the Statistical Package of Social Scientists (SPSS) to produce a descriptive analysis.

3.10. Ethical Consideration

The conducting of research requires not only expertise and diligence, but also honesty and integrity. This was done to recognize and protect the rights of human subjects.

To render the study ethical, the rights to self-determination, anonymity, confidentiality and informed consent was observed

Scientific honesty is regarded as a very important ethical responsibility when conducting the research. Dishonest conduct includes manipulation of design and methods, retention or manipulation of data, Brink (1996). The researcher will avoid any form of dishonesty by recording truthfully the answers of those subjects who could not read or write.

Permission to carry out the study was sought from both West End hospital and Africa University Research Ethics Committee (AUREC). The subjects were fully informed verbally, of the study and consent was obtained.

The research participants were being assured of confidentiality. Subjects were requested not to write their names on the questionnaires to ensure confidentiality. There were no foreseen risks to the subjects in the study, meaning none of the subjects were psychologically or physically injured or harmed during the study.

3.11 Chapter Summary

This chapter described the research methodology, including the population, sample, data collection instruments as well as strategies used to ensure the ethical standards, reliability and validity of the study.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The chapter presents data related to the factors contributing to preterm birth at Westend in Harare. The data is going to be presented using graphs and frequency tables. The data was collected between March 2022 and April 2022. 80 questionnaires were distributed and all were returned giving a 100% response rate.

4.2 Demographic data of Respondents

4.2.1 Age distribution

n=80

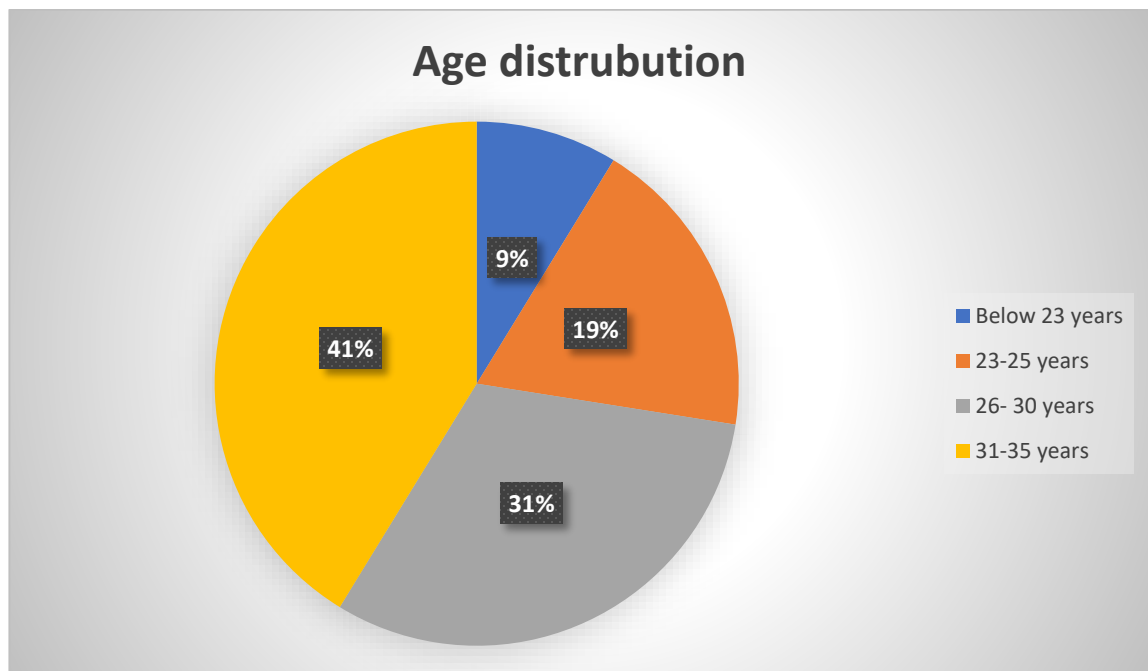


Figure 1: Age distribution of respondents

Figure 4.2 shows that the majority of women 33 (41%) who were part of the study were between 31 and 35 years of age followed by (25) 31% who were between 26 and 30 years old. A considerable 15 (19%) indicated that they were between 23 and 25 years while only 7 (9%) were below 23 years.

