VIEWS ON PHYSIOLOGICAL AND PSYCHOLOGICAL CHANGES AND THEIR INFLUENCE ON MATERNITY WEAR SELECTION AMONG WOMEN ATTENDING ANTE-NATAL CLINIC AT KENYATTA NATIONAL HOSPITAL

BARASA NELIMA (BSC.CTID)
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FEBRUARY 2016
DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature_____________________ Date __________________

Barasa Nelima H60/21277/2012

This thesis has been submitted for review with our approval as the University supervisors

Signature _____________________ Date _____________________

Rose B. Otieno (PhD)
Department of Fashion Design and Marketing
Kenyatta University

Signature _____________________ Date _____________________

Lydia N. Kinuthia(PhD)
Department of Applied Community and Development Studies
Egerton University
DEDICATION STATEMENT

This thesis is dedicated to the Almighty God, my beloved husband, and my friend Ms. Marete.
ACKNOWLEDGEMENT

I first of all give thanks to the Almighty God who gave me the opportunity, knowledge and guidance to undertake this research. I sincerely express my gratitude and thanks to my first supervisor, Dr. Rose Otieno who patiently saw me through the challenges of this study. Her constructive critique, corrections and timely suggestions improved the quality of this research.

To my second supervisor, Dr. Lydia N. Kinuthia, I register my sincere gratitude and thanks for the interest, commitment and assistance she demonstrated toward the completion of the study. Her corrections and many useful suggestions added to the quality of the work.

My sincere appreciation goes to my friend Ms. Marete for her support toward the accomplishment of this work.

I owe special thanks to my family especially my husband, for his love, support and encouragement. May the Lord reward him abundantly.

Finally I wish to register my sincere gratitude to my employer, Buru Buru Institute of Fine Arts, for granting me an opportunity to undertake my Master’s Degree.
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<th>Abbreviation</th>
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<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>ERC</td>
<td>Ethics Review Committee</td>
</tr>
<tr>
<td>KNH</td>
<td>Kenyatta National Hospital</td>
</tr>
<tr>
<td>NACOSTI</td>
<td>National Commission of Science, Technology and Innovation</td>
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<tr>
<td>UON</td>
<td>University of Nairobi</td>
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OPERATIONAL DEFINITION OF TERMS

**Anxiety** - worries experienced by young expectant women as a result of changes in their physical body during pregnancy.

**Body Measurement** - body size in inches. The body measurement was measured in terms of change in body size in inches around the bust, hips and abdomen.

**Body Posture** - this is the position or bearing of an expectant woman’s body during pregnancy. The body posture was measured in terms of it being upright, leaning forward or backwards.

**Body Silhouette** - general outline or shape of the body. This was one of the values used to measure physiological changes. The body silhouette was measured in terms of the size, position and outline of the abdomen and bust.

**Body Weight** - the heaviness of an expectant woman is when weighed. This was measured in Kilograms (Kg).

**Clothes** - garments made out of fabric. They included dresses, tops, and trousers, among others.

**Comfort** - means the ease or relief provided to expectant women by maternity wear.

**Depression** - hopelessness experienced by young expectant women as a result of changes in the physical body during pregnancy. This comes as a result of deep negative thoughts that the young expectant women develop as a result of change in their physical body.

**Design Features** - proposed element used on maternity wear to accommodate and maintain the body shape and size during pregnancy. They included garment size, design features, fabric used, colour and texture. They were measured in terms of them being suitable or not in relation to the body shape and size.
Fabric Used - textile materials utilized in making maternity garments. Was measured in terms of their suitability or not. This was valued in terms of it being patterned or not.

Fear - panic experienced by young expectant women as a result of changes in their physical body during pregnancy.

Figure Type - variation in the body shape and size of expectant women. It was measured in terms of vertical and girth measurements of the body in feet and inches.

Fit - how a garment fits in relation to body size and shape.

Garment Size - dimensions of a piece of clothing. Was measured basing it on standard sizes found on sizing charts.

Joyful - the happiness experienced by young expectant women as a result of changes in their physical body during pregnancy.

Maternity Wear - loose, free and easy to wear clothes specifically worn by pregnant women. They offer utmost comfort and a fit that makes pregnancy a wonderful experience (Sujata, 2010). They are categorized in relation to their functions (e.g. official, casual and evening maternity wear). These included dresses, tops, trousers, foot wear, sweater, skirts, jackets, bras among others.

Maternity Wear Selection - respondent’s regular consumption experience and power to decide the suitable clothes that are specifically worn by pregnant women. This was a dependent variable that was measured in terms of its suitability or not. This was in relation to variables like fabric used, design features, colour, texture and figure type.

Physiological Changes - changes to the physical body as a result of the adaptations to pregnancy. This was an independent variable that was measured in terms of the body silhouette, body measurement, and body posture and weight changes.
Psychological Changes - the behavior of the mind as a result of the physical transformation during pregnancy. It was an independent variable that was measured using the following variables; anxiety, joy, stress, fear, and depression.

Selection - the decision and power for a pregnant woman to choose maternity wear that is comfortable, fitting and fashionable. This was measured in terms of design features, fabric, colour, texture, figure type and size.

Sizing - a designated system that indicates the body size of a person that a garment is intended to fit.

Stress - excessive anxiety experienced by young expectant women as a result of changes in their physical body during pregnancy.

Texture - the roughness or smoothness of the surface of a fabric that can be felt by touching or seeing. This can be coarse, ribbed or twilled texture.
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The pregnancy period in human beings is divided into three trimesters. During this period expectant women experience psychological, behavioral and biological changes that make them more sensitive about their bodies. This is due to dramatic body changes, which to some extent trigger negative thoughts and feelings in some women. With the wide variety of body shapes and sizes, physiological changes occur differently for every pregnant woman. These variations lead to problems of comfort, fit and sizing of maternity wear especially if not well selected. Despite an increasing interest in fashion and clothing, researchers in Kenya have conducted limited study about dressing and adorning the pregnant body. This leaves pregnant women with minimal sources of reference thus relying on trial and error or copying what other pregnant women wear. Therefore there is need for a study that focuses on the views on physiological and psychological changes and their influence on maternity wear selection among expectant women. The objectives of the study were to: identify the views of young expectant women aged 16-35 years regarding their physical body changes during pregnancy, establish the views of these young expectant women regarding their psychological changes during pregnancy, determine the physiological and psychological changes that influence maternity wear selection, discuss the social economic factors that influence maternity wear selection among these young expectant women and determine dress features that influence maternity wear selection among these young expectant women. The researcher adopted a descriptive research design to collect data, analyze and present. Pre-testing was done on a sample of 12 respondents attending ante-natal clinics at KNH to avoid ambiguity of the instruments. Convenience sampling was used to select 96 young expectant women. Interview schedules and questionnaires with open-ended and closed-ended items were used to collect data. Frequencies and percentages were used to summarize variables relating to demographic characteristics, young expectant women’s views on physiological and psychological changes and maternity wear selection. Data was grouped and summarized in tables and graphs. Open ended items were analyzed in relation to the responses given by the respondents while the quantitative aspects were analyzed using Microsoft Excel. The findings indicated that young expectant women experience dramatic changes in their body silhouette, measurement, posture and weight which they viewed either positively or negatively. It was also revealed that the young expectant women experienced psychological changes like anxiety, joy, stress, fear and depression with the outstanding one being anxiety as a result of the changes in their physical body. Most of the respondents were not happy with the psychological changes, which made them select maternity wear that was either ill-fitting or oversized. Furthermore, physiological and psychological changes did not influence the young expectant women when selecting their maternity wear. In addition, socio-economic factors like availability of money, cost of item, age and marital status highly influenced the respondents when selecting their maternity wear. Finally, all the young expectant women were influenced by colour when selecting their maternity wear. It was therefore concluded that young expectant women experience different views on physiological and psychological changes that influenced their maternity wear selection. Disparity in the way the young expectant women view these changes creates a need for each one of them to understand how to select maternity wear that is suitable in terms of sizing, fit and comfort. Ante-natal clinics in Kenya should consider including lessons on views on physiological and psychological changes and their influence on maternity wear selection among expectant women in their program.
CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE STUDY

According to obstetric medicine, pregnancy in human beings begins when the developing embryo becomes implanted in the endometrial lining of a woman’s uterus. Pregnancy is broken into three trimesters, which describe the body changes that take place over time (Stone & Eddleman, 2003). Ardahan and Bayik (2014) supported Stone and Eddleman (2003) by outlining that these body changes occur differently as the pregnancy progresses throughout the three trimesters. Furthermore, Longhurst (2005) described pregnancy as a time of physiological, psychological, and biological changes in women's lives. This is as a result of dramatic body changes experienced by pregnant women, which to some extent trigger positive or negative thoughts and feelings in them (Sohn, 2009).

While Sohn (2009) highlighted that expectant women experience dramatic body changes, Stone and Eddleman (2003) reported that these dramatic changes occur differently among the expectant women due to variation in body shape and size. For instance, Mehta, Siega-Riz and Herring (2003) explained that expectant women with low Body Mass Index (BMI) gain more weight than those who have a high BMI. In addition, the position of the fetus in the uterus leads to variation in abdominal shapes among women (Faust & Carrier, 2014). Furthermore, expectant women who have had subsequent pregnancies may have an abdomen that is low. For instance, a pregnancy becomes obvious at week 20 with the first pregnancy but by week 14 in the following pregnancies (Stone & Eddleman, 2003). Therefore Sohn (2013) highlighted that variation in body shape and size by young expectant women, leads to disparity in selection of maternity wear. Bran (2009) expressed the need for
young expectant women to understand their body shape and size in order to select maternity wear that will not lead to problems of comfort, fit and sizing.

According to Aishatu (2011) pregnancy is a process of starting humanity and a natural gift. Traditionally, expectant women had positive feelings towards it to an extent of going about their duties and took care of themselves as much as they could. Unfortunately, pregnancy is considered as a moment of illness by many modern women (Guse, 2002).Teenagers and young mothers hide their pregnancy due to diffidence and anxiety (Bell, 2013). The writer further explained that expectant teenagers dress in oversized and ill-fitting garments to avoid being noticed.

According to Musial (2001), the aim of dressing a pregnant body is to make it comfortable and fashionable. Sohn (2009) and Barari (2011) elucidate that the current development in maternity wear is that it is fashionable compared to maternity wear that was used in the 1980s and 1990s. This has been supported by Xitij Joshi of Uzazi maternity wear in India, who stated that the market for maternity wear has grown from non-existence due to rapid change in fashion. This reflects the expectant women’s need to feel better about themselves and their desire to have maternity wear that is of good fit, size and comfortable (Noopur, 2012). As a result expectant women should remember that maternity wear should be such that once you wear them you need not fuss over them.

Sujata (2010) defines maternity wear as loose, free and easy to wear clothes specifically worn by pregnant women during pregnancy. Opara (2000) states that these garments are made to accommodate the growing fetus. Maternity wear are made with lots of ease that accommodates the changes that take place during
pregnancy thus providing comfort and good fit (Noopur, 2012). Sohn (2013) highlighted that maternity wear that made expectant women look bigger during pregnancy have long been discarded. Development in fashion trends has led to designing and production of maternity wear that is trendy and comfortable making expectant women feel gorgeous during pregnancy (Guy, Banim & Green, 2001).

Kambiz (2011) stated that clothing of the physical self highly affects maternity wear selection of expectant women as they want to improve their body image. Longhurst (2005) reveals that clothing is used by women in America as a means of constructing a range of complex and contradictory gendered subjectivities in public spaces. The same applies to expectant women who use maternity wear to attain looks and subjectivities that satisfy their desire to be comfortable and stylish during pregnancy (Noopur, 2012).

Maternity wear therefore is used to accommodate the rapid physiological and psychological changes as well as satisfy the expectant women’s subjectivities. This as a result creates a need for fashion designers, marketers in maternity wear, doctors, and counsellors to understand expectant women’s views on physiological and psychological changes and their influence on maternity wear selection. These stakeholders will be able to advice expectant women on how to select maternity wear that will protect them from experiencing problems of poor comfort, fit and sizing. This study therefore seeks to determine expectant women’s views on physiological and psychological changes and their influence on maternity wear selection.
1.2 PROBLEM STATEMENT

According to Longhurst (2005) academics have done very little research about dressing and adorning the pregnant body, despite an increasing interest in fashion and clothing. The writer further states that literature focusing on femininity and women fail to focus on adorning pregnant bodies or maternity wear. It appears that people have assumed pregnant women to be “outside” of fashion. It is apparent that in Kenya there is a gap in literature on dressing the pregnant body. This leaves young pregnant women with no source of reference point thus relying on trial and error or copying what other pregnant women wear. The researcher observed the tendency of young expectant women trying to follow trends that are in fashion with their peers that are not suitable for pregnancy. Bell (2013), states that expectant teenagers dress in a manner to hide pregnancy by using ill-fitting or oversized garments leading to problems in comfort and fit. This is due to lack of understanding on how their views on physiological and psychological changes influence maternity wear selection.

