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ANXIETY IN FIRST-TIME BIRTHING MOTHERS

A Systematic Literature Review

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Substantial attention has been paid regarding the topic of anxiety in pregnancy. Numerous studies have been explored about its impact on the offspring, and considerable evidence shows that when pregnant women are exposed to significant stress or anxiety, there is a high risk for obstetric complication, affecting the fetal and neonatal well-being and behavior. With regards to the prevalence of anxiety in pregnancy and its harmful effects, the importance of knowing what is causing it is a necessity, especially among first time birthing mothers. Hence, the purpose of this thesis was to describe anxiety in first-time birthing mother. In this thesis, the author wanted to investigate the contributing factors of anxiety in first-time birthing mother. This thesis aimed to produce information that can be used by health care professionals or even nursing, midwife, and public health nurse student who will be dealing with first-time birthing mothers.

The qualitative research method was used in this study and considering that the subject involved in this study allows appraisal, retrieval, and summarization of all evidence-based data, a systematic literature review was undertaken. PUBMED, EBSCO, and Cochrane Library were used in the collection of data. Collected eligible data were written in English and were analyzed using inductive content analysis method. This study found that fear, worries, and concerned related to the baby, mother, childbirth, and lack of guidance from health care professional described the anxiety in first-time birthing mothers.

Health care professionals have a vital role in guiding patients for they are the entrusted individual with the obligation to guide and help. Health care professionals in health care settings must acknowledge the mother´s feelings and experiences so that a better approach and screening can be given to provide better patient-centered guidance in order to promote a good quality of care.

Key words: First-time; Pregnancy; Anxiety

CONTENTS

FOREWORD

I want to express my special thanks of gratitude to my teacher Kauppila Hannele and Mikkola Anja for the professional guidance I received to finish this work. Secondly, I would also like to thank my family who gave me support and inspiration. Lastly, I would like to thank the Lord Almighty for the grace and strength He gave me to complete the thesis.

To God be the Glory!

1 INTRODUCTION

Substantial attention has been paid regarding the topic of anxiety in pregnancy. Numerous studies have been explored about the impact of prenatal maternal anxiety on the offspring, and some considerable evidence shows that when pregnant women are exposed to significant stress, anxiety, or depression, there is a high risk for obstetric complication, affecting the fetal and neonatal well-being and behavior (Alder, Fink, Bitzer, Hosli & Holzgreve 2007). A recent study found that anxiety in pregnancy is positively related to an increase of preterm birth and low birth weight, increase the risk of preeclampsia, increase the risk of prolonged gestation, possible result in loss of fetus and other possible associated disorder, especially for first-time birthing mothers. In addition, women who have experienced a high level of anxiety during pregnancy are more likely to develop postpartum depression (Ding et al. 2014; Kurki, Hiilesmaa, Raitasalo, Mattila & Ylikorkala 2000; Sanchez, Puente, Atencio 2013; Skouteris, Wertheim, Rallis, Milgrom & Paxton 2009; Qiao, Wang & Li 2012).

According to the World Health Organization (WHO), one of the common mental health problems is depression and anxiety among pregnant women. A study shows that there is about 10% of pregnant women and 13% who has given birth worldwide who are affected by depression and anxiety (WHO, 2008). In addition there are 5% to 18% of babies who are born preterm across 184 countries, and an estimated total of 15 million babies who are born preterm (before 37 completed weeks of gestation) every year and that this number is still rising (WHO, 2016; Blencowe H et al. 2012). With regards to the prevalence of anxiety in pregnancy and its harmful effects, the importance of knowing what is causing or contributing it is a necessity especially among first time birthing mothers. Emmanuel & St John (2010) stated in their research that having a clear idea in regards to maternal anxiety or gaining knowledge of what a mother is feeling during pregnancy is essential for it can give a comprehensive way in understanding mothers during their transition period to motherhood. Therefore, the purpose of this thesis is to describe anxiety in first-time birthing mother. In this thesis, the author wanted to investigate the contributing factors of anxiety in first-time birthing mother. This thesis aim to produce information that can be used by health care

professionals or even nursing, midwife, and public health nurse student who will be dealing with first-time birthing mothers.

2 ANXIETY

Anxiety is defined as the anticipation of a future situation; it is distinguished from fear, the emotional response to a real or perceived impending threat. Anxiety carries the feeling of being uneasy, being nervous or being anxious to a future situation, with accompanying physical symptoms such as tension, sweating, and an increase in heart rate or an increase blood pressure. A professor of psychiatry Joseph Lévy-Valensi (1879-1943) interpret anxiety as a dark and distressing feeling of expectation involving the psychological and cognitive aspects of worrying. Anxiety is considered to be a healthy feeling or emotion; it is said to be the body's adaptive response to uncertainty, trouble or sense of being unprepared which promotes survival by encouraging a person to stay away from dangerous places or situations (Crocq 2015).

Anxiety is differentiated into two types; Trait and state anxiety. The difference between the two is that trait anxiety reflects ones individual's personality response when facing a threatening situation, while state anxiety is a state of agitation, a sense of worrying and anxiousness in response to a threatening demand or danger (Schwarzer 1997). Anxiety is reported to be two to three times common in women than men from ages 20 to 45 years old (Smith 2008, 38). There is four levels of anxiety mild, moderate, severe and panic (Videbeck 2004, 268-270).