4.2.2 Marital status of Respondents

N=80

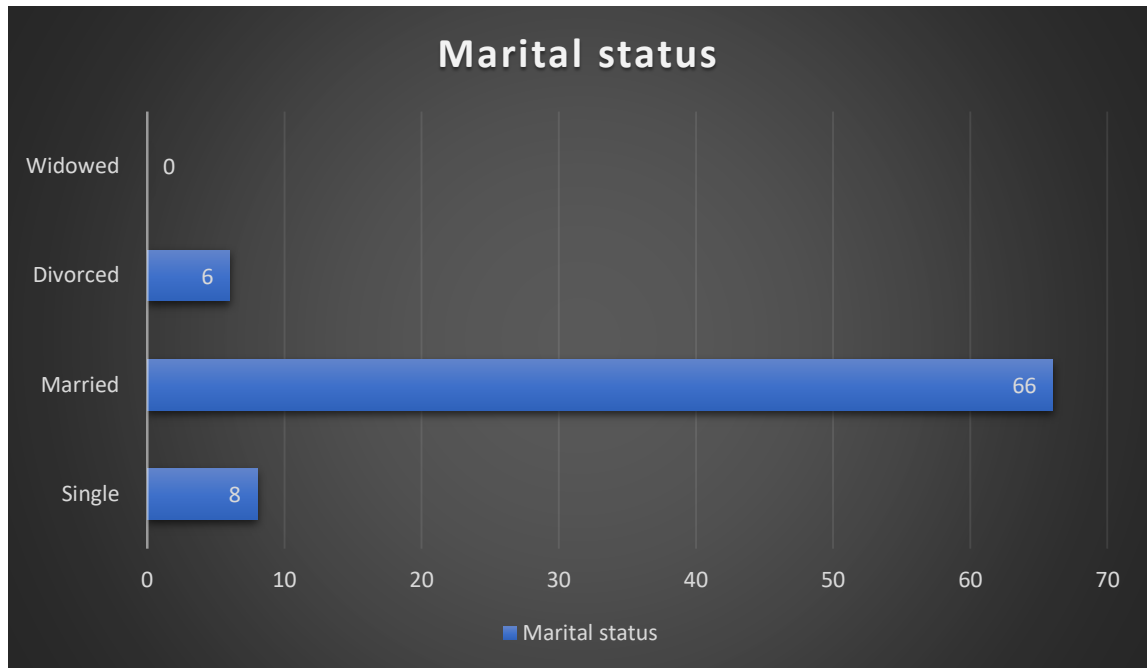


Figure 2: Marital Status

Figure 4.2 shows that the majority of study respondent (66) indicated that they are married. Eight (8) were single while 6 were divorced. No respondent indicated that they were widowed.

4.2.2 Level of education for who be specific

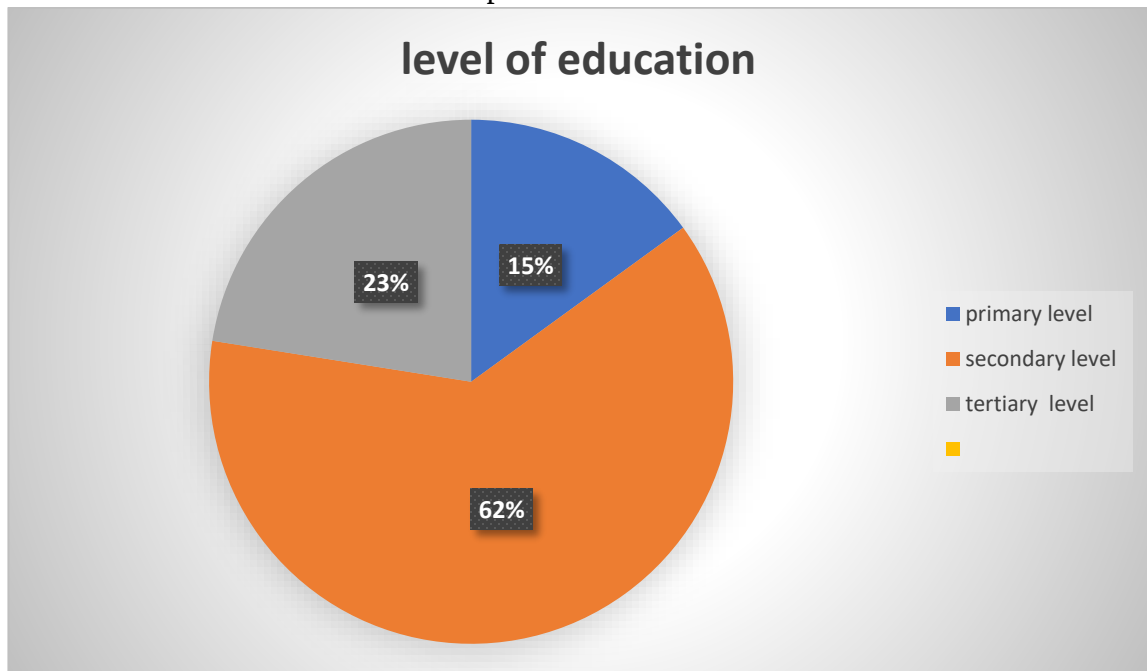


Figure 3: Level of education

Figure 4.3 shows that the majority of women 52 (62%) through secondary education while 12(15%) indicated that they had ended their education in primary school. A considerable 18 (23%) indicated that they had gone through tertiary education.