This therefore created a need for an imperative study that would focus on views of young expectant women on physiological and psychological changes and their influence on maternity wear selection. This will highlight the views of expectant women on physiological and psychological changes and relate them to clothing, on which no research has been done in Kenya. As a result, expectant women, medical practitioners, marketers in maternity wear, researchers, fashion designers and counsellors will have an insight on the young expectant women’s views on physiological and psychological changes and their influence on maternity wear selection. In return this will help reduce problems of comfort and fit experienced by pregnant women.
1.3 PURPOSE OF THE STUDY

The purpose of this study was to determine the views of young expectant women on physiological and psychological changes and their influence on maternity wear selection.

1.4 OBJECTIVES OF THE STUDY

The study was guided by the following objectives:

i. To identify views of young expectant women aged 16-35 years regarding their physical body changes during pregnancy.

ii. To establish views of these young expectant women regarding their psychological changes during pregnancy.

iii. To determine the physiological and psychological changes that influence maternity wear selection.

iv. To discuss the social economic factors that influence maternity wear selection among these young expectant women.

v. To determine dress features that influence maternity wear selection among these young expectant women.

1.5 RESEARCH QUESTIONS

The following research questions were answered:

i. Did the young expectant women possess both positive and negative views regarding physical body changes during pregnancy and what were the reasons for them?

ii. What were the issues that affected the young expectant women regarding the way they perceived pregnancy?
iii. What aspects of maternity wear selection were as a result of changes in body and feelings?

iv. How were the young expectant women affected by financial and societal issues in selection of their maternity wear?

v. What dress features did the young expectant women prefer or not prefer on their maternity wear and what were the reasons for that?

1.6 SIGNIFICANCE OF THE STUDY

Dressing and adorning the pregnant body has not had a lot of research attention in Africa especially in Kenya. Some research on maternity wear in Africa has so far been done in Nigeria by Aishatu (2011), Ajiboye and Abimbole (2012). This study would therefore help in filling the existing gap in literature regarding dressing and adorning pregnant women thereby creating a better understanding in this field.

The findings of the study would contribute to the advancement of knowledge in this field of study. Medical practitioners, fashion designers, marketers in maternity wear and counsellors would have an understanding about views of young expectant women on physiological and psychological changes and their influence on maternity wear selection. For instance medical practitioners and counsellors would be able to offer advice on selecting maternity wear in relation to body changes during pregnancy. Fashion designers and marketers in maternity wear would be able to design advice and sell maternity wear in relation to physiological and psychological changes during pregnancy.

This will be achieved through the seminars and training organized by fashion design organizations and institutions. In addition the researcher will write papers in this
area of study and issue them to the fashion designers and marketers of maternity wear. This would help reduce problems of comfort, fit and sizing experienced by expectant women during pregnancy.

This study is exploratory and would act as a baseline for other researchers to develop their studies. The research would also help young expectant women understand the physiological and psychological changes that influenced maternity wear selection.

1.7 SCOPE OF THE STUDY

This study focused on: young expectant women’s views on physiological and psychological changes, physiological and psychological changes that influenced maternity wear selection, socio-economic factors that influenced maternity wear selection among young expectant women and dress features that influenced maternity wear selection.

1.8 LIMITATIONS

The study was limited to young expectant women aged 16-35 years according to objective one and attending the ante-natal clinic at Kenyatta National Hospital, Nairobi County. Therefore the finding cannot be generalized.

1.9 ASSUMPTIONS

It was assumed that young expectant women would be willing to respond to the questions asked and provide valid and reliable information about their maternity wear selection.
1.10 CONCEPTUAL FRAMEWORK

Aishatu (2011) and Sohn (2009) highlight that pregnancy is a physical experience that leads to dramatic physiological and psychological changes. Sohn (2009) examined the pattern adaptation and acceptability of maternity clothing in relation to body changes during pregnancy. Aishatu (2011) highlighted the factors to be considered in the making and selection of maternity clothing. The researcher categorized the changes into physiological and psychological and introduced the aspect of their influence on maternity wear selection. The researcher also introduced socio-economic factors as an intervening variable.

Adapting from the work of these two authors the independent variable in this study referred to views or thoughts on physical body changes and views or feelings on psychological changes. The dependent variable referred to maternity wear selection. The former referred to body silhouette, body measurement, posture changes and weight changes. The latter referred to joy, anxiety, stress, depression and fear. The socio-economic factors were intervening variables which included marital status, level of income, level of education, age, religious norms and beliefs and one’s beliefs and values. The independent and dependent variables in this study interplayed with one another to influence the way young expectant women selected their maternity wear as shown in Figure 1. For example, an expectant woman who was depressed, stressed, anxious, joyful or fearful with the change in her body silhouette, showed an influence of these psychological changes in her maternity wear selection in terms of colour, texture, garment size, fabric used and design features. Young expectant women’s socio-economic position also influenced their maternity wear selection (Bell, 2013).
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<td>Views or thoughts on Physical Body Changes</td>
<td>Maternity wear selection</td>
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<td>Body Silhouette</td>
<td>Fabric used</td>
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<tr>
<td>Body Measurement</td>
<td>Design features</td>
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<td>Posture Changes</td>
<td>Colour</td>
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<td>Weight Changes</td>
<td>Texture</td>
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| Views or feelings on Psychological Changes | |
| Joy | |
| Anxiety | |
| Stress | |
| Depression | |

| Intervening Variable | |
| Socio-economic Factors | |
| Marital status | |
| Availability of money | |
| Cost of item | |
| Education level | |
| Age | |
| Religious beliefs or norms | |
| Ones values and beliefs | |

Figure 1.1: The Interaction of Expectant Women’s Views on Physiological, Psychological and Socio-economic Changes and Maternity Wear Selection
Adapted from Aishatu (2011) and Sohn (2009)
CHAPTER TWO: LITERATURE REVIEW

To provide a theoretical basis to this study topics reviewed were, physiological changes during pregnancy, psychological changes during pregnancy, socio-economic factors that influence maternity wear selection, maternity wear and maternity wear selection.

2.1 PHYSIOLOGICAL CHANGES DURING PREGNANCY

Expectant women experience an apparent alteration in their physical body appearance (Komarkova & Glombikova, 2013). Sohn (2009) earlier reported that alterations in the women’s body were as a result of dramatic physical changes. Ardahan and Bayik (2014) outlined that these changes occur differently as the pregnancy progresses through the three trimesters of pregnancy. This is as a result of disparity in the body shape and size that causes a variation in the occurrence of the body changes during pregnancy (Stone & Eddleman, 2003).

For instance, Mehta et al. (2003) explained that expectant women with low Body Mass Index (BMI) gain more weight than those who have a high BMI. In addition, the position of the fetus in the uterus leads to variation in abdominal shapes from person to person (Faust & Carrier, 2014). Furthermore, expectant women who have had subsequent pregnancies may have an abdomen that is low. For instance, pregnancy becomes obvious at week 20 with the first pregnancy but by week 14 in the following pregnancies (Stone & Eddleman, 2003). This would therefore lead to a disparity in the alteration of the body size and shape as highlighted by Noopur (2012).
According to Faust and Carrier (2014), more physical changes are perceived in the upper part of the female body during trimester one. For example, Alder (2007) explained that while breasts begin to increase, other body proportions remain almost normal during the first trimester that is from week one to twelve weeks. As a result Martell and Mitchel in Faust and Carrier (2014) stated that some women become conscious of any changes in their body and may focus on themselves. On the other hand, during the second trimester the waistline gradually expands and rises and in the last trimester there is rapid abdominal enlargement until birth (Duncombe, Wertheim, Skouteris, Paxton & Kelly, 2008). Kafeel (2011) described these changes to be very essential in the maturity of the fetus. Furthermore, Stone and Eddleman (2003) stated that these changes occur differently as a result of disparity in body shapes and size. These physical changes are the most concrete changes during pregnancy, though many young women are not ready to face them (Zwelling, 2000).

According to Alder (2007) breast enlargement is one of the first physical changes that may begin as early as the fifth week, and terminates about the fifth month of pregnancy. This leads to an average increase in circumference of two to three inches in this area. Because normal clothing ease for the bust is about four inches, wardrobe change for this enlargement is usually unnecessary this early in pregnancy. The next area of the body that enlarges is the waistline, which gradually varies with the individual and is affected by the number of previous pregnancies. A woman in her first pregnancy may not need maternity clothing until the fifth or sixth month. This noticeably changes with subsequent pregnancies, however, and maternity clothes may be needed earlier.
According to Noopur (2012) the substantive change of the body shape, weight, size and bearing during pregnancy creates a need for clothes that can accommodate these changes. Kormarkova and Musilova (2010) report that most expectant women addresses this need by use of plus size or ill-fitting clothes that makes them look shabby and uncomfortable. Sohn, (2013) highlights that variation in anthropometric body measurement by young expectant women leads to disparity in selection of maternity wear. The author continued to explain that this would lead to a variation in sizing, design features, colour, texture and fabric used in making maternity wear. Wrong size of maternity wear affects the fit of the clothing thus interfering with the psychological well being of an expectant woman (Gould, 2003). Maternity wear made from suitable fabric makes expectant women feel comfortable and cool (Sohn, 2013). Sohn, (2009) categorized these physical changes as; changes in the body silhouette, measurement, posture and weight.

2.1.1 Body Silhouette Changes

The body silhouette is one of the dramatic physical changes experienced by expectant women. According to Mehta et al. (2003) as the pregnancy progresses, the body silhouette presents itself differently throughout the three trimesters. In addition, due to disparity in the body shape and size, the body silhouette presents itself differently among the expectant women (Stone & Eddleman, 2003). This leads to change in body size and shape thus changing the body silhouette of young expectant women as the pregnancy progresses (Myughe & Ranth, 2012). According to Sohn (2013) the change in body silhouette as the pregnancy progresses affects the sizing, fit and comfort of maternity wear.
A study conducted by Aishatu (2011) revealed that the most dramatic physical changes of expectant women’s body silhouette occur during the last two trimesters of pregnancy. Komarkova and Musilova (2010) state that this is the time when pregnant women need maternity garments to accommodate these changes.

2.1.2 Body Measurement Changes

Noopur (2012) stated that expectant women experience an increase in body measurement whereby certain body parts grow much more in proportion than others. Sohn (2009) explained that the prominent growth is seen on the waist, bust, hip, biceps, and thighs among others. Despite variation in anthropometric requirements of the body as reported by Sohn (2013), Sohn and Bye (2011) considered the body measurement changes as evident in all expectant women in the second trimester onwards. According to Komarkova and Glombikova (2013) variation in abdominal extension during pregnancy also causes disparity in body measurement changes among the expectant women.

These changes in body measurement mount pressure on young expectant women as they struggle to maintain their body size (Musial, 2001). Young expectant women try to create subjectivities that would make them satisfied and feel acceptable in the society (Longhurst, 2005).

2.1.3 Posture Changes

Kaaja (2004) states that expectant women experience abdominal growth that cause a transitory bend of the back. This experience increases during the last six months of pregnancy (Faust & Carrier, 2014). This leads to a backward bend of an expectant woman’s body resulting to an increase in length of the front part of the body
(Myunghe & Ranth, 2012). Change in size and posture causes the front of a dress to rise as pregnancy progresses. Sohn (2009) reveals that the change in the body posture affects the fit of clothing thus requires greater attention when selecting maternity wear.

2.1.4 Weight Changes
Noopur (2012) describes pregnancy as a stage where the anthropometric requirements of the human form are very different due to a substantive weight gain that is not uniformly distributed. Boscaglia, Skouteris and Wertheim (2003) explain that expectant women experience a significant variation in the weight gained in their body that result in a substantial alteration in body image. An expectant woman gains roughly 13 kilograms in weight during pregnancy (Myunghe and Ranth, 2012). Many women become self-conscious about the weight gain, resulting in low self-esteem (Mehta & Maria, 2011). Sohn (2009) states that the physical changes during pregnancy require special consideration for comfort, fit and sizing when selecting maternity wear. Sohn (2013) highlights the need to design, make and select maternity wear that will hide the inconsistent change in physical body thus avoiding cases of negative feelings experienced by young expectant women.

2.2 PSYCHOLOGICAL CHANGES DURING PREGNANCY
Pregnancy is an experience full of growth, change, enrichment and challenge (Eden, 2013). The author further explains that this is a time when expectant women deal with fears and prospects about the change in their body. Ardahan and Bayik (2014) highlighted that alterations in the size and shape of the expectant women’s bodies elicit different feelings and thoughts of unreality of the emerging issues. Zwelling (2000) states that many young women are depressed, anxious and stressed as a result
of the change in the physical body. On the other hand some women regard pregnancy as a joyful and exciting experience (Musial, 2001).

Psychological changes like joy, fear, anxiety, stress and excitement occur during the first trimester (Alder, 2007). At the start of the second trimester the emotions of the first trimester become stable and the exciting changes of this trimester begin (Eden, 2013). Gould (2003) explains that the feelings might be less intense but equally troubling. Many women begin to feel self-conscious about the weight they are putting on, and these feelings can lead to low self-esteem (Mehta & Maria, 2011). Some women wonder whether they are still considered beautiful by their partners thus becoming more dependent on them (Eden, 2013).