Anxiety is a response to stress. Stress is the wear and tear that life causes on the body (Selye, 1956). Stress can occur when a person is dealing with life situations or problems. Each person handle stressful situation differently; for instance, some people feel that speaking in public is scary, but for some people it is enjoyable to experience. Some are nervous having children, getting married, being pregnant, giving birth and other stress causing events. Hans Selye (1956, 1974) assessed the physical body

responds to real or perceived stressors, and he determined that there are three stages of reaction to stress. The alarm reaction stage where the body sends a message to the brain to prepare for possible defense needs. Then the resistance stage was the body defend by fight, flight or freeze behavior depending on the individual reaction example if the person can adjust to a different situation or condition the body responses will relax and vice versa. Last is the exhaustion stage, and this occurs when the person has responded to anxiety and stress negatively. Anxiety has both healthy and harmful effect depending on its degree and how well the person handle it (Videbeck 2004, 268-270).

3 FIRST-TIME BIRTHING MOTHERS AND PREGNANCY

First-time birthing mother is basically a woman who has never been pregnant nor given birth before, and then gets pregnant for the first time and will give birth for the first-time. The exact terms use Nulligravida; a woman who has never been pregnant. Nulliparous; a woman who has never been given birth. Primigravida; a woman is pregnant for the first time. Primipara; a woman who has completed one pregnancy with a fetus who have reached the stage of fetal viability and is giving birth for the first-time (Bobak, Jensen, & Zalar 1989, 199; Madhavanprabhakaran, Melba & Karkada 2015; Preis, Eberhard-Gran & Garthus-Nieget 2018).

Pregnancy is described as the most captivating and groundbreaking chapter of a woman’s life, especially, the time of first pregnancy where it said to be the most crucial or momentous transition period — a woman’s transition to motherhood (Broden 2006). Generally, pregnancy is viewed as a time of fulfillment and joy; however, sometimes joy of pregnancy can be overshadowed with stress, fear and anxiety related to the course of pregnancy and childbirth (Waqas et al. 2015; Webb Nathalie 2017). During pregnancy, women may experience many changes involving physiological, psychosocial and emotional because of the hormonal changes that are happening in their body (National Collaborating Centre for Women's and Children's Health UK 2008).

Pregnancy is the period in which an embryo or fetus develops inside a woman's womb or uterus. It usually lasts about 40 weeks (280 days), or just over nine months, as measured from the last menstrual period to delivery. Most women do a home pregnancy test (HPT) to determine their pregnancy status (Eunice Kennedy Shriver National Institute of Child Health and Human Development 2017). Pregnancy can happen through sexual intercourse or assisted reproductive technology such as frozen embryo transfer (FET), in vitro fertilization treatment/intracytoplasmic sperm injection (IVF/ICSI) (Zhao et al. 2016).

The most common signs of pregnancy are the absence of a menstrual period, nausea and breast changes. According to the American Pregnancy Association, there are 29% of women reported a missed period as the first sign of their pregnancy, 25% indicated nausea as a first sign, 17% reported that a breast change was their initial symptom of pregnancy and 3% of women revealed implantation bleeding as their first sign of pregnancy (American Pregnancy Association 2018). Other frequent pregnancy symptoms commonly experienced by those who are pregnant are reported as follows: tiredness or fatigue, backaches, headaches, frequent urination, food cravings or food aversions, darkening of the Areolas and mood swings (American Pregnancy Association 2018).

Pregnancy is divided into three trimesters. The first trimester is from week one to twelve; this includes conception in which the sperm fertilizes the egg, then fertilized egg travel down to the fallopian tube and into the uterus, where it implants into the uterine wall. The fertilized egg is named a zygote, and it is composed of a bunch of cells that later develop into a fetus and the placenta. The placenta is a connection between the mother and the fetus, it provides the nutrients and oxygen to the fetus. The second trimester starts from week thirteen to week eighteen, during these weeks baby's organ become fully developed and the baby will begin to move around, and the baby is developing a waking and sleeping cycle. Also, around these weeks congenital disabilities and baby's gender can also be check through ultrasound. The third trimester is from week twenty-nine to forty. During these weeks the baby is growing

continually, gaining more weight in preparation for the delivery. The baby who will be born between 34-37 weeks is considered preterm in which the baby is at an increased risk of problems such as developmental delays, vision and hearing problems, and cerebral palsy. Week 39 or 40 is considered the full term; babies who are born during this week have better health outcomes. Week 41 is considered late-term and 42 weeks and beyond are considered post-term. Week 39 or 40 is the best week to deliver a baby because it gives the baby's lungs, brain, and liver time to fully develop (Eunice Kennedy Shriver National Institute of Child Health and Human Development 2017).

During pregnancy, each part of baby' body develop at a specific period, and during each period the baby's body can be susceptible to damage caused by medication for example or tobacco or drug use or any other harmful exposures such as stress or anxiety to name a few. The period is called the "critical period of human development." according to the teratogen chart, starting from the beginning of pregnancy at around week three to week nineteen is the most highly sensitive and critical period, and around these periods most congenital disability could happen (see Figure 1.) (Bobak, Jensen, & Zalar 1989, 177).