4.2.4 Number of Children

n=80

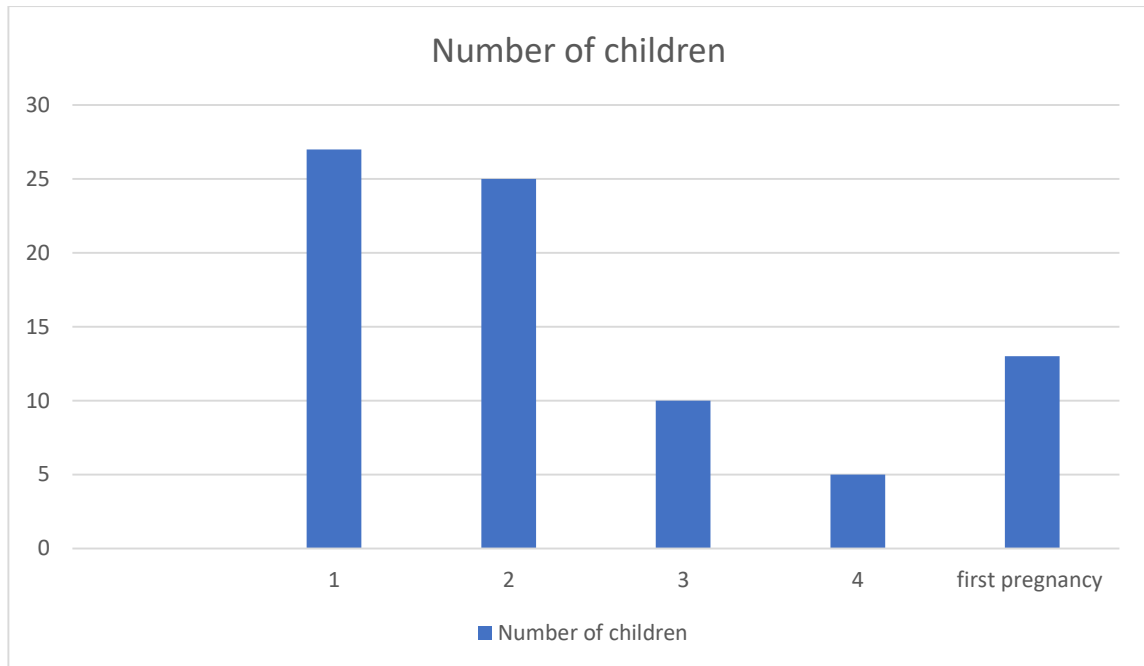


Figure 4.4: number of children

Figure 4.4 shows that the majority of pregnant women who visited or were admitted at Westend maternity (27) had at least one child and were expecting their second child. Twenty-five (25) were expecting their third and had two (2) children already while 13 indicated that it was their first pregnancy.

4.3 Factors contributing to Preterm Birth n-80

Table 1: Factors contributing to Preterm Births

n=80

Factors contributing to preterm births	Rank of responses			
	strongly disagree	disagree	Agree	strongly agree
Lack of proper and standard prenatal care	14.2%	29.3%	16.3%	40.2%
Race (black, white, coloured)	21.7%	17.4%	52.2%	8.7%
Maternal smoking	22.8%	16.3%	26.1%	34.8%
Multiple pregnancies	17.4%	23.9	28.3%	30.4%
Maternal stress	9.8%	6.5%	22.8%	60.9%
Maternal /fetal health risk (Asthma, Diabetes)	30.8%	5.6%	29.2%	34.4%
Previous preterm births	13.4%	8.1%	22.4%	56.1%
Witchcraft	11.9%	6.1%	15.7%	66.3%
Depression	23.2%	15.7%	27.2%	33.9%
Spontaneous Preterm labour	21.9%	15.2%	19.2%	43.7%
Low maternal body index	42.5%	7.2%	10.1%	40.1%
Not taking traditional medicines	45.0%	11.3%	13.4	30.3%

Table above shows the distribution of responses from respondents on the factors contributing to preterm births. The majority of respondents strongly agreed that preterm births is caused by lack of proper standard prenatal care. This was indicated by 40,2% (32) of the women. 16.3% (13) agreed that lack of proper and standard prenatal care is a factor

contributing to preterm births while a considerable 14.2% (11) strongly disagreed with the notion. More so 29.3% (24) disagreed that lack of proper and standard prenatal care causes preterm birth.

On whether race can be a contributing factor to preterm birth, the study findings showed that the majority 52.2% (42) agreed to the notion while 8.7% (7) strongly agreed. However, a considerable 21.7% (17) strongly disagreed that race is a contributing factor to preterm birth supported by 17.4% (14) who indicated that they disagree.

The study findings also reveal that 34.8% (28) of study respondents strongly agreed that maternal smoking contributes to preterm birth. This was supported by 26.1% (20) who indicated that they agree with the notion that preterm birth can be caused by maternal smoking. Whilst there seemed to be a wider agreement, a considerable 22.8% (18) indicated that they strongly agree that maternal smoking leads to preterm births. They were supported by 16.3% (14) of the study respondents who indicated that they disagree with the notion.

Study findings reveal that pregnant women considered maternal smoking as a contributing factor to preterm birth as supported by 34.8% of the study respondents who indicated that they strongly agree while 26.1% indicated that they do agree. On the other hand, 22.8 strongly disagreed that maternal smoking contributes to preterm births supported by 16.3 who indicated that they disagree

The study also found out that maternal stress contributes to preterm births as was indicated by 60.9% of the study respondents who strongly agreed that maternal stress contributes to preterm birth. A considerable 22.3% also in agreed that preterm births can be as a result of maternal stress. However, 9.8% indicated that they strongly disagree that maternal stress causes preterm birth. 6.5% indicated also that they disagree on the relationship between maternal stress and preterm birth.

There was wide agreement among respondents that previous preterm births can contribute to preterm births among women. This was indicated by 56.1% of study respondents who strongly agreed while 15.7% indicated that they agree. Although there is a great indication that the majority believes previous preterm births can contribute to

another preterm birth, a considerable 13.4% and 81% strongly disagreed and disagreed respectively.