These psychological changes influence the way expectant women select their maternity wear. Longhurst (2005) describes it to be a time when expectant women select maternity wear with an aim of creating different subjectivities. For instance, the feelings of expectant women on the physical body change during pregnancy determine their presentation through the clothes they select (Eden, 2013). Guy et al. (2001) state that psychological changes during pregnancy makes expectant women select maternity wear that is either suitable or not. Opara (2000) suggests that the maternity wear selected during this time should not only satisfy the young expectant women’s subjectivities but also provides comfort, fit and style.

2.3 SOCIO-ECONOMIC FACTORS INFLUENCING MATERNITY WEAR SELECTION

Socio-economic status in a given family’s setup is based on income, educational level, occupation, and social status in the community (Skouteris, Carr, Wertheim,
Paxton and Duncombe, 2005). The researcher has observed that families with high socio-economic status often have access to a wide range of resources to promote and support their family member’s development. They are able to provide their siblings with the needs and wants that are necessary in their lifetime. Also, they have easy access to information regarding their children's health, as well as social, emotional, and cognitive development. In addition, families with high socio-economic status often seek out information to help them better prepare their siblings for a better life.

Evidences and researches in Africa have constantly shown that crises during pregnancy are as a result of multiple socio-cultural and economic factors (Ajiboye & Abimbole, 2012, and Bell, 2013). The socio-economic aspects in young pregnant women depend on their particular cultural, family and community setting (Skouteris et al., 2005). For example in cultures where maternity is a core aspect of a woman’s identity, pregnancy can signify status. On the other hand, young pregnant unmarried women might be considered an embarrassment for the clan and are either abandoned or chased from home thus left with no guaranteed support.

As the need to understand how body and mind changes influences maternity wear selection increases, it is evident that socio-economic factors will at the same time influence the young expectant women’s maternity wear selection (Musial, 2001). Ross (2005) therefore highlights that, when selecting clothes, it is important that people consider socio-economic factors in addition to other factors that surround them.
2.4 HISTORY OF MATERNITY WEAR

Sujata (2013) defines maternity wear as loose, free and easy to wear clothes specifically worn by pregnant women during pregnancy. The author continues to state that maternity wear offers a paramount comfort and a fit that makes pregnancy a wonderful experience. During 16th century England, pregnant women were characterized by waist-less dresses (Faust & Carrier, 2014). During this period dresses did not follow the pregnant woman’s body silhouette until the Middle Ages. Pregnant women wore the Baroque Adrienne gown that was waist-less with many folds. Aprons were also worn to close the opening left by jackets and during the 19th century maternity clothing was customized to conceal pregnancy.

For many decades during the 20th century, maternity wear was considered a “fashion backwater,” pinafores were the most common style and were often sold through nursery shops. Maternity clothing has not generally been considered a potentially profitable area though the clothing needs of expectant women are greater and more diverse. This is due to a belief that many women would not purchase clothes intended for only a few months of wearing. However, with wide media interest in celebrity pregnancies beginning in the late 1990’s, the maternity wear market grew 10% between 1998 and 2003. A Kate, Marks and Spencer in Stone and Eddleman (2003) study asserted that the demand for maternity wear was growing because “nowadays women are working during pregnancy, and traveling, and going to the gym, so their clothing needs are greater and more diverse (Longhurst, 2005).

2.5 IDEAL MATERNITY WEAR

Noopur (2012) states that ideal maternity wear should be properly fitted in both the horizontal and vertical dimensions of the body thus providing appropriate fit, sizing
and comfort. Aishatu (2011), also highlights the need for maternity wear to reflect the expected physical changes and the body shape and size. Changes in the body shape and size requires clothing with expandable features (Noopur, 2012). Features which can grow with the growth of the body and fold back when not required (Barari, 2011). Good fitting bras and abdominal support is frequently recommended. Lightweight clothing of sufficient warmth to maintain the proper body temperature and with absorptive qualities to take care of perspiration is desirable.

2.6 MATERNITY WEAR SELECTION

Maternity wear has grown massively in recent years creating an extensive choice of trendy maternity wear from which expectant women can select from (Faust & Carrier, 2014). Barari, 2011 explains that maternity clothes have nowadays been transformed into a little fashion industry. Expectant women should bear in mind that maternity wear should be such that once you wear them you need not fuss over them. Opara, 2000 states that body changes during pregnancy, creates a need for the expectant women to select maternity wear that accommodates these changes. This is supported by Barari, 2011 who explains that pregnant women should wear maternity wear that is comfortable.

According to Faust and Carrier (2014), the expected physical changes are of foremost importance when selecting maternity wear. The difference in the body measurement during pregnancy requires expectant women to be careful in selection of their maternity wear (Komarkova & Musilova, 2011). For example, clothing purchased during the second trimester may become tight and uncomfortable during the third trimester (Sohn, 2009).
Silhouette change requires non-restricting clothing with expandable features (Faust and Carrier, 2014). Uplift support for the breast is essential and abdominal support is frequently recommended. Lightweight clothing of sufficient warmth to maintain the proper body temperature and with absorptive qualities to take care of perspiration is desirable. Faust and Carrier (2014) went further to explain that the wardrobe that pregnant woman need will determine the actual clothing that is needed.

Clothing needs may not include career clothes if employment is terminated in the early stages of pregnancy, but suitable clothing must be purchased if the pregnant women plan to continue working during the pregnancy (Noopur, 2012). Longhurst (2005) reported that pregnant women become tired of wearing maternity clothes especially if worn in the first trimester. Expectant mothers need time to analyze their regular wardrobe and decide which garments can be adapted to maternity wear.

Opportunity to explore the market and make definite plans for actual wardrobe need is essential. Based on consumer opinions, maternity outerwear is not needed until about the fourth or fifth lunar months. The exact time will vary with individual women. The slight enlargement of the abdomen that occurs before the fifth lunar month can usually be accommodated by wearing regular clothing that is moderately appropriate to the body. Also, cost is frequently a decisive factor in selecting a maternity wardrobe. How much one should spend on short-term clothing is a debatable issue, which will be influenced by the foregoing factors as well as by how much money is available for maternity purchases. On the other hand, it is unwise to skip or attempt to get by with a make shift wardrobe because of the adverse effect this may have on the health or morale of the expectant mother. Analyzing her regular wardrobe, to determine which garments may be used or adapted for
maternity wear will help to reduce the cost, as part of careful planning and intelligent shopping.

Aishatu (2011) advised that maternity wear selection should be guided by the basic design principles that apply to the selection of their wardrobe. These are:

(i) **Fabric**

Sujata (2010) states that maternity wear should be made of natural fabric that is stretchy and light in weight. Aishatu (2011) states that patterned fabrics help conceal the silhouette of a pregnant body. The writer continues to explain that plaids, checks, and other prints help conceal the silhouette of pregnant women and add interest to the maternity clothes if they are well used. Ideally, fabrics for maternity wear should be neither too stiff nor too soft, neither too heavy nor too flimsy, but have sufficient body to hold their shape. Weber (1990) and stated that cotton materials help create balance in body heat transmission thus making a pregnant woman to feel comfortable. More so, since pregnant women feel hot during pregnancy, cotton materials are the best for the construction of maternity garments that will make pregnant women comfortable during hot climate (Faust and Carrier, 2014). Scientists have also found ways of improving cotton. It can be set so that it will neither shrink nor stretch, it can also be given a glazed or shiny surface so that it will not easily become dirty.

(ii) **Design features**

Design details like pleats and gathers on maternity wear create different effects on the body (Aishatu, 2011). If not well selected they can exaggerate the figure in terms of body size and shape. These features also give proper fit of the maternity wear as
they try to accommodate the physical changes that occur during pregnancy (Sohn, 2009).

(iii) **Sizing**

Due to the body changes that take place during pregnancy, expectant women need maternity wear that is of proper size, fit and comfort (Komarkova and Musilova, 2010). In a study undertaken by Sohn (2013), she found that pregnant women first begin to show significant changes in body shape and size beginning in their fifth month of pregnancy. The difficulties experienced during pregnancies can be avoided by wearing maternity wear that is of the required size (Sujata, 2010).

(iv) **Colour**

Colours play a big role of setting the mood of the day and sculpturing the shape of an expectant woman’s body (Sujata, 2010). Since the expectant woman is no longer subjected to colour restrictions, she has free rein in the selection of colours for her wardrobe. However, she should not deviate radically from her normal colour preferences. Personal colouring, figure type and size of wardrobe should be the determining factors. Some women prefer more conservative dress colours as a background for colourful accessories. The size of the maternity wardrobe will limit the variety of colour that may be used. It should also be remembered that figure size is affected by colour. Light colour tends to make one seem larger while dark colours will have a slimming effect on the eye (Weiss, 2013).

(v) **Texture**

Shimmering textures reflect light thereby making the figure appear larger and revealing its shape (Sujata, 2010). Dull and bulky textures create shadows thus
making the expectant woman’s body appear big (Weiss, 2013). Aishatu (2011) highlights that these textures are usually considered undesirable for maternity wear, because they too increase the size of the wearer.

2.7 INFLUENCE OF BODY AND MIND CHANGES DURING PREGNANCY ON MATERNITY WEAR SELECTION

Pregnant women encounter dramatic body and mind changes during pregnancy (Richardson, 1990). With a wide variety of body shapes and sizes, physical changes occur differently to every pregnant woman. These variations lead to problems of comfort, fit and sizing of maternity wear (Sohn, 2009). Psychological changes may occur as a reaction to these physiological changes and to some extent as a reaction to whether the pregnancy was planned or unplanned.

Due to dramatic changes during the last two trimesters, pregnancy cannot be hidden and clothing must accommodate the changes. Maternity wear purchased during the second trimester may become tight and uncomfortable during the third trimester. This brings in the need for maternity wear, but unfortunately most expectant women are unsure of how the maternity wear should fit so that it is comfortable and stylish during their whole pregnancy (Noopur 2012).

2.8 SUMMARY OF REVIEWED LITERATURE

Expectant women experience dramatic changes in their physical body during pregnancy. Alterations in the body silhouette, measurement, posture and weight elicit positive and negative feelings among the expectant women. Many young women are anxious, fearful, stressed and depressed due to changes in their physical body. These influences the way young expectant women select their maternity wear.
The expected physiological and psychological changes are of foremost importance when selecting maternity wear. The difference in the body shape and size requires expectant women to be careful in selection of their maternity wear. There is need for appropriate clothing during pregnancy which will necessitate the psychological well-being of the expectant women and reduce problems of sizing, fit and comfort. Similarly, dress features like colour, texture, fabric used, garment size and design features also play a key role in maternity wear selection.

Young expectant women’s socio-economic position also influences maternity wear selection. For example, how much one should spend on short-term clothing is a debatable issue, which will be influenced by the foregoing factors as well as by how much money is available for maternity purchases and its cost.

Sohn (2009) examined the pattern adaptation and acceptability of maternity clothing in relation to body changes during pregnancy. Aishatu (2011) highlighted the factors to be considered in the making and selection of maternity clothing. In filling the gap in literature, this study brings a broad understanding of the views of the expectant women on these changes and their influence on maternity wear selection. This will enlighten young expectant women and stakeholders understand the body changes during pregnancy and their influence on maternity wear. These will guide the stakeholders in designing, making and selling maternity wear that is of good size, fit, comfort and fashionable.
CHAPTER THREE: METHODOLOGY

3.1 RESEARCH DESIGN

The study adopted a descriptive research design to determine the expectant women’s views on physiological and psychological changes and their influence on maternity wear selection. This method looks at a phenomenon intensively with an aim of describing it and explaining how one variable influences another (Orodho, 2005). This therefore helped in explaining and describing intensively the views on physiological and psychological changes, socio-economic factors and maternity wear selection. The method also allowed utilization of large amount of data.

3.2 MEASUREMENT OF VARIABLES

3.2.1 Independent Variable

Views on physiological changes were measured in terms of them being positive or negative. Expectant women can be happy or unhappy due to the change in their physical body. This variable was measured based on the statements given during the interview using a bi-polar scale. For example whether the respondents are happy or unhappy with the changes in their body silhouette, body measurement in inches, and body posture and body weight in Kilograms.

Views on psychological changes were measured based on the statements given during the interview. For example, whether the expectant women were positive or negative with their psychological changes in terms of joy, anxiety, stress, fear and depression.

Socio-economic factors influencing maternity wear selection were measured based on the statements given during the interview. Respondents were asked to state their
socio-economic position in terms of marital status, level of income, level of education, age and religious norms, beliefs and values. The respondents were also asked to explain whether the outlined values influenced their maternity wear selection.

3.2.2 Dependent Variables
Maternity wear selection was assessed in terms of its suitability or not. The variable was measured based on the responses given by the respondents on whether their views on physiological and psychological changes influence their maternity wear selection. For example fabric used (i.e. patterned or not), design features (i.e. with fullness or without), colour (i.e. bright or dull), texture (i.e. rough or smooth) and sizing (i.e. medium or large).