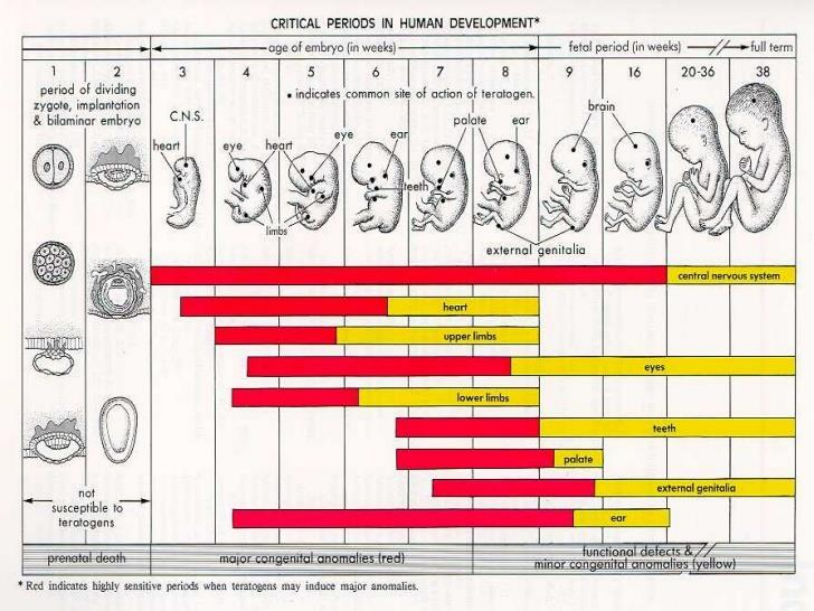

Figure 1. Critical period of human development (Bobak, Jensen, & Zalar 1989, 177).

3.1 Pregnancy physiological changes

Many changes occur during pregnancy affecting every system in the body. These changes are designed to support fetal growth and development and also preparing the woman for birth and motherhood. The woman's body undergoes many transformations due to the stimulation of hormones estrogen and progesterone (Marshall & Raynor 2014, 143).

The uterus grows to 15 times their pre-pregnancy length during conception. The uterus expands by distension due to the mechanical effect of the growing fetus. The uterus plays a vital role in pregnancy by stretching and expanding to accommodate and nurture the developing fetus. The vagina also increases in blood flow resulting in a bluish-purple coloration known as Chadwick's signs. At the end of the pregnancy, the vagina becomes more elastic, and the cervix will soften and dilate in preparation for childbirth (Bobak, Jensen, & Zalar 1989, 200). Also, due to a high level of estrogen, an increase in vaginal discharge occurs, a thick white discharge known as leucorrhoea (Marshall & Raynor 2014, 143-148; Abraham & Oats 2010, 33-34). As the uterus increases its size, weight, shape, it also changes its position, and with this abdominal enlargement during pregnancy is apparent. The woman's breast becomes heavy and full as the pregnancy progress due to the growth of mammary glands. The nipple and areolae will become more pigmented, increase in size, pinkish and become more erect. Sebaceous glands called Montgomery tubercles will upper in the breast surrounding the nipples; this is what they call stretch marks on the breast (Bobak, Jensen, & Zalar 1989, 200-204; Abraham & Oats 2017, 35-36).

Furthermore, during pregnancy, the heart increases in size due to the continuous blood volume expansion. The heart is also shifted upwards and to the left due to the enlarging uterus which raises the diaphragm. The cardiac output increase from 30% to 50% by the third week of pregnancy and will decrease to 20% at forty weeks of pregnancy, the blood volume, stroke volume, plasma volume increases in order to fill the additional intravascular space created by the placenta and also to meet the

increased demand for oxygen. Also, total body water also increases. The blood volume increases at approximately 1500ml. The red blood cells increases but it depend on the iron amount available, mostly if the woman is under iron supplements red blood cells will increase to 30% to 33% and if an iron supplement is not taken it increases by only 17%. The white blood cells count also increase during the second trimester and are at a peak during the last trimester. The hemoglobin and hematocrit values will also decrease noticeably during the second trimester, that why during pregnancy if a woman's hemoglobin value drops to 10g/dl or less and also if hematocrit will drop 35% or less the women will be considered anemic. The pulse and blood pressure increase, in between 14 to 20 weeks of pregnancy the pulse slowly increases about 10 to 15 beats per minutes, on the other hand, the increase in blood pressure varies in on the position of the woman. When a woman is at sitting position blood pressure is at the highest and lowest when at lying down position. However, during the first half of pregnancy both systolic and diastolic pressure decreases at around 5 to 10 mmHg. Despite the increase in heart size and all, these changes are reversible after pregnancy (Bobak, Jensen, & Zalar 1989, 205; Marshall & Raynor 2014, 149-156; Abraham & Oats 2010, 33-34; Abraham & Oats 2017, 36-38).

During pregnancy in general with other blood vessels, the veins of the leg become enlarged. The veins are affected during late pregnancy due to the obstruction to venous return caused by the higher pressure of blood returning to the uterus and mechanical pressure of the uterus on the vena cava, and this is why some women have varicosities during pregnancy. Moreover, the smooth muscles in the renal pelvis, ureters, and bladder relax, because of these a pregnant woman may experience bladder irritability and nocturia during the early pregnancy. Also, some degree of urinary incontinence may experience since the muscles of internal urethral sphincter relax, and there is also a pressure of the uterus on the bladder. Fluid retention also happens during pregnancy because of the reduced blood flow back to the heart, and this may lead to edema or swelling in face or limbs. Edema happens typically during the second trimester (Bobak, Jensen, & Zalar 1989, 207; Abraham & Oats 2010, 34-35; Abraham & Oats 2017, 38).

During pregnancy women mostly complained of heartburn, nausea, and vomiting due to the restricted movement of the diaphragm; this happens during the third trimester. Women also experience shortness of breath, and this is because the growing baby presses the mother's lungs (Bobak, Jensen, & Zalar 1989, 207; Marshall & Raynor 2014, 161-163; Abraham & Oats 2010, 34-35; Abraham & Oats 2017, 38).