Study findings also suggest that preterm births are caused by witchcraft as indicated by 66.3% of the study participants. This was also supported by 15.1% of the respondents who indicated that agree with the notion. Despite the majority agreeing, 11.9% disqualified witchcraft by strongly disagreeing that it causes preterm births while 6.1% indicated that they do agree that witchcraft causes preterm birth.

4.3.2 Effects of preterm births n=30

Table 2: Effects of Preterm Births

n=80

Effects preterm births	Rank of responses			
	strongly disagree	disagree	Agree	strongly agree
Strain on family	12.0%	13.2%	29.0%	45.8%
Maintaining maternal body mass index	8.0%	13.4%	22.4%	56.1%
Neocrotising enterocolitis and Neonatal sepsis	8.7%	17.4%	21.7%	52.2%
Motor sensory impairment	8.2%	7.9%	23.0%	60.4%
Maternal stress	6.5%	5.5%	37.8%	50.2%
Respiratory syndrome	12.8%	3.6%	19.2%	64.4%
Delays in cognitive development	5.4%	4.1%	20.1%	70.4%

Table 4.2 shows the distribution of responses by pregnant mothers on the effects of preterm births. It came out that the majority of study respondents (70.4%) strongly agreed that preterm births can result in delays in cognitive development. 20.1% agreed with the notion while only 5.4% strongly agreed that delays in cognitive development is an effect of preterm birth

The results also show that there was a strong agreement between respondents that respiratory syndrome is an effect of preterm birth. This was indicated by 64.4% of respondents who strongly agreed with the assertion while 19.2% indicate that they agree that respiratory syndrome is an effect of preterm birth. A considerable 5.4% and 4.1% indicated that they strongly disagree and disagree with the notion that respiratory syndrome is an effect of preterm birth respectively.

The study respondents also indicated that another common effect of preterm birth is that of motor sensory impairment. This was indicated by 60.4% of study participants who strongly agreed that motor sensory impairment is an effect of preterm births. 23.0 % indicated that they agree that motor sensory impairment is an effect of preterm birth. However, a considerable 8.2% strongly disagreed that motor sensory impairment can be an effect of preterm birth.

Furthermore, 52.2% of the respondents identified Necrotising and neonatal sepsis as an effect of preterm birth. A considerable 37.8% agreed with the notion. Albeit the majority having strongly agreed on that Necrotising and neonatal sepsis are effects of preterm births, a considerable 6.5% strongly disagreed with the notion while 5.5% indicated that they disagree.

The respondents also strongly agreed that preterm births culminate in family straining. This was indicated by 45.8% of the respondents who strongly agreed that family straining is an effect of preterm births while 29.0% indicated that they agree with the notion. However, 12.0% were of the opinion that preterm births do not result in family straining.

Reducing Preterm births

Table 3: Reducing preterm Births

N=80

Reducing preterm births	Rank of responses			
	strongly disagree	disagree	Agree	strongly agree
Proper and Standard Prenatal Care	11.0 %	7.1%	12.0%	69.9%
Counselling for distressed mothers	16.7%	4.1%	23.3%	55.9%
Reducing maternal smoking	4.3%	18.8	27.1%	49.8%

Table 3 shows the responses by respondents on what can be done to reduce cases of preterm births at Westend Hospital. The majority (69.9%) strongly agreed that preterm births can be reduced through proper and standard prenatal care for pregnant mothers. This was supported by a considerable 12.0% who agreed with the notion. However, 11.0% strongly disagreed that proper and standard prenatal care can reduce preterm births.

The respondents also indicated that counselling of distressed mothers can help in reducing preterm births at Westend Hospital. This was indicated by 55.9% of the respondents who strongly agreed on the way to reduce preterm birth. In support, a considerable 23.3% indicated that they agree with using counselling for distressed mothers to reduce cases of preterm birth. However, a considerable 16.7% strongly disagreed that counselling distressed mothers can reduce preterm births.

The respondents also strongly agreed (49.8%) that reducing smoking can be used as a way of reducing preterm births. This was also given credence by 27.1% who indicated that they agree that reducing maternal smoking can help reduce cases of preterm births.

However, a 4.3% indicated that they strongly disagree that reducing maternal smoking can reduce cases of preterm births

4.4 Chapter summary

The chapter brought put the study findings and [presented then in the form of graphs, tables and pie charts. The respondents' answers were presented in such a way that it brought out those who strongly agree, disagree, agree and strongly agree. The next chapter will look at the summary of research findings and the discussions of the findings.

Capttal letter N is for the population whereas n is for the sample.

CHAPTER 5: DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1. Introduction

This chapter addresses discussion of study results and findings and their implications to nursing practice, education and nursing research. Limitation of the study, recommendations, summary and conclusion of the study are also highlighted.

5.2 Discussion of study Findings

The purpose of this study was determining the factors that influence preterm births in Zimbabwe with particular focus being at Westend Hospital. A descriptive research design with descriptive statistics being used to bring out the views of the respondents. Self-administered questionnaires were used to collect data from the pregnant mothers. The questionnaire comprised of four sections namely demographic data, factors contributing to preterm births, effects of preterm births as well as ways and means of reducing preterm births.