3.3 LOCATION OF THE STUDY
The study was carried out at Kenyatta National Hospital located along the Hospital Road off Ngong’ Road in Nairobi, Kenya. It is the largest national hospital that offers a wide range of medical services in the country. According to the Kenyatta Hospital Management, the hospital has opened doors for all kinds of people of various statuses who access their services in both a private and general wing. Its strategic location makes it easy for people to access the hospital from all parts of Nairobi city and the country at large.

3.4 TARGET POPULATION
The target population for this study was drawn from expectant women attending ante-natal clinic at the reproductive health department, Kenyatta National Hospital. The recruitment of the respondents in both the general and private wings was done
during the three days ante-natal visits in a week scheduled by the hospital. This was done by the help of the nurse on duty whom the researcher had made prior arrangements with and in accordance with the KNH ante-natal clinic guidelines. The respondents comprised of young expectant women aged 16-35 years both married and single and non-referral. This age group is fashion conscious and very sensitive to change in their physical body (Ross, 2005). On the other hand, the respondents who were below 16 years were not used because their pregnancy is unwanted and in most cases it will not be appreciated. It was obvious that for those who are above 35 years want to get married and thus the pregnancy is joyous whatever way it is.

During the preliminary study in March 2013, it was revealed that the ante-natal clinic receives at least 960 young expectant women monthly. This figure comprises of an average of 480 expectant women attending ante-natal clinics from the general and 480 from private wings. According to Kenyatta National Hospital Management, the general wing mostly caters for the basic standard payment and the private wing caters for high-end paying patients.

3.4.1 Exclusion Criteria
The study excluded the expectant women aged 36 years and above. It also excluded young expectant women who did not attend ante-natal clinics as well as cases that were referrals.

3.4.2 Inclusion Criteria
Although there are 85 city council hospitals in Nairobi County, the purpose of selecting KNH was to find a common and accessible place that would give the researcher better representation of respondents from different walks of life. That is
different respondents from different economic classes and parts of the country. This study comprised of young expectant women aged between 16-35 years and attending ante-natal clinic regularly at Kenyatta National Hospital. The nurse on duty helped identify the young expectant women by use of their personal files.

3.5 SAMPLING TECHNIQUES

The study used convenience method of sampling to select the respondents. Since participation was voluntary, respondents selected were those available and willing. According to Gay (1981) the sample size in a descriptive study should at least be ten percent of the accessible population. The researcher therefore applied the same principle to select 96 respondents. The total sample comprised of 48 young expectant women from the private wing and 48 from the general wing. The researcher selected 16 expectant women from each trimester and wing. All activities were done in a room that the researcher had booked in advance with the KNH administration. The minors were being used in this study because use of maternity wear is not pegged on age but the need for maternity clothes.

3.6 SAMPLE SIZE

Based on the procedures suggested by Gay (1981), the sample size was determined by getting ten percent of the total number of young expectant women attending ante-natal clinic at KNH in a month. According to KNH management, the hospital has three ante-natal clinics every week with an average of 80 women during each visit accumulating to approximately 240 women per week. The research took four weeks leading to a total of 960 young expectant women. Ten percent of this figure was equal to 96 respondents.
3.7 RESEARCH INSTRUMENTS

Mugenda and Mugenda (2003) highlights that in collection of qualitative data an interview schedule should be used. Non-structured open-ended questions were used (Orodho, 2005). To strengthen the study, questionnaires with closed ended items were used (Mugenda and Mugenda, 2003). Each item in both the interview schedule and questionnaires were developed to address a specific objective or research question (Kombo & Tromp, 2006). Clinical records for the respondents were also used to provide demographic information about the respondents.

3.8 PRE-TESTING

In order to ensure that the instruments were free of ambiguity, pre-testing was conducted on a selected sample of young expectant women attending ante-natal clinics at KNH. Pre-testing was done at KNH in order to ascertain full facts surrounding the location of study, logistics and data integrity and understanding the environment where the actual study would take place. The purpose of pre-testing was to minimize errors and to find out whether the interview schedule and questionnaire were appropriate for the study. The designed instrument was administered to twelve (12) respondents who were selected using convenience method of sampling. The results of the pre-testing were recorded under reliability and validity of the instruments.

3.9 RELIABILITY AND VALIDITY OF THE INSTRUMENTS

Validity was tested by ensuring that each objective had a question that addressed it. The items used in the interview schedule and questionnaire covered the objectives and research questions with no difficult words to understand used. This also ensured that the objectives and research questions used related to the area of study. Data
collected from the pre-testing were subjected to reliability testing through the Statistical Package for Social Sciences (SPSS). A reliability coefficient of 0.820 was observed using this method.

3.10 DATA COLLECTION TECHNIQUES

The researcher sought permission from Kenyatta University Ethics Review Committee (ERC), KNH/UON-ERC and National Commission for Science, Technology and Innovation (NACOSTI). This helped the researcher to access the hospital, acquire necessary information and facilities for the research. The researcher also sought permission from the hospital administration to be given three days in a week for four weeks during the hospital’s scheduled ante-natal visits to be able to select, interview and give questionnaires.

The consenting process involved meeting with the nurse on duty prior to the recruitment process to explain the purpose of the study and the process of which the participants took part. It also involved asking for an affirmation from the participants on whether they wanted to take part in the study or not. For the respondents who were between 16 -18 years, the researcher sought signed consent from parents and guardians.

This was done during their first visit prior to the interview with the help of the nurse on duty that helped to ask the respondents to come the next day to give room for parental consent. The researcher obtained their telephone numbers and talked to the parents and guardians and reassured them. Respondents who were 19 years and above were given the consent form as shown in (Appendix A) to read, understand and sign if they accepted to participate in the study.
With prior arrangement with the nurse on duty, the researcher explained to each selected young expectant woman the purpose of the study after which an interview was conducted and questionnaires filled. This enabled the researcher to collect data from expectant women in the first trimester, then second and finally third. All the 96 respondents filled the questionnaires and were also interviewed. The nurse on duty helped in taking body weight of the respondents and made sure that the respondents were comfortable. To make the respondents more comfortable the researcher motivated them through good communication and maintained good rapport. This process helped in collection of qualitative and quantitative data using interview schedules and questionnaires.

3.11 DATA ANALYSIS AND PRESENTATION

Data was grouped, summarized and presented in tables and figures. Results were interpreted using frequencies and percentages (Orodho, 2005). Quantitative aspects were analyzed using Microsoft Office Excel 2007. Qualitative aspects from the open ended items were analyzed based on the responses given by the respondents. Based on the data analysis objectives and research questions were evaluated to assess whether they have been met or not. Conclusions were based on discussion of findings relating on young expectant women’s views on physiological and psychological changes and their influence on maternity wear selection.

3.12 LOGISTICAL AND ETHICAL CONSIDERATIONS

The researcher sought permission from Kenyatta University ERC, KNH/UON-ERC and NACOSTI. With the permission to go ahead with the research from the Kenyatta University ERC, the researcher continued with the study while waiting for the response from NACOSTI. These organizations are mandated to validate ethical
and viable considerations of research in Kenya. The researcher established a good rapport with the hospital management and expectant women to ensure good relationship and communication throughout the process. The researcher assured the respondents that the information given during the research was confidential. The researcher obtained informed consent from the respondents used in the study and ensured that all respondents participated voluntarily. The researcher worked within the budget given to ensure that all activities were carried out.
CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 INTRODUCTION

This chapter presents the findings from the analysis of the views of young expectant women on physiological and psychological changes and their influence on maternity wear selection. The analysis on physiological aspects included: change in body silhouette in terms of the size, position and outline of the abdomen; body measurement in inches; posture in terms of body bearing; and weight in kilograms. Psychological change analysis included joy, anxiety, stress, fear and depression. Young expectant women’s views on physiological and psychological changes were therefore determined. The analysis of the influence of the views of young expectant women on the mind and body changes on maternity wear selection was determined. This was in relation to young expectant women being influenced by these views when selecting their maternity wear or not. Maternity wear selection was analyzed in terms of it being suitable or not.

Data were collected using a questionnaire and interview schedule (methodologies of which were discussed in Chapter Three), analyzed and presented using tables, frequencies, graphs and percentages. The results were presented under the following subtopics in relation to demographic characteristics, objectives and research questions.

4.2 RESPONSE RATE

The study had a sample size comprising of 96 young expectant women to whom 96 questionnaires and interviews were administered. Ninety questionnaires were completed and the same number of interviews was conducted successfully. Six interviews and questionnaires were rejected as the respondents requested to
discontinue. Of the six rejected interviews and questionnaires, four were for respondents in the third trimester while two were for those in the first trimester. The response rate of the study was therefore 94% and this was used for data analysis.

The data collected from the pilot study were subjected to reliability test with the Statistical Package for Social Sciences (SPSS) and Microsoft Office Excel 2007. Reliability coefficient of 0.820 was obtained using this method. On the other hand the reliability coefficient for the data collected for the main study was 0.790. This gave a minimal variation of 0.03, which meant that the instruments were reliable and valid.

4.3 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Analysis of the demographic characteristics of the respondents helped in the examination and interpretation of the findings. Demographic characteristics gathered from young expectant women attending ante-natal clinic at Kenyatta National Hospital included their marital status, number of children, period of pregnancy, age, and level of education, occupation, religion and income.

4.3.1 Marital Status of the Respondents

The marital status of the respondents was determined through the use of the information that the young expectant women had given in their personal files at the clinic. This was measured in terms of whether the respondents were married, single or divorced. The results were recorded as shown in Table 4.1.
Table 4.1.

Marital Status of the Respondents

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>50</td>
<td>56</td>
</tr>
<tr>
<td>Single</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Divorced</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.1 indicates that 50 (56%) respondents were married while 25 (28%) were single, and 15 (16%) were divorced.

4.3.2 Number of Children of the Respondents

The respondents’ number of children was determined through asking the respondents to fill the questionnaire because the information had not been provided in the clinic files. This was measured in terms of whether the respondents had one child, two or three children or whether this was their first child. The results were recorded as shown in Table 4.2.

Table 4.2.

Number of Children of the Respondents

<table>
<thead>
<tr>
<th>Number of Children</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>One</td>
<td>50</td>
<td>56</td>
</tr>
<tr>
<td>Two</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 4.2 indicates that 25 (28%) respondents had no child, 50 (56%) respondents acknowledged that they had one child and 15 (16%) respondents said that they had two children. The results also revealed that there was no expectant woman with three children and above.

4.3.3 Age Group of the Respondents

The age group of the respondents was determined through the use of the information that the young expectant women had given in their personal files. This was measured in terms of the age bracket that the expectant women belonged to. For example whether the expectant women were below 17 years, 18 – 23 years, 24 – 29 years or 30 – 35 years. The results were recorded as shown in Table 4.3.

Table 4.3.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 17</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18 - 23</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>24 - 29</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>30 - 35</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The analysis from Table 4.3 shows that 5 (6%) respondents were below the age of 17 years, 14 (16%) between 18 and 23 years, 40 (44%) between 24 and 29 years and 31 (34%) between 30 and 35 years.
4.3.4 Occupation of the Respondents

The respondents were asked to state their occupation. This was measured in terms of the type of occupation the respondents were involved in. For example whether the respondents were self-employed, employed or house wives. The results were recorded as shown in Table 4.4.

Table 4.4.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self employed</td>
<td>35</td>
<td>39</td>
</tr>
<tr>
<td>Employed</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>House wife</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.4 shows that 35 (39%) respondents were self-employed, 40 (44%) were employed and 15 (17%) were housewives. It is therefore evident from the results that most of the respondents were employed. On the other hand 17% of the respondents who were housewives were depending on their parents, guardians, husbands or boyfriends.

4.3.5 Monthly Average Incomes of the Respondents

The respondents were asked to state their monthly incomes. This was measured in terms of how much money in shillings each respondent earned in a month. For example; below Ksh 10,000, Ksh 10,001-20,000, Ksh 20,001-30,000 or Ksh 30,001 and above. The results were recorded as shown in Figure 4.1.
The analysis from Figure 4.1 reveals that 38 (42%) respondents earned a monthly income of Ksh 10,000 and below, 28 (31%) earned between Ksh 10,001 and 20,000, 14 (16%) earned between Ksh 20,001 and 30,000 and 10 (11%) earned Ksh 30,001 and above.

4.3.6 Religion of the Respondents

The respondents were asked to state their religious affiliation. This was measured in terms of the religion that the respondents were affiliated to. For example whether the respondents were Christians, Muslims, and Hindus or practiced traditional religions. The results were recorded as shown in Table 4.5.
Table 4.5.
Religion of the Respondents

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>68</td>
<td>76</td>
</tr>
<tr>
<td>Muslim</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Hindu</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.5 above shows that 68 (76%) respondents were Christians, 20 (22%) Muslims and 2 (2%). There were no respondents who professed a traditional religion.

4.3.7 Level of Education of the Respondents

The respondents were asked to state their level of education. This was measured in terms of whether the respondents had attained A-level certificate and below, Diploma, Bachelor’s Degree or Master’s Degree and above in their education. The results were recorded as shown in Figure 4.2.
The Figure 4.2 indicates that 14 (16%) respondents had attained A-level in their education, 38 (42%) confirmed to have certificate level of education, 22 (24%) diploma, 10 (11%) bachelor’s degrees and 6 (7%) master's degree and above.