There are also changes in metabolism, during pregnancy, the gut provides better absorption of nutrients, and there is a reduction of muscles tone and thyroid activity; hence it slows the metabolism of a pregnant woman. Because of this woman experience nausea and constipation. Weight gain also happen during pregnancy because the body adapts to preserve and nourish the growing fetus, a pregnant woman is expected to gain weight at around 9-12 kilograms, this includes the weight of the uterus, placenta, the amniotic fluid, fetus, breast (glandular tissue), blood, fat deposited, and extracellular fluids (Marshall & Raynor 2014, 164-165; Abraham & Oats 2010, 35; Abraham & Oats 2017, 37-39).

As influenced by estrogen and progesterone the gum may become "spongy.". Pregnant women may experience bleeding and tender gums. Some skin changes also happen like the brown pigmentation in the belly called chloasma or mask of pregnancy. Around 50% to70% of pregnant women are affected by chloasma. This pigmentation appears at the beginning of pregnancy and will gradually increase by the end of delivery, however, this will fade after giving birth. The linea negra, it is a pigmented line in the belly extending from pubis to the top of the fundus — the striae gravidarum or stretch marks which appear during the second half of pregnancy. The women's belly stretches during pregnancy, and this stretching may cause some sensation like itching. This stretch marks will usually fade through times, but they never disappear entirely. Thinning and softening of the fingernails and toenails also happen during pregnancy, although not all pregnant women experience this. Moreover, Oily skin and acne may also occur to some women. Also, an increase in fine hair growth may occur; they usually disappear after pregnancy (Bobak, Jensen, & Zalar 1989, 208-209; Abraham & Oats 2017, 38).

There is also an alteration of posture and walking during pregnancy; this is because of the gradual change of the body and also because of the increased weight. As the baby grows, the belly becomes rounder and the center of the gravity of a pregnant woman shift forward. This is the reason why walking is a bit difficult for them. Additionally, because the women carry her weight as she walks or stands, the ligament and muscular structures of the mid and lower spine will be severely stressed. These and other changes often cause some discomfort to pregnant women; they often complain of lower back pain or leg cramp. Also, during pregnancy, the muscles of the abdominal wall stretch and lose some tone; for this reason, there is a possibility that the muscles will separate; this separation is called diastasis recti. The diastasis recti usually occur during the third trimester of pregnancy (Bobak, Jensen, & Zalar 1989, 209-210; Marshall & Raynor 2014, 167).

3.2 Pregnancy psychological and social changes

Pregnancy is a transition that involves a massive change. A woman goes through several physical changes as well as emotional changes. Without a doubt, pregnancy is a time of great joy. However, it is also important to remember that during pregnancy, the pregnant woman's body produced a hormone that will affect her emotions. According to a study, a woman will experience emotional fluctuations throughout the different stages of pregnancy (Newhan & Martin 2013).

During pregnancy, some women have a mood swing; the hormonal disturbances strongly influence this. The changes in estrogen, progesterone, and stress hormones levels bring havoc to the emotional well-being of a pregnant woman. Mood swings happen during the first trimester of pregnancy; some women have this alteration of behavior, on how they see and perceive things, they can be mad, sad, or happy. During the pregnancy, some women may have a feeling of anxiety or fear because they are scared to lose the baby or to have a miscarriage. It is said that this feeling is a mother’s instinct to protect the baby. They fear about various things that trigger their mind to be anxious, like parental concerns and labor anticipation. Aside from mood

swings, a pregnant woman can also experience mental fatigue in some reasons like, for example, nausea and vomiting makes the woman feel tired. The progesterone hormone also affects the sleep pattern of the pregnant woman. Aside from that during pregnancy, a woman can also experience iron deficiency so tiredness can also be experienced. Moreover, as the pregnancy progress, the uterus and the baby are getting bigger, it becomes heavy, and this affects the mother also to feel tired and have sleepless nights. Most pregnant women also experienced body changes issues, as the pregnancy progress, an increase in weight happens, and even body change such as expanding tummy and losing in shape and some physical discomfort may arise. Although not all women response to body change and discomfort negatively, some does. Some women feel self-conscious, and these feelings them and can lead to low self-esteem (Bobak, Jensen, & Zalar 1989, 219-223; Eden, 2006).

To first-time birthing mother, the pregnancy is said to be the stage of change within two lifestyle or events of being: the woman without a child and the woman with child." Furthermore, during pregnancy, a woman is engaging in maternal adaptation, where she is now moving from only caring herself to being committed to a life-long concern and caring for another human being. Moreover, it is said that the identification of the motherhood role varies for each woman, like for example for some pregnancy and caring for a child is considered to be one of the most important goals in their lives; however, other may not seem like that. Some women have always wanted a baby. This motivation is said to be affecting the acceptance of pregnancy, eventual prenatal, and parenteral adaptation positively. Some women are not ready to become a mother or a parent yet, and this affects them psychologically. A woman's reaction to the confirmation of her suspension of pregnancy may vary from great delight to shock, disbelief, and despair. Moreover, according to study, the health of the pregnant woman, age, and the woman's psychological preparedness for motherhood significantly affect the emotional experience of the woman during pregnancy — also the social support provided by family and friends. As the expectant mother experience considerable psychological changes, physical, emotional, and social support is also what they need. The help from family and loved ones are essential. The husband or partner role is vital. (Bobak, Jensen, & Zalar 1989, 218-219; Tyrlik, Konencny, & Kukla 2013).