5.2.1 Demographic data related to the study

The study found out that in terms of age distribution, the majority of participants were between 31 and 35 years of age (41%) followed by those between 26 and 30 years (31%). Those between 23- 25 years old constituted only 19% of the total number of participants. This shows that the majority of the respondents were still in the prime and late child bearing age hence their significant numbers. The fact that the majority of study respondents were between 31- 35 years of age helped to get experienced views of participants who have been in the child bearing bracket for some time and their views have been shaped either by witnessing critical issues of preterm or getting to know about it through education and several discussions with health workers.

Regarding education, the study found out that majority of women who visited Westend hospital could easily comprehend and understand the issues of the research as the majority 62% went through secondary education while 15% indicated that they had ended their education in primary school and 23% indicated that they had gone through tertiary education. The education status of pregnant mothers made it easy for the researcher to get informed positions and data from women who could read and write as well as understanding critical issues regarding preterm births in Zimbabwe.

The study also established that the majority of women who were apart of the study had at least a child and were coming off with a second pregnancy or third one. This was indicated by the fact that 27 of the mothers had a child whilst 50 were carrying their 3rd pregnancy having had 2 children already. This helped in bringing out experiences, realities and perceptions of mothers about preterm as they had previously given birth.

5.2.2 Factors contributing to Preterm birth

Regarding the factors contributing to preterm births at Westend Hospital, the study found out that the lack of proper and standard prenatal care has been exacerbating preterm births. this was indicated by the majority of respondents (40.2%) who strongly agreed that preterm births are caused by lack of proper standard prenatal care. The findings reveal that standard prenatal care is critical in so far as reducing cases of preterm births. This corroborates with the findings by Feresu (2019) who in a study of causes of preterm births found out that study, the lack of prenatal care is associated with a twofold increase in the risk of pre-term birth. This entails that the hospital investment in standard prenatal care for pregnant mothers can determine the reduction or increase in preterm births. The findings of the study therefore suggest that preterm births are usually caused by lack of proper and standard prenatal care facilities at hospitals.

The study findings also reveal that maternal smoking is a contributing factor to preterm births. This was supported by the majority (34.8%) of study respondents strongly agreed that maternal smoking contributes to preterm birth. The study findings are in line with the findings by Henderson (2016) in a study of contributing factors to preterm births in s Singapore who found out that the risk of having a preterm baby was higher among mothers who smoked during the pregnancy time than nonsmoking mothers. The findings show the negative impact of maternal smoking especially with bringing the result s of a preterm baby. Whether pregnant mothers have or are furnished with such knowledge before, during and after pregnancy remains under researched. However, the study participants strongly agreed on the fact that maternal smoking is a contributing factor to preterm birth.

Furthermore, the study established that stress during pregnancy (Maternal stress) is another contributing factor to preterm births. Study participants (60.9%) strongly agreed that maternal stress remains a risk factor for preterm birth.

This reveals that mothers during pregnancy needs to live a stress-free life or have access to stress management facilities to reduce the risk of preterm births. The study findings are in line with the study by Fraley (2017) who studied the relationship between a preterm mothers' experiences of a stressor event and chronic sorrow. It was found out that mothers who reported feelings of helplessness, frustration, depression, anger and irritability when they were pregnant were most likely to have preterm births. Critically analysing the how stress during gestation can cause preterm births one may need to understand the mother lived experiences with regards to a stressor event and how it affects the gestation period of mothers.

A previous preterm births was also found to be a risk factor for preterm births among mothers. The study findings showed that their wide agreement among respondents that previous preterm births can contribute to preterm births among women with 56.1% strongly agreed that previous preterm experience is a risk factor to be considered in so far as preterm births is concerned. The findings are close to similar with those of Godson (2015) who found out that previous experiences of giving preterm births remains one of the most frequent factors contributing to preterm births among mothers. Whilst conducting a study at Makelele hospital, Godson (2015) found out that causes of preterm births are often repetitive with 75% of the mothers who had preterm birth indicating that it was not their first time. The repetitive nature of preterm births therefore can be said to be a risk factor contributing to preterm birth.

The study also found that there was some level of spirituality among mothers who were interviewed for the study with 66.3% of the respondents strongly agreeing that preterm births sometimes is as a result of witchcraft. This shows that the majority of women were highly religious and believed in spirituality of giving birth.

5.2.3 Effects of Preterm

The study found out that the delays in cognitive development of a child. It established that children who are born prematurely have a low or slow cognitive development process. This was indicated by 70.4% of the study participants who strongly agreed that the delayed cognitive development of a child is an effect of preterm birth. The findings of the study related to the findings by Ritchie et al (2015) who found out that pre term births affects

the cognitive performance of children and interaction difficulties are reported to be manifold and this was supported by a system review of twenty-three studies that dealt with social development in children between 0 and 17 years of age. The review revealed that 16 out of 21 studies reported more peer problems and social withdrawal in preterm children compared to full term children. (Ritchie et al, 2015).