**4.4 VIEWS OF YOUNG EXPECTANT WOMEN REGARDING THEIR PHYSICAL BODY CHANGES**

To identify views of young expectant women aged 16-35 years regarding their physical body changes, expectant woman were first categorized in three trimesters. The expectant women in each trimester were then asked to explain the physical changes they had experienced in their bodies. Physical body changes were further categorized as body silhouette, body measurement, posture changes and weight changes. Expectant women were then asked to state and explain their positive and
negative thoughts or feelings regarding the physical body changes that had taken place in their bodies.

4.4.1 Physical Body Changes Experienced by Young Expectant Women

The physical body changes experienced by young expectant women were measured in terms of the body silhouette, body measurement, posture and weight. Results were presented in relation to the three trimesters that expectant women go through during pregnancy.

4.4.1.1 Physical Body Changes Experienced in Trimester One

Trimester one is regarded by Alder (2007) as a period where there are minimal physical body changes that do not create the need for wardrobe change.

Table 4.6.

<table>
<thead>
<tr>
<th>Physical Changes</th>
<th>Change</th>
<th>Percentage</th>
<th>No Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Silhouette</td>
<td>19</td>
<td>63</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>Body Measurement</td>
<td>19</td>
<td>63</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>Body Weight</td>
<td>19</td>
<td>63</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>

Table 4.6 shows that 19 expectant women had undergone slightly visible changes in their body silhouette. The size, position and outline of the abdomen and bust was determined to find out whether there was any change in the general outline or shape of the body. It was revealed that the body silhouette changes occurred mostly in the
waist, bust and hips among expectant women between 9-12 weeks. However 11 expectant women did not show any visible change in their body silhouette.

Table 4.6 also shows the results of the expectant women in trimester one that had undergone some change in their body measurement. Body measurements were obtained by use of a tape measure with measurements taken around the fullest parts of the expectant women’s bust, hips and abdomen. The measurements were then compared with the original measurements stated by the expectant women. From the Table 4.6, 19 expectant women showed changes in their body measurement. Measurements related to the abdomen recorded a large increase. This was significant in the expectant women between 9-12 weeks. On the other hand 11 expectant women did not show any change in their body measurement. Most of these women were between 0-4 weeks and 5-8 weeks pregnant.

On the other hand body posture was identified through observation and determining whether the young expectant women’s body bearing was upright, leaning forward or backwards. The results in Table 4.6 reveal that there was no visible change in the body bearing among the expectant women in trimester one. This was probably due to the minimal increase in the abdomen of the expectant women that did not cause a transitory bend of the back. As a result, the expectant women still felt comfortable in their pre-pregnancy clothing, and felt no need to select maternity wear.

Finally, the weight of the young expectant women in this trimester was taken using a weighing scale. The weight taken from each woman in this trimester was further compared with their original weight that they stated. Table 4.6 above shows that 19 expectant women recorded a change in their body weight. The average weight gain
among these expectant women was between 0.5 – 1.5 kilograms. However it was noticed that the weight gain was not uniform among the women.

4.4.1.2 Physical Body Changes Experienced in Trimester Two and Three

Most dramatic physical changes occur during these two trimesters as highlighted by Komarkova and Musilova (2010). This is where all the pregnant women will require maternity wear as highlighted by Sohn and Bye (2011). This is supported by Sohn (2009) who recommended that since most dramatic body changes occur in trimester two and three, these two trimesters should be considered together when studying clothing. The following table shows the results of the physical changes in these two trimesters.

Table 4.7.

Physical Body Changes Experienced in Trimester Two and Three

<table>
<thead>
<tr>
<th>Physical Changes</th>
<th>Change Percentage</th>
<th>No Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Silhouette</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Body Measurement</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Body Posture</td>
<td>48</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Body Weight</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.7 shows that all the 60 respondents in this trimester recorded dramatic changes in their body silhouette. The change was significant in their waist, abdomen and bust measurement as they had dramatically increased in size. It was noted that the dramatic changes occurred differently among the expectant women. For example
there were women who recorded a greater change in their body silhouette than others. This is associated with age, body mass index, tightness of the muscles before pregnancy and number of children that each expectant woman had previously.

The results in Table 4.7 also indicate that all the 60 expectant women in this trimesters recorded dramatic changes in their body measurement. The change was significant in their waist, abdomen and bust. It was noted that the striking changes occurred differently among the expectant women. For example there were women who recorded greater change in their body measurements in inches around their waist, abdomen and bust than others. On the other hand, 48 expectant women in trimester two and three had undergone visible changes in body posture. This was as a result of pressure exerted on the back of the body due to increase in size of the abdomen during these two trimesters. However 12 expectant women did not show any visible changes in body posture.

Table 4.7 shows that all the 60 young expectant women in these two trimesters recorded vivid changes in their body weight. There was variation in the amount of weight gained among the expectant women. For example there were women who recorded a large amount of weight gained in kilograms than others. This was associated with the disparity in the anthropometric characteristics of the expectant women’s body.
4.4.2 Views of Expectant Women Regarding the Physical Body Changes

During the study expectant women were also asked to state and explain their positive and negative views towards their physical body changes. The results were recorded in Table 4.8.

Table 4.8.

Views of Expectant Women Regarding the Physical Body Changes

<table>
<thead>
<tr>
<th>Physical Body Changes</th>
<th>Positive</th>
<th></th>
<th>Negative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Silhouette</td>
<td>35</td>
<td>39</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>Body Measurement</td>
<td>35</td>
<td>39</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>Body Posture</td>
<td>35</td>
<td>39</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>Body Weight</td>
<td>35</td>
<td>39</td>
<td>55</td>
<td>61</td>
</tr>
</tbody>
</table>

According to Table 4.8, 35 (39%) young expectant women confirmed that they had a positive view regarding the changes in their body silhouette, body measurement, posture and weight. The young expectant women highlighted that they were contented with the changes in their physical body. They regarded the pregnancy period to be an exciting and a joyful experience and could cope with the changes so easily. The young expectant women also described their pregnancy to have been accepted by their family members and the society at large since they were married and were expected to get children. On the other hand majority 55 (61%) young expectant women stated that they had a negative view regarding the changes in their body silhouette, body measurement, posture and weight. The young expectant
women confirmed that they were unhappy with the striking changes in their physical body. Most of the young expectant women described the pregnancy to be unwanted as they had not planned for it. They highlighted that they were worried about how they would have to work hard to take their body shapes, size and weight back to what they used to be. Some also stated that they didn’t want their friends to notice that they were expectant, thus the physical changes would not be something to smile about.

To answer the research question on whether the young expectant women experienced both positive and negative views regarding the physical body changes, it was noted that the young expectant women did experience both positive and negative views during pregnancy. The results indicated that most women were not happy with the changes in their physical body because the physical body changes were so dramatic to an extent of changing their body appearance. The pregnancy was also described to be unwanted as some of the young expectant women were not ready for it. They explained that they were caught by surprise thus terming the pregnancy to be an accident.

4.5 VIEWS OF YOUNG EXPECTANT WOMEN REGARDING THEIR PSYCHOLOGICAL CHANGES

To establish views of young expectant women regarding their psychological changes during pregnancy, the respondents were asked to state whether they had experienced the outlined psychological changes. They were then asked to explain whether they were happy or unhappy with the psychological changes that they had experienced.
4.5.1 Psychological Changes Experienced by Young Expectant Women

The following figure shows the psychological changes experienced by young expectant women during pregnancy.

![Psychological Changes experienced by the Respondent](image)

**Figure 4.3. Distributions of Respondents by Psychological Changes**

From Figure 4.3 above, the most outstanding psychological change experienced by the young expectant women was anxiety accounting for 82 respondents, followed by stress (69), depression (60) and fear (52). This was as a result of emotional changes that occurred in trimester one plus striking physical body changes that occurred in the second and third trimesters.

On the other hand 32 young expectant women were joyful due to the emotional changes that occurred in trimester one plus the vivid physical changes in trimester two and three. This was as a result of the need to get children since they were...
This made the young expectant women to positively deal with the changes through selection of maternity clothes that was fitting and comfortable.

### 4.5.2 Views of Expectant Women Regarding the Psychological Changes

Table 4.9 below shows the young expectant women’s views towards the psychological changes that had taken place in their mind.

<table>
<thead>
<tr>
<th>Psychological Changes</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Joy</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>Anxiety</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td>Stress</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Depression</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fear</td>
<td>27</td>
<td>37</td>
</tr>
</tbody>
</table>

From the Table 4.9 it was found that 32, 33, 34 and 27 respondents were happy with the psychological changes like joy, anxiety, stress and fear respectively. The respondents explained that they were worried about the change in their body size and shape and being positive helped them work hard to avoid the alteration in their body shape and size. In addition they described the pregnancy as wanted and this made them to have a positive view towards the body changes that came along with the pregnancy. The respondents also explained that their positive feeling towards the
pregnancy made them select maternity wear that was fitting and comfortable so as to maintain their body image.

However most of the respondents were not happy with the changes that had taken place in their mind. The respondents explained that this was due to the extensive change in their physical appearance. In addition the respondents described the pregnancy as unwanted thus having a negative feeling about the changes that come along with it. The respondents highlighted that their negative feeling towards the emotional changes during pregnancy made them select clothes that were ill-fitting, oversized and uncomfortable.

To answer the research question on the issues that affected the young expectant women regarding the way they perceived pregnancy, the respondents were asked to state the issues that came along with them perceiving pregnancy either positively or negatively. The findings indicated that 34 (38%) of the respondents perceived the pregnancy positively thus describing the pregnancy as appropriate as it defined their fertility and femininity. On the other hand 56 (52%) respondents perceived the pregnancy negatively stating that they felt heavy, awkward and unattractive.

4.6 PHYSIOLOGICAL AND PSYCHOLOGICAL CHANGES THAT INFLUENCED MATERNITY WEAR SELECTION
To determine the physiological and psychological changes that influence maternity wear selection, the various changes in body and mind were highlighted. The young expectant women were then asked to state using a bi-polar scale the physiological and psychological changes that influenced their maternity wear selection. The results of the respondents were recorded in Table 4.10.
Table 4.10.

Physiological and Psychological Changes that Influenced Maternity Wear Selection

<table>
<thead>
<tr>
<th>Physical and Psychological Changes</th>
<th>Yes</th>
<th>Percentage</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in body shape</td>
<td>29</td>
<td>32</td>
<td>61</td>
<td>68</td>
</tr>
<tr>
<td>Change in body size</td>
<td>39</td>
<td>43</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>Change in body bearing</td>
<td>16</td>
<td>18</td>
<td>74</td>
<td>82</td>
</tr>
<tr>
<td>Change in weight</td>
<td>12</td>
<td>13</td>
<td>78</td>
<td>87</td>
</tr>
<tr>
<td>Joy</td>
<td>20</td>
<td>22</td>
<td>70</td>
<td>78</td>
</tr>
<tr>
<td>Anxiety</td>
<td>11</td>
<td>12</td>
<td>79</td>
<td>88</td>
</tr>
<tr>
<td>Stress</td>
<td>21</td>
<td>23</td>
<td>69</td>
<td>77</td>
</tr>
<tr>
<td>Depression</td>
<td>19</td>
<td>21</td>
<td>71</td>
<td>79</td>
</tr>
<tr>
<td>Fear</td>
<td>22</td>
<td>24</td>
<td>68</td>
<td>76</td>
</tr>
</tbody>
</table>

According to the results in Table 4.10 the outstanding physiological change that influenced maternity wear selection was change in body size, accounting for 39 (43%) respondents. On the other hand 51 respondents confirmed that they were not affected by changes in their body size in selecting their maternity wear.

Change in body shape was also considered among the young expectant women to be a physiological change that influenced their maternity wear selection. This accounted for 29 respondents out of 90. However majority of the respondents were not influenced by change in their body shape when selecting maternity wear.
Change in body bearing was also another physiological change that influenced maternity wear selection among the young expectant women. It accounted for 14 respondents out of 90. This was as a result of backward bend of an expectant woman’s body resulting to an increase in the length of the front part of the body. On the other hand most of the young expectant women were not influenced by their posture change when selecting their maternity wear.

Change in body weight was considered as one of the physiological changes that influenced maternity wear selection among the young expectant women. This accounted for 12 respondents out of 90. This was attributed to the need for the young expectant women to accommodate the changes in their body weight by selecting suitable maternity wear. On the contrary most of the young expectant women were not influenced by change in their body weight when selecting their maternity wear.

On the other hand psychological changes also influenced maternity wear selection. This included joy, anxiety, stress, depression and fear, which accounted for 20, 11, 21, 19 and 22 respondents respectively. However most of the young expectant women were not influenced by psychological changes when selecting maternity wear.

To answer the research question on the aspects of maternity wear selection that were as a result of changes in body and mind, the respondents were asked to state the maternity wear aspects that were as a result of change in body and mind. The results were recorded in Table 4.11.
Table 4.11.

Aspects of Maternity Wear Selection as a result of Changes in Body and Mind.