4. CHILDBIRTH

Childbirth is also known as labor and delivery. It is the peak of the pregnancy where the baby, the placenta and membranes are expelled from the uterus. During labor, a series of a coordinated and spontaneous uterine contraction happen, including the voluntary bearing down efforts made by the pregnant woman which result in delivery or expulsion of the fetus, placenta and membranes (Bobak, Jensen, & Zalar 1989, 333-335; Marshall & Raynor 2014, 328). Furthermore, it is also described that childbirth is one of life's most intense experience a woman can go through; the pain of childbirth is said to be the most intense. A painful and fearful process and conjointly with the other hormonal changes happening during pregnancy it will undoubtedly arise a worry, fear, or anxiety among first-time mothers (Ogliboli-Nwasor & Adaji 2014; Askari, Atarodi, Torabi & Moshki 2014).

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During childbirth most women will experience painless and irregular uterine contraction weeks before labor. During this time the fetal head drops into a lower position of the woman's pelvis; known as "lightening" which means the baby's head is down in preparation of the birth. A pregnant woman may also experience an increase in vaginal mucus discharge, and as the baby's head drop there is increased pressure in the pelvis and by this women also experience some constipation and the urge to urinate frequently (Abraham & Oats 2017, 72; Helsinki University Hospital 2019). The sign that a pregnant woman is going on labor is when her water breaks and there is a presence of regular and spontaneous contractions of 5-10 minutes intervals. Normal labor starts two weeks before or after the estimated date (Helsinki University Hospital, 2019). World Health Organization (WHO, 1999), defined normal labor as one that is spontaneous in onset, low-risk throughout, the fetus is in the vertex position, and after birth, the mother and the infant are in good condition (Marshall & Raynor 2014, 328).

Some factors affect the process of childbirth. The first factor is the fetal head size and position. Second is the shape of the mother's pelvis and cervical dilation and the distension capacity of the pelvic floor, and the opening of the vaginal canal. The third

is the intensity and duration and frequency of the uterine contractions, and the bearing down efforts. Fourth is the position of the woman, either standing, walking, side-lying, squatting, hands and knees positions. The last factor is the emotional readiness, preparation, support system and environment (Bobak, Jensen, & Zalar 1989, 335).

In childbirth, a woman can choose where and how they give birth. The current choices for women are; prepared participatory childbirth, actively managed childbirth, elective cesarean section, and home birth. In the prepared participatory childbirth approach the parents or the woman and her partner must do a childbirth training, so they learn about the process of childbirth. In this approach, the labor is managed by the trained staff. Prepared participatory childbirth can be done in a standard hospital delivery room or birthing homes. The actively manage childbirth is involved in intentional rupturing of the membrane or intentionally breaking the amniotic sac to start the labor, this process obligates the woman to dilate for about one centimeter per hour, and after this, vaginal examinations are made every 2-4 hours. If the woman's progress is slow, a diluted oxytocin infusion is given, to increase the contraction of the womb. The oxytocin is given if there is only a single fetus present as a vertex present and there is no sign of fetal distress. This actively managed childbirth approach is usually practiced to first-time birthing mothers, but some repeaters mothers are also given at times (Abraham & Oats 2017, 70-72).

The elective cesarean section is a process where the pregnant women request for the cesarean section to happen. Notably, there is an increasing number of women whose age over 35 years old wished to deliver via cesarean section. For some women their reason is related to pain in labor and for others to avoid any risk of pelvic floor damage during labor. Doctors can also suggest having planned or elective cesarean section to a pregnant woman for various reasons, example if the baby is in an abnormal position, the mother has a health problem, or the baby or mother have medical complications, or the mother is carrying more than one baby (Helsinki University Hospital 2019). The last choice of giving birth is home birth. According to research in the United Kingdom, there are 45% of first-time birthing mothers who wished to give birth at home; these mothers are healthy low-risk women. Women who chose to give birth at home must

be screened for any medical or obstetric abnormality and also they must have an experienced midwife with them (Abraham & Oats 2017, 71).

4.1 Childbirth stages

There are three stages of labor. The first stage is the time of the onset of real labor, the stage where dilation of cervix happens from 0-10 cm or full dilation. The first stage of labor is said to be the longest, and it is classified into three phases; the early labor phase, where the time of real onset labor to dilation of the cervix up to 3 cm. The active labor phase, the dilation of cervix continues from 3 cm up to 7 cm. The last phase is the transition phase is when dilation of cervix continues from 7 cm up to 10 cm or fully dilated. The second stage is when the cervix is fully dilated to 10 cm, following the delivery of the baby. The third stage is the placenta delivery (Abraham & Oats 2017, 74-82; American Pregnancy Association 2017).

The duration of labor is different in each stage. Longer delivery hours are expected in 90% of first-time birthing mothers than those women who give birth many times. In first-time birthing mother, the first stage can take up to 2 to 12 hours or up to 20 hours of labor, in comparison to the woman who gave birth many times who only take up to 1 to 9 hours to 14 hours of labor during the first stage. In the second stage in first-time birthing mother could take from 1 to 2 hours and at the third stage 15 to 30 minutes or even longer. In contrast, women who experience giving birth many times at their second stage it will only take 1 hour to 1.5 hours and on their third stage 5-30 minutes roundabout. However one must remember that labor and delivery are special and unique and that no labor and delivery is the same, that not all women experience the same way (Abraham & Oats 2017, 74; American Pregnancy Association, 2017; Bobak, Jensen, & Zalar 1989, 348; Marshall & Raynor 2014, 329-330).