Still on delayed cognitive development the study findings also corroborate with the findings by Allotey, Zamora, and Kalidindi, (2015) who found out that at approximately two years of age, children born preterm already have lower social competence like listening to parents or playing with other children. (Alduncin et al, 2014 Johnson et al, 2015). This means that children born prematurely are more likely to show more externalizing behaviors than their full-term peers, imposing special challenges on their social environment (Allotey, Zamora, Kalidindi, 2015). This shows that the effects of preterm births are deep and largely affects children in their development.

Furthermore, the study established another effect of preterm birth is the respiratory syndrome. This was indicated by 64.4% who strongly agreed that preterm births result in respiratory syndrome. This links with the assertion by Lasiuk and Comaeu (2015) who argued that babies born preterm are at increased risk of a range of poor outcomes including respiratory distress syndrome. In order to deal with this, the study found out that there is need to reduce the severity of factors that can lead to preterm births.

Moreover, the study found out that another common effect of preterm birth is that of motor sensory impairment. This was indicated by 60.4% of study participants who strongly agreed that motor sensory impairment is an effect of preterm births. Padeen (2015) is of the opinion that in the long-term, preterm babies are more likely to experience motor and sensory impairment, delay in cognitive development and behavioural problems than babies born at full term (Padeen, 2015). Having found out the effects, it remains unclear whether this may have an effect in causing preterm births again in the future.

The study found out that the effects of preterm births can manifest through family strains. This highlighted by 45.8% of the respondents who strongly agreed that family straining is an effect of preterm births while 29.0% indicated that they agree with the notion.

The result link with a study conducted by Henderson (2016) who found out that preterm birth can put enormous strain on the family, particularly if the baby is seriously ill (Henderson, 2016). This psychological stress caused on the family due to preterm birth can either have long term or short-term effects to the development of the family. Henderson (2015) further brings out that family strain can also manifest through frustration of parents. Having brought out the effects of preterm on the family, it can be argued that there are dynamics that can cause a cycle of preterm as continual stress and strain can lead to repeated occurrences.

5.2.4 Ways to reduce the Occurrence of Preterm births

The study found out that in order to reduce the occurrence of preterm births, there is need for operationalization institutionalization of proper and standard prenatal care programme. The majority (69.9%) of study respondents agreed that there is need for a proper and standard prenatal care for pregnant mothers. There exists a congruent between the study findings and the findings by Ickovics (2016) who argued that the number of visits for ANC needs to be increased and controlled in order to reduce the risk of preterm birth among pregnant mothers. While it remains a viable solution, it is solemnly up to pregnant mothers to fulfil the obligation to go for continuous visits until they give birth. It is also up to the hospital to ensure the number of days for Prenatal care are increased in order to ensure specialised attentions given to pregnant mothers.

Study findings also suggest the need to ensure counselling for distressed pregnant mothers in order to reduce the occurrence of Preterm births. 55.5% of the respondents indicated that counselling of distressed mothers can help in reducing preterm births at Westend Hospital. The findings are in line with the findings of Feresu (2019) who contends that young mothers are susceptible to stress disorders and depression and would need special attention when they come for ANC booking including specialized counselling services. This can be a way of dealing with one of the causes of preterm births. The importance of counselling in dealing the preterm births is argued to be critical as it detoxify and distress pregnant mothers.

5.3 Implication of the Research study

5.3.1 Implications to nursing practice

The increasing number [preterm births have meant the need to look into the contributor factors to preterm births. Stress disorders during pregnancy, smoking, race, lack of proper and standard prenatal care and previous preterm births were found to be among the contributing factors to preterm births in Zimbabwe. The study therefore implies the need to ensure that pregnant mothers are motivated to utilize prenatal care education to reduce the occurrence of preterm births. The study findings show that pregnant mothers largely agreed on the factors contributing to preterm births hence there exists an opportunity to address these factors through an intensive specialized attention to the issues of pregnant mothers by nurses and other health care workers.

5.3.2 Implications to Nursing Education

The overall study findings show that the factors contributing to preterm births are well known among pregnant mothers. However, the lack some implementation modalities for programs meant to equip nurses with specialized skills to deal with individual problems faced by pregnant women. This therefore implies that there is need of updating the curriculum to look at modern ways of ensuring full term deliveries for pregnant mothers through adoption of strategies informed by research

5.3.3 Implications to nursing research

Whilst the contributing factors, the effects as well as the ways to reduce the effects of preterm births are well known, there is need for further studies on how the contributing factors can be addressed through the development of specialized programmes and intervention mechanisms. Thus this study can be used as a baseline for further research to established how holistic prenatal programme can be revamped and implemented in Zimbabwe.

5.4 Study limitation

The study was conducted at one Hospital out of the 9 hospitals in Harare making it was difficult to generalize the results. The research was limited to a sample as a result it was persuasive instead of being conclusive. The researcher was also guided by the university calendar hence the research was restricted to the number of months in which the research is supposed to be conducted.