<table>
<thead>
<tr>
<th>Aspects of Maternity Wear Selection</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of maternity wear</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>Design features</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Fabric used</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Colour</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Texture</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 4.11 indicate that size of maternity wear, design features, fabric used, colour and texture were maternity wear selection aspects that were as a result of changes in body and mind. This accounted for 30, 24, 14, 10 and 7 respondents respectively. The results revealed that most of the respondents did not consider these aspects of maternity wear to be as a result of changes in body and mind. This was accredited to lack of understanding of what these aspects were and how they influenced maternity wear selection.

4.7 SOCIO-ECONOMIC FACTORS THAT INFLUENCE MATERNITY WEAR SELECTION

To discuss the socio-economic factors that influence maternity wear selection respondents were asked to state and explain the socio-economic factors that influenced their maternity wear selection. Based on the statements given by the respondents the following results were recorded.
Figure 4.4. Socio-economic Factors that Influenced Maternity Wear Selection

According to the results in Figure 4.4 availability of money was rated the highest socio-economic factor that influenced maternity wear selection accounting for 82 respondents. This was attributed to the amount of monthly income that the expectant women earned as well as other financial commitments. For example, the respondents stated that their monthly income was so little to cater for suitable maternity which is very expensive. As a result young expectant women gave priority to the things that mattered most on their budget.

The results in Figure 4.4 also reveal that cost of item was a second socio-economic factor that influenced maternity wear selection. This accounted for 78 respondents out of 90. Majority of the respondents highlighted that most of the fashionable maternity wear were very expensive and yet only used for a short period.
The Figure 4.4 also shows that 51 respondents out of 90 stated to have been influenced by their age when selecting their maternity wear. The respondents stated that they selected maternity wear that will make them fashionable in order to express their identity as separate as that of their parents. This was attributed to the need for young expectant women wanting to remain younger and fashionable during pregnancy.

Figure 4.4 indicates that 62 respondents stated that their marital status influenced the way they selected their maternity wear. This was due to the need for the young expectant women to maintain their marital status in relation to societal influences and dictates. For example, they had to select maternity wear that could define their marital status and also acceptable in the society they live in. However 28 respondents were not influenced by marital status in selecting their maternity wear.

Values and beliefs of the respondents also influenced the young expectant women’s maternity wear selection. This accounted for 52 respondents as shown in Figure 4.9.

Figure 4.4 also indicates that 43 respondents were influenced by their education level when selecting their maternity wear. While 21 respondents confirmed that their religious norms influenced their maternity wear selection.

To answer the research question on how the young expectant women were influenced by the socio-economic factors in selecting maternity wear, the respondents were asked to explain how they were influenced by their socio-economic factors when selecting maternity wear. The results were recorded in Table 4.12.
Table 4.12.

How the Socio-economic factors affected Maternity Wear Selection

<table>
<thead>
<tr>
<th>Socio-economic factors</th>
<th>Suitable Percentage</th>
<th>Not suitable Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>25</td>
<td>65</td>
</tr>
<tr>
<td>Societal</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

According to results in Table 4.12, 25 (28%) and 42 (47%) respondents selected maternity wear that was suitable in relation to their financial and societal factors. This was attributed to the availability of money that could be spent on maternity wear and flexibility in the need to uphold their societal issues. Most of the respondents were highly affected by the socio-economic factors to an extent of selecting maternity wear that was not suitable. This accounted for 65 (72%) and 48 (53%) respectively.

4.8 DRESS FEATURES THAT INFLUENCED MATERNITY WEAR SELECTION

To determine the dress features that influenced maternity wear selection, the various dress features were highlighted. The young expectant women were then asked to state using a bi-polar scale the dress features that influenced their maternity wear selection. The results of the respondents were as shown in Figure 4.5.
Figure 4.5: Interaction of Respondents with Dress Features that Influenced Maternity Wear Selection

According to the results in Figure 4.5 colour of the maternity wear was considered as the outstanding dress feature that influenced the young expectant women’s maternity wear selection. All the respondents were influenced by colour in selecting maternity wear. This was attributed to the respondents desire to go for colours they liked most without bothering with the effect of colour on their body size and shape.

Garment size was the second dress feature that influenced the young expectant women’s maternity wear selection. This accounted for 30 respondents. This was attributed to the expectant women’s need to select maternity wear that could accommodate the changes in their body thus making them comfortable. On the other hand 60 respondents confirmed that garment size was not among the dress features that influenced their maternity wear selection. This was attributed to some of the young expectant women being in the first trimester and others having not accepted the changes in their body size and shape.
Design features were also considered to influence the young expectant women’s maternity wear selection. It accounted for 24 respondents. This was attributed to the increase in dramatic body changes that generated the need for maternity wear for the expectant women. However 66 respondents stated that they were not influenced by design features in selecting their maternity wear. These pregnant women stated that design features on maternity wear made their bodies big and their pregnancy noticed.

Fabric used to make the maternity wear was also considered by less than 20 respondents to be among the dress features that influenced the young expectant women in selecting their maternity wear. The young expectant women stated that they understood the various types of fabrics that were suitable for maternity wear that fit well and was comfortable. However majority of the young expectant women stated that they were not influenced by fabric used when selecting their maternity wear.

Texture was considered by 7 young expectant women as a dress feature that influenced their maternity wear selection. The respondents stated that they liked maternity wear with patterns so as to hide their protruding abdomen. However most of the young expectant women were not influenced by texture in selecting their maternity wear. The expectant women explained that they didn’t understand how texture influenced their maternity wear selection.

To answer the research question on dress features that young expectant women preferred or did not prefer on their maternity wear, the respondents were asked to
state the features and give the reasons why they preferred or did not prefer. The results were recorded in Figure 4.6.

**Figure 4.6: Dress Features Preferences for Maternity Wear**

According to the results in Figure 4.6 most respondents preferred dress features such as design features, colour and size of maternity wear. This accounted for 62, 90 and 69 respondents respectively. On the other hand dress features like texture and fabric used were preferred on maternity wear by few respondents. This accounted for 22 and 32 respondents respectively. The results in Figure 4.6 also indicate that 28, 68, 21 and 58 respondents did not prefer dress features like design features, texture, size of maternity wear and fabric used on their maternity wear respectively. This was attributed to lack of understanding of the dress features and their influence on maternity wear selection. However all the respondents preferred colour as a dress feature on their maternity wear.
CHAPTER FIVE: DISCUSSIONS OF FINDINGS

The purpose of this study was to determine the views of young expectant women on physiological and psychological changes and their influence on maternity wear selection (Section 1.3). This study is therefore significant as it would provide literature and contribute to advancement of knowledge in this field (Section 1.6). To achieve the objectives and research questions outlined in Sections 1.4 and 1.5, data were collected and findings presented in Chapter Four. The current chapter will discuss the findings in the light of the data collected contextualizing it with other works.

Based on the findings in Chapter Four, the following themes will be discussed: physical body change aspects related to sizing and fit, emotional aspects in relation to psychological changes, physical and psychological aspects related to maternity wear selection, economic aspects and family impacts and dress aspects related to maternity wear selection. These themes will be discussed as they relate to the objectives of this study (Section 1.4).

5.1 PHYSIOLOGICAL BODY CHANGE ASPECTS RELATED TO SIZING AND FIT

Objective One of the study was to identify views of young expectant women aged 16-35 years regarding their physical body changes. During the interview, when asked about the physical body changes they had experienced, 19 (63%) respondents in trimester one stated to have experienced minimal changes in their body silhouette, measurement and weight (Table 4.6). On the other hand, 60 (100%) respondents in trimester two and three confirmed that they experienced vivid physical changes in their body silhouette, measurement and weight. (Table 4.7). This implied that the
respondents in the first trimester did not require maternity wear as compared to those in trimester two and three who had pressure to change their wardrobe. Sohn (2013) associated the wardrobe change to change in body silhouette of the expectant women to an extent of affecting sizing and fit of their normal clothes. The finding is supported by Alder (2007) who reported that since there is minimal increase in the body during the first trimester, wardrobe change is unnecessary during this time. Similarly, Sujata (2010) and Aishatu (2011) recommended that since most physical changes occur in trimester two and three, most expectant women will require maternity wear during this time.

It was also observed that the respondents experienced both positive and negative views regarding these physical body changes (Table 4.8). Even though most of the respondents were married and had one child, most of them (55 (61%)) had a negative view regarding the changes in their physical body. This was attributed to the dramatic physical changes and the fear that their body shape and size would be transformed thus making them look unattractive. For example, the respondents stated that the changes made their body big and shabby. The reference drawn from the finding is that young expectant women would select maternity wear that could maintain their body shape and size with an aim of looking attractive. This will to some extent compromise on the important elements of fit, comfort and sizing of maternity wear selected.

Nevertheless, 35 (39%) respondents had a positive view regarding the physical body changes since they had had an experience of the physical changes from their previous pregnancies and also perceived the changes to be short term. In addition, the respondents explained that they were happy with the pregnancy and the changes
since they defined their fertility and femininity. This implied that the respondents were aware that their body size and shape would change thus selecting maternity wear that could accommodate the changes.

It was therefore evident from the findings that the positive and negative views of the respondents regarding the physical changes influenced their maternity wear selection. This indicated that the respondents selected maternity wear that could create the kind of body image they wanted. This finding concurs with Sohn and Bye (2011) and Longhurst (2005) who highlighted that expectant women develop different views regarding the body changes during pregnancy which makes them to create different subjectivities that satisfies them.

The findings on Objective One provided information on the physical body changes experienced by young expectant women during pregnancy and the positive and negative views regarding these body changes. It was also evident that expectant women who had children were aware that the physical changes would change their body size and shape. The finding is therefore significant to the study since it will provide literature on the views of young expectant women regarding physical body changes. It will also give an understanding on how these views on physical changes influence maternity wear selection.

The findings on Objective One on views of young expectant women regarding physical body changes coincide with the fact that young expectant women experience vivid changes in their physical body (Sohn, 2009). Ardahan and Bayik (2014) discussed that these changes occur differently as the pregnancy progresses through the three trimesters of pregnancy. In addition Stone and Eddleman (2003)
reported that disparity in the body shape and size caused a variation in the occurrence of the body changes during pregnancy. Mehta et al. (2003) explained that expectant women with low BMI gain more weight than those who have a high BMI. In addition, the position of the fetus in the uterus leads to variation in abdominal shapes from person to person (Faust and Carrier, 2004). Furthermore, expectant women who have had subsequent pregnancies may have an abdomen that is low. For instance, pregnancy becomes obvious at week 20 with the first pregnancy but by week 14 in the following pregnancies (Stone and Eddleman, 2003). This would therefore lead to a disparity in the alteration of the body size and shape as highlighted by Noopur (2012).

According to Boscaglia, Skouteris and Wertheim (2003) changes in the physical body are viewed differently among the expectant women. For example, Richardson in Boscaglia et al. study found that some women viewed the bodily changes as temporary thus being able to assimilate then without distress. On the other hand, Gould (2003) stated that other women are worried about the alterations in their body shape and size caused by pregnancy. This as a result would make the young expectant women select their maternity wear differently with an aim of creating a satisfying look (Faust & Carrier, 2014).

5.2 EMOTIONAL ASPECTS IN RELATION TO PSYCHOLOGICAL CHANGES

Objective Two of the study was to establish views of young expectant women regarding their psychological changes during pregnancy. From the questionnaires, it was observed that most of the respondents were married, had at least one child and were aged between 18-35 years. During the interview on views of young expectant
women regarding psychological changes, the respondents confirmed that they experienced emotional aspects like joy, anxiety, stress, depression, and fear with the most outstanding psychological change being anxiety 82 (91%) (Figure 4.3). This was associated with emotional changes that occurred in trimester one plus striking physical body changes that occurred in the second and third trimesters.

Most women who were anxious, stressed, fearful and depressed confirmed that they were not ready to lose their original body shape and size as a result of the physical body changes. It was also evident from the findings that the need to remain young and fashionable made the young expectant women to develop negative emotional aspects since they believed that maternity wear made them big and not fashionable. This implied that the young expectant women were guided by their negative emotions in selecting maternity wear that would create the kind of look they want. This finding is supported by Eden (2013) who earlier on described pregnancy as a time when expectant women deal with fears and prospects about the change in their physical body. Findings by Ardahan and Bayik (2014) also indicate that alterations in the size and shape of the expectant women’s bodies make them possess different emotional feelings of unreality.

On the other hand the few young expectant women who were joyful confirmed that they were aware that the physical body changes might cause a change in their body size and shape. This made them to take it positively and select maternity wear that could not transform their body size and shape. This implied that the young expectant women selected maternity wear that reflected their emotional feelings with an aim of dealing with the physical body changes. These findings are in line with research conducted by Boscaglia et al. (2003), and Longhurst (2005) reporting that expectant
women experience emotional changes during pregnancy which is translated in the
clothes they select and the different subjectivities they want to create. However,
Opara (2000) cautioned young expectant women not to select maternity wear that
only satisfies and reflects their feelings but also provide proper sizing and fit.