4.2 Childbirth management

Upon labor admission, the nurse or midwife must check or review the prenatal records of the patient in order to gain knowledge about the patients before the childbirth begin. Knowing the patient helps the nurse to guide or assess the patients during labor. Aside from reviewing or checking patients record nurses or midwives can also interview the patient, do physical examination like examining the abdomen, checking the fetal position, size, and presentation using Leopold maneuvers. The presence and rate of the fetal heart sound must also be noted as well as the location for auscultation. Moreover, the initial estimation of frequency, duration, and strength of contraction must also be recorded. A laboratory test to patients must also be done like a urine specimen sample must be collected to check for the presence of protein and glucose, and a blood sample must also be taken for a CBC and blood typing. The maternal blood pressure, heart, and respiratory rate, and weight are also recorded. The presence or absence of edema must also be noted (Bobak, Jensen, & Zalar 1989, 381; Brown 2017). During admission, the patient's is under constant observation until delivery. If the patient's labor is active, the patient must be advised not to eat or to eat a small amount; this is to prevent possible vomiting and aspiration during delivery or in case emergency delivery with general anesthesia. During this time an IV infusion of Ringer's lactate may also be started, around 500-1000 ml, this infusion is to prevent dehydration, subsequent hemoconcentration and to maintain an adequate circulating blood volume during labor (Brown 2012).

The midwives together with other health care team play an essential role in supporting the woman during childbirth. The unity and teamwork between the woman and her health care team are also vital especially in doing the decision making (Hodnett, Downe & Walsh 2012). Moreover, an accurate and detailed record of all care given during the first stage, including the careful administration and monitoring of any medicine is essential to the provision of quality care (Marshall & Raynor 2014, 361). During the first stage of labor, a patient must be made comfortable as possible and can choose whatever she wanted to do, example if the patient wanted to remain in bed, sitting, standing or walking and so on. Health care professionals assess the

patient's progress by doing a physical examination of the cervix and not only that by also observing if there any changes in breathing, behavior, noises, and posture alongside with the changes in contraction. The most important during this stage is to check the maternal and fetal wellbeing continuously. The maternal heart rate, blood pressure, and fetal heart rate are continuously checked by an electronic monitor or by intermittent auscultation. During this stage women mostly feel that they wanted to bear down already; however, they should not be allowed form doing so not until the cervix is fully dilated because if they bear down and not yet fully dilated, they are just wasting their time and energy. Women should not bear down at an early stage to avoid tearing of the cervix. As the labor progress, the contraction becomes more painful, and the woman may ask for an epidural anesthetic or more analgesics. To some woman back rubbing or massage help them endure the pain or changing position, including sitting up (Abraham & Oats 2017, 75-78; Brown 2017; Marshall & Raynor 2014, 338-345).

During the second stage of labor, the woman should be attended regularly, and the contractions must also be monitored by palpation or electronically, it should be recorded every 5 minutes of after every contraction. Also, the fetal heart sound should be continuously checked (Brown 2012). If fetal heart rate falls below 100 bpm and if its persist for about two minutes action must be taken right away to determine what is the cause. Moreover, the vaginal examination must also be done to make sure that the umbilical cord has not prolapsed. The position of the expectant mother should be taken into consideration because it also affects the fetal heart rate (Abraham & Oats 2017, 78).

Furthermore, during this stage active cooperation of the expectant mother is needed. The presence of the medical theme is also significant throughout the whole process; as they help and encourage the expectant mother to bear down with each uterine contraction and to relax in between. Also, the relationship between the expectant mother and the nurse or midwives are essential because they can also affect how the expectant mother perceived the pain of labor. During this stage, time, waiting and following the woman is the essential element of care. In this stage, the concept of patience, helping and encouraging the woman on her journey, giving meaning and

understanding to the pain of labor, is more important than anything else (Abraham & Oats 2017, 78; Marshall & Raynor 2014, 349).

During the third stage of labor, the delivery of the placenta happen. In this stage, there are two types of methods that can be done. The first method is the expectant (or physiological) care were the expulsion of the placenta and membranes are supported with normal, physiological mechanisms and no routine actions are used such as administration of uterotonic drug or clamping of the umbilical cord (Marshall & Raynor 2014, 398-399; Abraham & Oats 2017, 81). During this stage, the baby can be put into the mother's chest for skin-to-skin contact, and this close contact will stimulate the oxytocin release which may help shorten the third stage (Marin Gabriel et al. 2010). The woman must also be kept in a comfortable semi-upright position or 45-degree angle to encourage separation of the placenta (Marshall & Raynor 2014, 398). The second method is the active management which includes the administration of a uterotonic drug, for the precautionary measure aimed at reducing the risk of postpartum bleeding. The uterotonic is also known as oxytocics or ebonics drugs; an example is syntocinon, ergometrine, and prostaglandins. These drugs stimulate the small muscles of the uterus to contract so the placenta and membrane will come out. The application of the uterotonic drug is usually undertaken in conjunction with clamping of the umbilical cord shortly after the birth of the baby and delivery of the placenta, using the controlled cord traction. If postpartum bleeding is noted, attempts should be made right away to find out the reason. To find if the placenta has separated or not and also attempts should be made to deliver it if it has not separated, manual removal of the placenta can be done if the measures mentioned earlier will fail (Marshall & Raynor 2014, 400-402; Abraham & Oats 2017, 81-84).