5.5 Recommendations

The following recommendations emanated from the study:

1. To either strengthen or improve the implementation and operationalization of the prenatal care programme among pregnant mothers in Zimbabwe, there is need to continue educating the nurses and midwives through workshops and seminars or on job training ensure to quality service delivery and reduce number of preterm births.
2. There is need for the Ministry of Health and Child Care in conjunction with hospital management to come up with strategies to motivate nurses and midwives through provision of incentives to nurses/midwives' order for them to have a positive attitude towards pregnant mothers and ensure that they are educated and attended to in detail when they come for ANC.
3. To enhance the practices that promote adherence to prenatal care and ANC programmes, there is need to develop prenatal care and ANC policy guidelines for Nurses and pregnant mothers to utilize to amplify the knowledge and guide implementation of the programme across hospitals and clinics

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Appendix 1 AUREC approval letter



AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)

P.O. Box 1320 Mutare, Zimbabwe, Off Nyanga Road, Old Mutare-Tel (+263-20) 60075/60026/61611 Fax: (+263 20) 61785 website: www.africau.edu

Ref: AU2487/22

22 March, 2022

FUNGAI MUGWISI
C/O CHANS
Africa University
Box 1320
MUTARE

RE: FACTORS INFLUENCING PRETERM BIRTHS IN ZIMBABWE, A CASE OF WESTEND HOSPITAL, ZIMBABWE

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and approved your application to conduct the above research.

The approval is based on the following.

- a) Research proposal
- b) Data collection instruments
- c) Informed consent guide
- **APPROVAL NUMBER** AUREC 2487/22
This number should be used on all correspondences, consent forms, and appropriate documents.
- **AUREC MEETING DATE** NA
- **APPROVAL DATE** March 22, 2022
- **EXPIRATION DATE** March 22, 2023
- **TYPE OF MEETING** Expedited
After the expiration date this research may only continue upon renewal. For purposes of renewal, a progress report on a standard AUREC form should be submitted a month before expiration date.
- **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be reported to AUREC within 3 working days on standard AUREC form.
- **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
- **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC.



Yours Faithfully

MARY CHINZOU –
ASSISTANT RESEARCH OFFICER: FOR CHAIRPERSON
AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE

APPENDIX 2 Authorisation letter

INTERNAL MEMORANDUM

TO: MR M DUBE
DIRECTOR HUMAN RESOURCES SERVICES

FROM: MRS MARCELINE TSOPOTSA-CHIEZA
HUMAN RESOURCES MANAGER-TALENT MANAGEMENT

DATE: 24 FEBRUARY 2022

REF: REQUEST FOR AUTHORITY TO CONDUCT A RESEARCH – FUNGAI MUGWISI

Fungai Mugwisi, a student at Africa University, is requesting to conduct a research at Westend Hospital in Harare. Fungai mugwisi is a former employee of PSMI hospitals.

The research is titled, "Factors influencing preterm births in Zimbabwe, a case of Westend Hospital, Zimbabwe".

Upon completion of her research, Fungai Mugwisi will share the results of her study with PSMI.

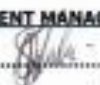
Please find attached:

1. Proof of study
2. Research proposal
3. Questionnaires

Your approval to the above request is hereby sought.

Kind regards,


MRS M TSOPOTSA-CHIEZA
HUMAN RESOURCES MANAGER – TALENT MANAGEMENT

Recommended/Not Recommended..... Dr T Mushuku (Director Hospitals)		Date..... 03/03/2022
Recommended/Not Recommended..... Mr M Dube (Director Human Resources Services)		Date..... 3/3/22
Recommended/Not Recommended..... Dr M Maulana (Executive Director Healthcare Services)		Date..... 3.3.22
Approved/Not Approved..... Dr T C Gutu (Managing Director)		Date..... 3/3/2022

HR Internal Memo – Research request Fungai Mugwisi

APPENDIX 3 Informed Consent

My name is Fungai Mugwisi a final year Bachelor of Science Nursing student from Africa University. I am carrying out a study on **Factors contributing to preterm births at Westend Hospital in Zimbabwe, Harare**. I am kindly asking you to participate in this study by responding to a questionnaire.

Purpose of the study

The purpose of the study is to determine the **Factors contributing to preterm births at Westend Hospital in Zimbabwe, Harare**. You were selected for the study because you have visited Westend hospital Maternity hospital. Your contribution is appreciated and they are other participants involved.

Procedures and duration

If you decide to participate you will be taken to a private room to be interviewed for privacy. It is expected that this will take about 20 minutes to be interviewed.

Risks and discomforts

There are no risks and discomforts to be faced during and after the study that is physically, emotionally, and socially.

Benefits and / or compensation

There are no material benefits to be given during and after the study. The research findings are intended to the government, Westend hospital and women on how to reduce issues of preterm births.

Confidentiality

The records of the study will be kept private. In any sort to report it to the public or shared confidentiality among health care workers, no including any information that will make it possible to identify you. Anonymity will be maintained by using code numbers instead of real names of the interviewers. The interview responses will be kept in a locked cupboard and only accessible to the researcher.

Voluntary participation

Participation in this study is voluntary. If the participants decide not to participate in this study, they are treated as autonomous agents and their decision will not affect their relationship with the researcher or hospital authorities. If you choose to terminate their participation, you are free to withdraw their consent and to discontinue without risking penalty or prejudicial treatment.

Offer to answer questions

Before you sign this form, please ask any questions on any aspect of this study which is unclear to you. You may take as much time as necessary to think it over.

Authorisation

If you have decided to participate in this study, please sign this form in the space provided below as an indication that you have read and understand the information provided above and have agreed to participate.