While the findings in Figure 4.3 showed that young expectant women develop
different psychological changes, it was evident from Table 4.9 that young expectant
women experience both positive and negative views regarding these changes. A few
respondents viewed the psychological changes positively because they perceived the
pregnancy to be appropriate as it defined their fertility and femininity. This
increased their self-confidence to an extent of being able to cope with emotional
changes as a result of extensive change in their physical appearance. As a result, the
young expectant women selected maternity wear that would increase their self-
confidence. This finding concurs with Cherry (2004) who stated that expectant
women choose clothes that reflected their emotional feelings in order to curb despair
during pregnancy.

However most of the respondents had a negative view towards the psychological
changes. This was attributed to the effect of the physical and psychological changes
to their bodies, which made them feel heavy, awkward and unattractive. This made
the young expectant women to have low self-esteem making them select maternity
wear that was either ill-fitting or oversized. This finding therefore disagrees with
Cherry (2004) who stated that expectant women choose clothes that reflected their
emotional feelings in order to curb despair during pregnancy.
The finding on Objective Two is therefore significant to the study since it will provide literature on the views of young Kenyan women who are expectant regarding psychological changes. It will also give an understanding on how these views on physical changes influence maternity wear selection.

The results on views of young expectant women regarding psychological changes during pregnancy coincide with the fact that the choice to sustain a pregnancy ushers in tremendous emotional transformation (Gould, 2003). For example Eden (2013) explains that pregnancy is a time when expectant women deal with fears and prospects about the change in their body image. Many young women are stressed, depressed and anxious because of the changes in their physical bodies (Zwelling, 2000). On the other hand some women regard pregnancy as a joyful and exciting experience (Musial, 2001). Ardahan and Bayik (2014) highlighted that alteration in the size and shape of expectant women’s bodies makes them possess different feelings and thoughts of unreality. This as a result makes them select maternity wear that depicts their feelings and thoughts as highlighted by Cherry (2004). However the maternity wear might be suitable or not suitable since the young expectant women’s feelings and thoughts might be positive or negative.

5.3 PHYSIOLOGICAL AND PSYCHOLOGICAL ASPECTS RELATED TO MATERNITY WEAR SELECTION

Objective Three of the study was to determine the physiological and psychological changes that influenced maternity wear selection. During the interview, it was evident from the findings that various physiological and psychological aspects influenced the respondents maternity wear selection though differently (Table 4.10). According to the findings few respondents were influenced by physiological and
psychological aspects when selecting maternity wear. This was accredited to the pressure mounted on the respondents to have clothes that could accommodate the physical changes with an aim of creating a feminine look.

However most of the respondents were not influenced by the physiological and psychological changes when selecting maternity wear. This was attributed to the need to copy what their peers wore with an aim of remaining young and fashionable. In addition, most of the young expectant women regarded maternity wear as clothes that made their bodies big. It was also evident from the findings that most young expectant women were not ready to accept the physiological and psychological changes as they wanted to maintain their original body size and shape.

This therefore implied that the young expectant women were guided by other aspects in selecting clothes that satisfied their desire to look young and fashionable. While Manley and Cloud (1993), earlier on stated that the selection of maternity wear should be based on the physical and emotional changes, Komarkova and Musilova (2011) later on pointed out that most expectant women base their selection on other outside forces with an aim of creating different body appraisals.

The findings on Objective Three is therefore significant to the study since it will provide literature on the physiological and psychological changes that influence maternity wear selection among the young Kenyan women who are expectant. More research on this objective should be done outlining how various physical and emotional aspects influence maternity wear in relation to sizing and fit.
The results on the physiological and psychological changes that influenced maternity wear selection concur with Opara (2000), who explained that changes in the body and mind creates a need for expectant women to look for clothes that can accommodate these changes. Manley and Cloud (1993) suggested the need for appropriate clothing during pregnancy, which necessitates the psychological well-being of the expectant women. The results confirmed that expectant women were not influenced by the physiological and psychological changes when selecting their maternity wear. Komarkova and Musilova (2011) highlighted that disparity in the body and mind changes required expectant women to select their maternity wear carefully.

It was evident from the findings that most young expectant women were not ready to accept the physiological and psychological changes as they wanted to maintain their original body size and shape. This could explain why many respondents were not influenced by the physiological and psychological changes in selecting their maternity wear. This was due to a lack of understanding of the physiological and psychological changes that influence maternity wear selection. It was also as a result of lack of literature on dressing and adorning the pregnant body.

5.4 SOCIO-ECONOMIC INFLUENCE ON MATERNITY WEAR SELECTION

Objective Four was to discuss the socio-economic factors that influenced maternity wear selection among the young expectant women. It was evidenced from the questionnaires that most of the respondents were married, had at least one child, were between the ages of 18-35 years, had occupations, had monthly income, had religious affiliations and beliefs and had attained a certain level of education. When
asked during the interview, it was observed that the respondents were influenced differently by the socio-economic factors in selecting maternity wear (Figure 4.4).

Apparently, economic aspects like availability of money and cost of item highly influenced the young expectant women’s maternity wear selection. This was attributed to the amount of monthly income that the respondents earned which was regarded to be little due to other financial commitment as well as the high cost of maternity wear. This implied that the young expectant women selected maternity wear based on their level of income thus compromising on the need to satisfy their desires. The finding concurs with Ross (2005) and Noopur (2012) who reported that maternity wear is rendered very expensive and its selection is affected by other financial commitments.

Other socio-economic factors that influenced maternity wear selection were age, marital status, religion, level of education and values and beliefs of the respondents. This was attributed to the need for the young expectant women to maintain their status in relation to societal influences and dictates. This implied that the young expectant women based their maternity wear selection on these factors. This finding concurs with Ross (2005) who highlighted that socio-economic factors highly influence clothing selection among young women to an extent of affecting the suitability of the clothes. However, some young expectant women were not influenced by the socio-economic factors when selecting maternity wear.
5.5 DRESS FEATURES INFLUENCE ON MATERNITY WEAR SELECTION

Objective Five was to determine dress features that influenced maternity wear selection among the young expectant women. As evidenced by the findings from the interview, dress features like colour, garment size, fabric used, texture and design features influenced maternity wear selection among the young expectant women differently (Figure 4.5). For example, most of the young expectant women were not influenced by these dress features when selecting maternity wear. This was due to lack of understanding of what the dress features were and the belief that maternity wear made the young expectant women look big. This therefore implied that young expectant women did not consider the dress features when selecting maternity wear creating a likelihood of them being guided by other factors. The finding concurs with Faust and Carrier (2014) who supported the fact that women are judged by their appearance and thus change in their body silhouette brings about lack of satisfaction and tend to wear clothes that are of a close or loose fit.

On the other hand a few respondents were influenced by dress features like garment size, fabric used, texture and design features in selecting their maternity wear. This was attributed to the expectant women’s need to maintain their body shape and size using maternity wear. This implied that the young expectant women considered the dress features when selecting maternity wear so that they camouflage the body changes. On the contrary, all the respondents were influenced by colour when selecting their maternity wear. This was attributed to the need for the young Kenyan women to select maternity wear with the colours they liked most without considering whether the colours were suitable for their body size and shape.
The findings on Objective Five is therefore significant to the study since and will provide literature on the dress features that influence maternity wear selection. It will also give the reasons why some young expectant women don’t prefer them.
CHAPTER SIX: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine the views on physiological and psychological changes and their influence on maternity wear selection among women attending ante-natal clinic at Kenyatta national hospital (section 1.3). Chapter One of this study focused on background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, limitations and assumptions. While Chapter Two gave a theoretical basis to the study, Chapter Three focused on the methodology used to carry out the study.

Chapter Four outlined the findings of the study in relation to the objectives (section 1.4) and research questions (section 1.5). Discussion of findings contextualizing them with the literature and giving their implications was done in Chapter Five. Finally the summary of findings, conclusions and recommendations are outlined in Chapter Six in relation to the objectives as show below.

6.1 SUMMARY OF FINDINGS

6.1.1. To Identify Views of Young Expectant Women Aged 16-35 Years Regarding their Physical Body Changes during Pregnancy

According to the findings, 50 expectant women were married and had at least one child. Most Kenyan women aged between 16-35 years in trimester two and three experienced dramatic changes in their physical body which made them develop both positive and negative views regarding these changes. Even though most of the young Kenyan women were married and had at least one child, they viewed the changes negatively because they were so dramatic to an extent of transforming their
body appearance. On the other hand few Kenyan women aged between 16-35 years viewed the physical changes positively since they had had prior experience of the changes. This therefore made them to select maternity wear that would create the look they wanted without transforming their body.

6.1.2. To Establish Views of these Young Expectant Women Regarding their Psychological Changes during Pregnancy

It was also evident from the findings that the young Kenyan women in all the three trimesters’ experienced emotional feelings that made them develop both positive and negative views regarding these changes. The outstanding psychological change experienced by the young expectant women was anxiety. This was linked to emotional changes that occurred in trimester one plus striking physical body changes that occurred in the second and third trimesters. Despite most of the women being married and with at least one child, most of them viewed the psychological changes negatively since the pregnancy made them feel heavy, awkward and unattractive.

On the other hand, 32 young Kenyan women who were joyful viewed the psychological changes positively since it was appropriate as it defined their fertility and femininity. This made them to take it positively and look for ways of maintaining their body size and shape. This implied that the young expectant women selected maternity wear that reflected their emotional feelings with an aim of dealing with the physical body changes.
6.1.3. To Determine the Physiological and Psychological Changes that influence Maternity Wear Selection

Physiological and psychological changes during pregnancy did not influence maternity wear selection among the young expectant women. The results revealed that alteration in the physical body during pregnancy mounted a lot of pressure on the respondents to maintain their body size and shape. Most of the respondents were not influenced by the physical and psychological changes when selecting their maternity wear. The young expectant women revealed that what would help them in selecting maternity wear was to copy what their peers wore. This was attributed to the need to remain young and fashionable and lack of understanding of how the physiological and psychological changes influenced maternity wear selection.

6.1.4. To Discuss the Socio-economic factors that influence Maternity Wear Selection among these Young Expectant Women

Socio-economic factors also affected the young expectant women’s maternity wear selection. For example availability of money (82) and cost of item (78) were rated the highest socio-economic factors that influenced maternity wear selection. Majority of the respondents highlighted that most of the fashionable maternity wear were very expensive and yet only used for a short time. In addition, the young Kenyan women confirmed that their financial needs could not allow them to spend some money on maternity wear since their monthly income was very little. On the other hand socio-economic factors like marital status (62), values and beliefs (52), age (51), education level (43), and religious norms (21) also influenced the young expectant women’s maternity wear selection. It was therefore concluded that the socio-economic factors influenced the young Kenyan women’s maternity wear selection.
selection differently to an extent of making them select maternity wear in relation to their socio-economic status.

6.1.5. To Determine Dress Features that influence Maternity Wear Selection among these Young Expectant Women

Finally the findings also showed that dress features influenced maternity wear selection among the young expectant women differently. For instance colour (90) the most outstanding dress feature that influenced the young expectant women’s maternity wear selection. Nevertheless, most of the young Kenyan women who were expectant were not influenced by dress features when selecting their maternity wear. The results also indicated that most respondents did not have any preference regarding texture on their maternity wear. Colour was preferred by all the respondents as a dress feature that influenced their maternity wear selection. This indicated that most respondents were not influenced by dress features in selection of their maternity wear but they all preferred colour on their maternity wear.

6.2 CONCLUSIONS

6.2.1. To Identify Views of Young Expectant Women Aged 16-35 Years regarding their Physical Body Changes during Pregnancy

From the study, it has been observed that most young expectant women experienced negative views regarding physiological changes during pregnancy. The need to maintain their original body shape and size shows that these youthful women selected maternity wear that fitted closely to their body or used their normal clothes. We could therefore conclude that young Kenyan expectant women select maternity wear without considering whether it is of the right size, fit and comfort. In addition, they don’t understand how to select maternity wear that can accommodate the body
changes, maintain their body shape and size and make them look young, fashionable and attractive.

6.2.2. To Establish Views of these Young Expectant Women regarding their Psychological Changes during Pregnancy

The study also concluded that most young expectant women were not happy regarding the psychological changes which were as a result of dramatic body changes. The need to satisfy their desire to maintain their body size and shape with an aim of looking young and fashionable was so high enough to warrant selection of ill-fitting maternity wear.

6.2.3. To Determine the Physiological and Psychological Changes that influence Maternity Wear Selection

Considering that the young expectant women experience changes in their body during pregnancy, the need for maternity wear therefore arises. The overall feedback from the respondents revealed that most of the Kenyan young expectant women were not influenced by the physiological and psychological changes when selecting maternity wear. This shows that the young expectant women were guided by aspects that satisfy their desire to maintain their original shape and size and look attractive, when selecting their maternity wear. The important aspects of sizing, fit and comfort were therefore compromised.

6.2.4. To Discuss the Socio-economic factors that influence Maternity Wear Selection among these Young Expectant Women

Based on the findings of the study, it was concluded that socio-economic factors like availability of money, cost of item, level of education, marital status, age, religion
and ones values and beliefs influenced maternity wear selection. Maternity wear is considered expensive by the pregnant women and therefore the rate of selection and usage will be minimal.