The placental expulsion process may take 10 minutes to an hour to complete, with a median of 13 minutes (Begley 1990). According to Dombrowski et al. (1995), the frequency of hemorrhage increased between 10 minutes to 40 minutes after the birth of the baby (Marshall & Raynor 2014, 399). Following the expulsion of placenta and membranes, bleeding will usually stop. After labor and delivery, the inspection and repair of the genital tract and perineum will be performed (Abraham & Oats 2017, 84).

5 PURPOSE AND RESEARCH QUESTION

Research aim tells about the overall purpose of a project, while the objectives "purpose" tells about the tasks that need to be executed to meet the aims. Objectives usually described the details of a research aim or a `statement of purpose" (Maule, Aveyard & Goodman 2017, 128-129).

The purpose of this thesis is to describe anxiety in first-time birthing mother. In this thesis, the author wanted to investigate the contributing factors of anxiety in first-time birthing mother. This thesis aim to produce information that can be used by health care professionals or even nursing, midwife, and public health nurse student who will be dealing with first-time birthing mothers.

In developing the research question, the PICO's framework was used, (Problem, Intervention or Issue, Comparison or Context and Outcomes). PICO's structure is the most well-known tool that helps in the development of research questions (Maule et al. 2017, 127-128).

Research question: What kind of factors contribute to the anxiety in first time birthing mothers?

6 RESEARCH LIMITATION

This study excluded any health issues or circumstances that the treating personnel knows how to deal with as a standard practice. For example, 1. Multiple pregnancies (e.g., twins, triplets) 2. pregnant women who have medical, obstetric or genetic problems (e.g., epilepsy, hypertension, diabetes, alcohol, and substance abuse), 3. women who experience domestic violence (e.g., physical or sexual abuse). This study excluded these for the reason that, they have already some issue that can result in anxiety according to these studies (Leonard 1998; Keegan, Parva, Finnegan, Gerson & Belden 2010; Afusat 2018). The researcher of this study thinks that if all of these circumstances mentioned above will be included, the research will be endless and will be time-consuming or is too large for this purpose and will be too complicated.

7 RESEARCH METHODS

Qualitative research methods was used in this study. Considering that the subject involved in this study allows appraisal, retrieval, and summarization of all evidence-based data, a systematic literature review was undertaken. A literature review is “a comprehensive study and interpretation of literature that relates to a particular topic” (Aveyard 2014, 2). A systematic literature review (SLR), is a reproducible study method of summarizing studies to address a clear question. The use of systematic and explicit approach in identifying, selecting and appraising relevant studies made and published by other scholars, researchers, and practitioners, to ensure the quality of the evidence and to reduce systematic error or bias, to produce a defensible conclusion (Social Care Institute for Excellence 2006)

7.1 Data collection

The collection of data, the database searched including PUBMED, EBSCO, and Cochrane Library was used. English language articles were used in the study. The finding of relevant works of literature, the researcher used a wide variety of keywords across the searched databases. The keywords included: Pregnancy, first-time birthing mothers, first-time mothers, anxiety. Different search strategies were also applied to help improve the search including Boolean operators “AND or OR” (for example; pregnancy and anxiety). The used of synonyms, spelling variations and other alternatives keywords (for example; nulliparous, primipara) and the used of hyphens (-) were also applied (for example; the first time, first-time). Inclusion and exclusion criteria were also used, the criteria of inclusion and exclusion is presented in table 1. The purpose of using different keywords and search strategies was to make sure that numerous relevant articles will be found to be used in the study. The references list for every material found were also checked for other possible eligible articles.

Table 1. Inclusion and exclusion Criteria

Inclusion	**Exclusion**
Articles publish in English	Articles that are not in English
Published date after 2010	Publish date before 2010
Full text articles	whithout fulltext articles
Free access articles	Non-free access articles
Evidence-based articles	Non evidence-based articles
Relevant study	Irrelevant study

Initial search produced 9,684 citations of which 8,417 were dismissed after filtering the search engine using the defined inclusion criteria. The remaining 1,267 materials were retrieved, titles and abstracts were screened for potentially eligible studies of which 1,173 were excluded for the reason that study participant belongs to the high-risk sample and it does not correspond to the research question. Resulting in 94 full-text publications were screened and assessed for eligibility. After a rigorous reading, ten materials were chosen to be included for the review. Summary of literature search and article review process is presented in (Figure 2), the general characteristic of studies included in the review are presented in (Appendix 1).