Name of Research Participant (please print)

Date

If you have any questions concerning this study or consent beyond those answered by the researcher including questions about the research, your rights as a research participant, or if you feel that you have been treated unfairly and would like to talk to someone other than the researcher, please feel free to call the Africa Research Ethics

Committee on (020) 60075 or 60026 extension 1156 or email to aurec@africau.edu

Name of Researcher -----

APPENDIX 4 Tendedzo

Zita rangu ndinonzi Fungai Mugwisi uye ndiri mugore rekupedzisira kudzidza chidzidzo chepamusoro chehukoti paAfrica University. Ndiri kuita chikamu chekutsvakurudza maererano ne zvinokonzerwa kuti vana vazvarwe vasina kusvika pachipatara che Westend. Ndinokumbirawo mugopindura mibvunzo kana mazvitendera uye makasununguka kubvuma kana kuramba.

Chinangwa chechikamu

Chinangwa chedzidzo ndechekuda kutsvakurudza kuti ndezvipi zvinokonzeresa kuzvarwa kwevana nguva isati yasvika kumadzimai pa chipatara che Westend . Izvi zvinobatsira vakuru vechipatara kutsvaga nzira dzekubatsira nadzo uye zvichavandudzira muzvidzidzo uye nemagariro.

Matanho nehurefu hwechidzidzo

Kana mabvuma kuita bvunzurudzo zvichatora maminitsi makumi maviri uye muchabvunzurudzwa muimba yakavanzika. Ndinokuvimbisai kuti hapana zvivhiringidzo kana kusagadzikana panguva yekubvunzurudzwa zvingakanganisa muviri wenyu, pfungwa uye magariro.

Muripo panguva yebvunzurudzo

Panguva yechidzidzo netsvakurudzo hapana muripo wamuchapihwa uye pakupera kwetsvakurudzo ino. Tsindidzo iripo ndeyekuti hapana zvichabuditswa zvamunenge mataura pamhepo pasina bvumo yenyu kusiya kwekugoverana humbowo nevamwe vadzidzi uye vakuru muchikamu chezveutano. Zita renyu haribuditswe kana kushambadzwa uye zvichabuda mutsvakurudzo zvichachengetwa.

Kupa mafungiro enyu muchikamu chetsvakurudzo hakumanikidzwe uye kana mukasarudza kusapinda mutsvakurudzo uye kuregedza isati yapera hazvikanganise hukama hwenyu nemutsvakiridzi kana nechipatara. Musati mapindura kana kuzvipira ndapota bvunzai chero mubvunzo zvinoenderana nechikamu chedzidzo zvisiri kunzwisika uye mutore nguva yenyu kuzvipira. Kana magutsikana nekunzwisika kunge muri muchidzidzo ndinokumbirawo runyoro

rwenyu panzvimbo yakapihwa

Zita remutsvakurudzwi

Zuva

Runyoro rwake-----

Kana muine zvimwe zvichemo kana zvamusina kugutsikana maererano nechikamu

chino munotendererwa kubata hofisi yeveAfrica University Research Ethics Committee

panhare dzinoti (020) 60075 kana 60026 (1156) kana kuvanyorera pa

aurec@africau.edu

Zita remutsvakurudzi-----

Appendix 5 Questionnaire for women

SECTION A: DEMOGRAPHIC DATA

In this section, I will ask questions about your details. Feel to answer.

1. How old are you?

- a. Below 23 years []
- b. 23 -25 years []
- c. 25-30 years []
- d. 30-35 year []

2. Marital status?

- a. Single []
- b. Married []
- c. Divorced []
- d. Widowed []

3. Level of education

- a. Primary level []
- b. Secondary level []
- c. Tertiary level []
- d. Others, specify.....

4. Occupation?

- a. Housewife []
- b. Employed []
- c. Self-employed []

5. How many children do you have?

- a) 1 []
- b) 2 []
- c) 3 []
- d) 4 []
- e) More than 5 []

6. Religion

- a. Christianity []
- b. Moslem []
- c. Traditional []
- d. Other, specify.....

Section B Factors contributing to Preterm birth

Please indicate the extent to which you agree to the following suggestions. Please mark with an ‘X’ on your choice of response. Use the following scale as your guide.

Strongly Disagree	Disagree	Neither agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

7. The following factors contribute to preterm births

1	Lack of proper and standard prenatal care					
2	Race (e.g. black, white, coloured etc.)					
3	Maternal smoking.					
4	Multiple Pregnancies					
5	Maternal stress					
6	Cervical incompetence					
7	Maternal /Fetal health risk/ Diseases (asthma, Diabetes)					
8	Previous preterm birth					
9	Witchcraft					
10	Depression					
11	Bad lucky					
12	Premature					
13	Spontaneous Pre-term labour					
14	Low Maternal body mass index					
15	Not taking traditional medicines					

8. The following are effects of Preterm births

1	Strain on the family					
2	Maintaining Maternal body mass index					
3	Necrotising and Neonatal sepsis					
4	Motor Sensory Impairment					
5	Frustration					
6	Respiratory Distress syndrome					
7	Delays in cognitive development					

9. How can preterm births be reduced?

1	Proper and standard prenatal care					
2	Counselling for distressed mothers					
3	Reducing maternal smoking.					