6.1.5. To Determine Dress Features that influence Maternity Wear Selection among these Young Expectant Women

From the findings, it was concluded that youthful Kenyan expectant women are not influenced by dress features when selecting maternity wear. These shows that the youthful expectant women in Kenya copy what their peers wear so as to remain young, fashionable and attractive. Thus, it could also be concluded that the youthful expectant women in Kenya experience problems of fit, sizing and comfort from the maternity wear selected.

6.3 RECOMMENDATIONS

6.3.1 Fashion Designers and Marketers

Fashion design institutions and organizations should offer training to fashion designers and marketers in maternity wear on views on physiological and psychological changes and their influence on maternity wear selection among expectant women. This would aid them in giving advice to expectant women on selection of maternity wear that is fitting, comfortable and fashionable and in relation to their physiological and psychological changes. On the other hand they will also be in a position to design and sell maternity wear that can make the young expectant women look young, fashionable and attractive. This will as a result reduce the gap in knowledge on dressing and adorning the pregnant body.
6.3.2 Ante-Natal Clinics

The ante-natal clinics in Kenya should consider including lessons on expectant women’s views on physiological and psychological changes and their influence on maternity wear selection in their program. This will help the Kenyan young expectant in understanding and accepting these changes.

6.3.3 Further Research

Since there is limited research in Kenya regarding dressing and adorning young expectant women, the researcher recommends further study on this work: in any hospital and county apart from Kenyatta Hospital in Nairobi County, among expectant women who are 36 years and above, expectant women who do not attend ante-natal clinics on any county and an observation of fewer respondents through trimester one, two and three using a body scanner.

This study focused on views of young expectant women on physiological and psychological changes and their influence on maternity wear selection at KNH, Nairobi. Future research should consider looking at physiological and psychological changes during pregnancy and their influence on maternity wear selection.
REFERENCES


Komarkova, P. & Glombikova, V. (2013). The Effect of Anatomical Changes in the Female Body During Pregnancy on Pattern Designs for Maternity Wear. Technical University of Liberec, Department of Clothing Technology, Liberec,


APPENDICES

APPENDIX A: INFORMED CONSENT

INFORMED CONSENT

My name is Nelima Barasa. I am a Masters student Kenyatta University. I am conducting a research on *Expectant Women’s Views on Physiological and Psychological Changes and their Influence on Maternity Wear Selection at Kenyatta National Hospital, Nairobi, Kenya*. The information will be used by medical practitioners, fashion designers, and business people in maternity wear and counselors in giving advice to expectant women on how to select maternity wear that is comfortable, fitting and fashionable. Expectant women will also understand their views on physiological and psychological changes and their influence on maternity wear selection.

**Purpose of the Study**

The purpose of this study is to determine the views of young expectant women on physiological and psychological changes and their influence on maternity wear selection.

**Procedures to be Followed**

In the presence of the nurse on duty the researcher will explain the purpose of study and the process of which the participant will take part. The researcher will then ask the participant to affirm whether they want to take part or not. Then the consent form will be given to the participant to read and understand. Those who agree to the consent form will participate in the study. Participation in this study will require that I ask you questions and also take your body measurements, take your weight and observe you to determine your physical and psychological body changes during this time. I will record the information from you in an interview schedule. With the help
of the nurse on duty, I will take your body weight and use your personal file to get your demographic characteristics that will be used to fill the questionnaire.

You have the right to refuse participation in this study. You will benefit from the results gotten from the study even if you agree to participate in the study or not and your decision will not change the care you receive from the hospital.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time.

You are free to decline to respond to any question and you may stop an interview at any time. You can also stop being in the study at any time without any consequences to the services you receive from this hospital or any other organization now and in the future.

Some of the questions you will be asked are on personal subjects and may be embarrassing or make you uncomfortable. If this happens, you may decline to answer these questions if you so choose. You may also stop the interview at any time. The interview may add approximately half an hour to the time you wait before you receive your ante-natal services.

**Risks**

If you participate in this study you will be subjected to some questions that may be too personal and private. Your body measurement and weight will also be taken and you will be required to stay in the hospital 30 minutes more that your usual time. In case you are threatened emotionally, you will be at liberty to choose not to
participate. However all information you give will be treated as confidential and only be used for the study.

**Benefits**

If you participate in this study you will help us to acquire knowledge about the expectant women’s views on physiological and psychological changes and their influence on maternity wear selection. You will also benefit from gaining knowledge and understanding on the area under study. This will help you in selecting maternity wear that is comfortable, fitting and fashionable.

**Reward and Compensation**

If you agree to participate in this study, you will be free to call the principal investigator to receive free consultation on the area under study. Since the study is purely academic participation will be purely voluntary and no monetary compensation will be given.

**Confidentiality**

The filling of questionnaires and contacting of interviews will be done in a private room within the hospital in the presence of the nurse on duty. Your name will not be recorded anywhere on the questionnaire or interview schedule. All information given by you will be kept private.

**Voluntary Participation**

Participation in this study is voluntary. You will not be penalized in case you choose not to participate.
Alternative Study Participation

You will be allowed to participate in any other study that fits your criteria in case you choose not to participate in this one.

Contact information

If you have any questions you may contact Dr. Rose Otieno on otieno.rose@ku.ac.ke or Dr. Lydia Kinuthia on lydiankatha@yahoo.com or the Kenyatta University Ethics Review Committee on ercku2008@gmail.com.

Participant’s Statement

The above information regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study any time. I understand that I will get the same care from the hospital and benefit from the study whether I decide to leave the study or not.

I have read all the information and conditions and agree to take part in this study.

All the information and conditions regarding this study have been explained to me and I agree to take part.

Name of participant

_____________________________  ______________________
Signature or Thumbprint            Date
Parents/ Carer Statement

I have read the information and conditions of this study and I give permission for my child to take part. All the information and conditions of this study have been explained to me and I give permission for my child to take part.

Name of Parent/ Carer

__________________________  ______________________
Signature or Thumbprint   Date

Investigator’s Statement

I, the undersigned, have explained to the volunteer in a language she understands the procedures to be followed in the study and the risks and benefits involved.

Name of Investigator

__________________________  ______________________
Interviewer Signature   Date
APPENDIX B: INTERVIEW SCHEDULE WITH EXPECTANT MOTHERS

Introduction:
Hallo. My name is Nelima Barasa. I am a Masters Student at Kenyatta University Department of Fashion Design and Marketing. I am conducting a study about Expectant women’s views and feelings on physical and emotional changes and their influence on maternity wear selection. I am requesting that you answer the following questions of which these responses will be confidential and only utilized for this research purposes. There is no right or wrong answers. Thank you.

Section A: Views on Physical Body Changes
1. What physical changes have you experienced during this pregnancy? Please explain.
2. What are your positive and negative thoughts or feelings regarding these physical changes? Please explain.
3. How do these views influence your maternity wear selection? Please explain.

Section B: Views on Psychological Changes
4. The following are emotional feelings experienced by young expectant women during pregnancy. State and explain whether you have experienced any of these feelings.
   i. Joy
   ii. Anxiety
   iii. Stress
   iv. Depression
   v. Fear
5. Are you happy or unhappy with the emotional changes you experienced in No.4 above? Please explain.

6. How does your feeling in No.5 above influence your maternity wear selection?

Section C: Physiological and Psychological Changes that Influence Maternity Wear Selection

7. Does change in your body figure influence your maternity wear selection? Please explain.


11. Are you influenced by joy in selecting maternity wear? Please explain.


13. Are you influenced by depression in selecting maternity wear? Please explain.


15. What aspects of maternity wear selection were a result of change in body and emotional feeling?
Section D: Socio-economic Factors that Influence Maternity Wear Selection

16. The following are financial issues that influence maternity wear selection. Please state and explain whether you were influenced by each one of them in selecting maternity wear?

   i. Availability of money
   ii. Amount of income in a month
   iii. Cost of item.

17. The following are financial issues that influence maternity wear selection. Please state and explain whether you were influenced by each one of them in selecting maternity wear.

   i. Marital status
   ii. Level of education
   iii. Age
   iv. Religious norms and beliefs
   v. Ones values

18. How were you affected by the financial and societal factors in selecting your maternity wear?

Section E: Dress Features that Influence Maternity Wear Selection

19. Does garment size influence the way you select your maternity wear? Please explain.


22. Does texture influence the way you select your maternity wear? Please explain.

23. Do design features on maternity wear influence your maternity wear selection? Please explain.

24. What dress features do you prefer or not prefer on your maternity wear and why?
APPENDIX C: QUESTIONNAIRE

Hallo. My name is Nelima Barasa. I am a Masters Student at Kenyatta University Department of Fashion Design and Marketing. I am conducting a study about Expectant women’s views and feelings on physical and emotional changes and their influence on maternity wear selection. I am requesting that you answer the following questions of which these responses will be confidential and only utilized for this research purposes. There is no right or wrong answers. Thank you.

Section A: Demographic Characteristics

1. What is your marital status?
   (a) Married
   (b) Single
   (c) Divorced

2. How many children do you have?
   (a) None
   (b) One
   (c) Two
   (d) Three and above

3. How old is your pregnancy in weeks?

4. What is your occupational category among the following?
   (a) Self employed
   (b) Employed (please specify)
   (c) House wife
5 What is your monthly average income?

(a) Below Ksh 10,000
(b) Ksh 10,001-Ksh 20,000
(c) Ksh 20,001-Ksh 30,000
(d) Ksh 30,001 and above

6 What is your religion?

(a) Christian
(b) Islam
(c) Hindu
(d) Others (please specify)

7 What is your education level?

(a) A level and below
(b) Certificate
(c) Diploma
(e) Bachelor’s degree
(f) Masters and above
APPENDIX D: APPROVAL FROM KENYATTA NATIONAL HOSPITAL ETHICS REVIEW COMMITTEE

Dear Barasa,

Research proposal: Expectant women’s views on physiological and psychological changes and their influence on maternity wear selection at Kenyatta national Hospital, Nairobi, Kenya (P360/06/2014)

This is to inform you that the KNH/UoN-Ethics & Research Committee (KNH/UoN-ERC) has reviewed and approved your above proposal. The approval periods are 10th September 2014 to 9th September 2015.

This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH/UoN ERC before implementation.
c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH/UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH/UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (Attach a comprehensive progress report to support the renewal).
f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
g) Submission of an executive summary report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/or plagiarism.

For more details consult the KNH/UoN ERC website [www.uonbi.ac.ke/activities/KNHUoN].

Protect to Discover
APPENDIX E: APPROVAL FROM KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE

Barasa Nelima
Kenyatta University
P.O. Box 45844 -00100, Nairobi.

APPLICATION NUMBER PKU/COMM/51/427 – “EXPECTANT WOMEN’S VIEWS ON PHYSIOLOGICAL AND PSYCHOLOGICAL CHANGES AND THEIR INFLUENCE ON MATERNITY WEAR SELECTION AT KENYATTA NATIONAL HOSPITAL NAIROBI, KENYA” – VERSION 2

Dear Barasa,

1. IDENTIFICATION OF PROTOCOL
The application before the committee is with a research topic, “Expectant Women’s views on Physiological and Psychological changes and their influence on Maternity wear selection at Kenyatta National Hospital Nairobi County, Kenya.” of version 2 received on 11th February 2015.

2. APPLICANT
Barasa Nelima

3. SITE
Kenyatta National Hospital, Nairobi County, Kenya.

4. DECISION
The committee has considered the research protocol in accordance with the Kenyatta University Research Policy (section 7.2.1.3) and the Kenyatta University Ethics Review Committee Guidelines AND APPROVED that the research may proceed for a period of ONE year from 10th March 2015.

5. ADVICE/CONDITIONS
i. Progress reports are submitted to the KU-ERC every six months and a full report is submitted at the end of the study.
ii. Serious and unexpected adverse events related to the conduct of the study are reported to this board immediately they occur.
iii. Notify the Kenyatta University Ethics Committee of any amendments to the protocol.
iv. Submit an electronic copy of the protocol to KUERC.

When replying, kindly quote the application number above.

If you accept the decision reached and advice and conditions given please sign in the space provided below and return to KU-ERC a copy of the letter.

PROF. NICHOLAS E. GIKONYO
CHAIRMAN ETHICS REVIEW COMMITTEE

I accept the advice given and will fulfill the conditions therein.

Signature
Dated this day of 2015.

cc. Vice-Chancellor
APPENDIX F: RESEARCH PERMIT FROM NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

This is to certify that:

MS. NELIMA ZIPPORAH BARASA
of KENYATTA UNIVERSITY, 8916-100
NAIROBI, has been permitted to conduct research in Nairobi County.

on the topic: EXPECTANT WOMENS VIEWS ON PHYSIOLOGICAL AND PSYCHOLOGICAL CHANGES AND THEIR INFLUENCE ON MATERNITY WEAR SELECTION

for the period ending:
11th December, 2015

Applicant's Signature

REPUBLIC OF KENYA
National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 5422
CONDITIONS: see back page

[Signature]

Director General
National Commission for Science, Technology & Innovation

NACOSTI
National Commission for Science, Technology and Innovation

Permit No: NACOSTI/P/15/9143/5928
Date Of Issue: 18th June, 2015
Fee Received: Ksh 1,000