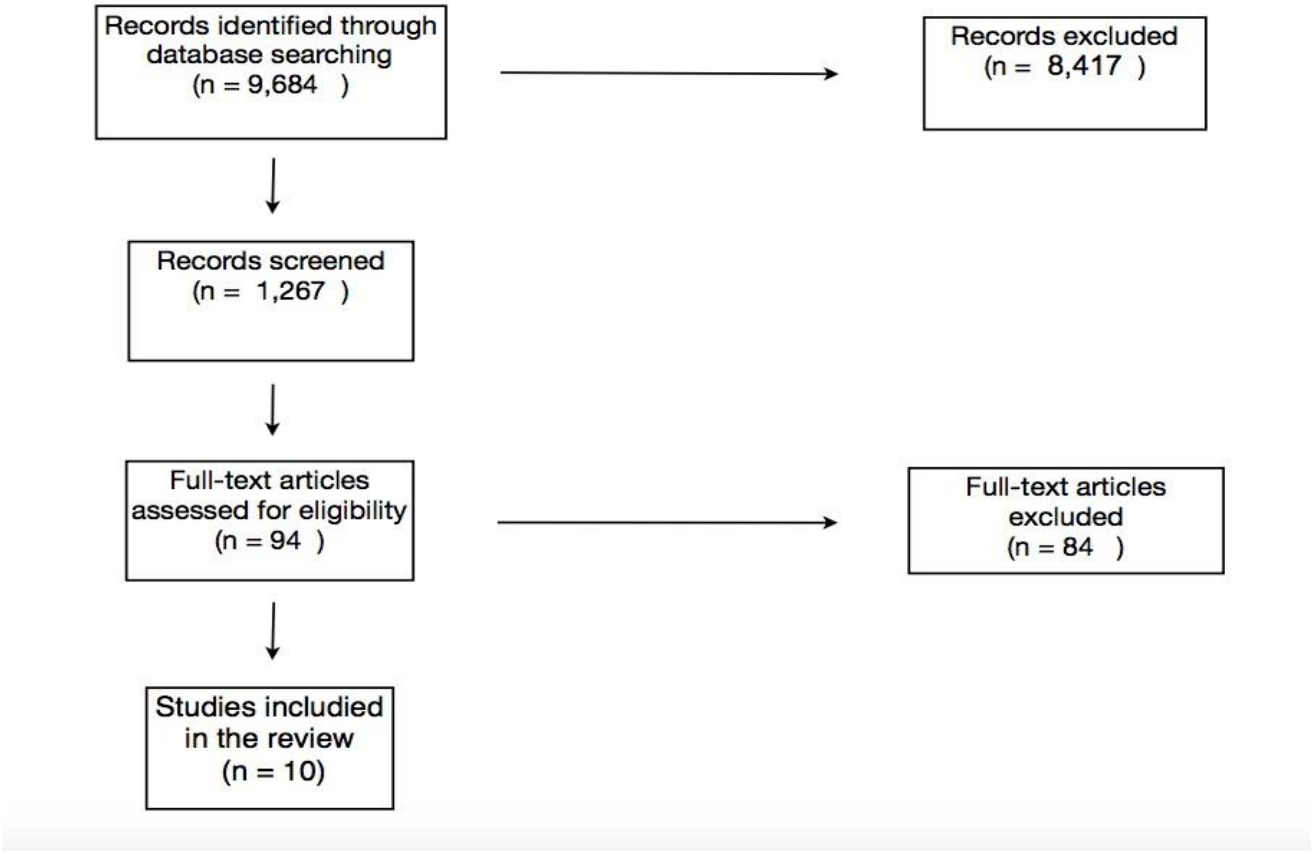

Figure 2. Summary of literature search and article review process.

7.2 Data evaluation

In the assessment of data quality, the researcher made sure that data being collected are relevant, credible, accurate, unbiased, and sensitive (Polit & Hungler 1999, 407). Articles were examined thoroughly. The researcher examined every detail of data found, checking for its structure wither there are flaws or irregularities in methodology documentation. The STROBE (Strengthening the Reporting of Observational studies in Epidemiology) is used to check the quality and risk of bias of the articles included in this review. STROBE is a ”checklist of items that should be addressed in reports of observational studies” (Strobe-Statement Organization 2009). The researcher appraised each articles; setting, date, and recruitment, eligibility criteria and methods of selecting participants, the reasons of non-participation of the participant, methods, variables, limitations, generalisability of the results and source of funding. All of these were checked to make sure that the publication of the report is authentic to ensure they are credible and to measure the risk of bias. The STROBE appraisal questions and results are presented in (Table 2).

Ten articles provided in their research setting, location and dates of recruitment, provided eligible criteria on their research and methods of selecting participants. They also used a defined and clear variables and limitations in their study. They also discussed the generalisability of their results (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Huizink et al. 2016; Lubis & Sinambela 2017; Modh, Lundgren & Bergbom 2011; Madhavanprabhakaran, Melba & Karkada 2015; Preis, Eberhard-Gran & Garthus-Nieget 2018;Raksha, Anjali & Kirna 2017; Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016; Rosario, Premji, Nyanza, Bouchal & Este 2017; Öznur, Mehmet & Kamile 2010).

Six articles did not acknowledge the sources of funding (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Huizink et al. 2016; Lubis & Sinambela 2017; Raksha, Anjali & Kirna 2017; Rosario, Premji, Nyanza, Bouchal & Este 2017; Öznur, Mehmet & Kamile 2010). According to Viswanathan & Ansari et al. (2012), sponsor participation

in a study could threaten the internal validity and applicability of study and influence the validity of the results. These studies above did not mention if they are sponsored nor mentioned if there is a conflict of interest. Hence, these studies are judged to have a medium risk of bias.

Seven articles did not provide reason for non-participation of participants (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Lubis & Sinambela 2017; Madhavanprabhakaran, Melba & Karkada 2015; Preis, Eberhard-Gran & Garthus-Nieget 2018; Raksha, Anjali & Kirna 2017; Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016; Öznur, Mehmet & Kamile 2010). These articles are judged to have a medium risk of bias because of not mentioning the reason of non-participation gives a possibility that the outcome of results may be biased.

Table 2. STROBE appraisal questions and results.

Questions	Deklava L et al. 2015	Huizink AC et al. 2016	Lubis, N.L et al 2017	Madha vanpra bhakar an et al. 2015	Mod h et al. 2011	Preis H et al. 2018	Raksha G et al. 2017	Rosario MK et al. 2017	Soltani F et al. 2016	Öznur Körükc ü et al. 2010
Were setting, location, and recruitment dates provided?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the eligibility criteria and methods of selecting participants provided?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the reasons for non-participation provided?	no	yes	no	no	yes	no	no	yes	no	no
Were the variables clearly defined?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were limitations discussed and potential bias addressed?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Was the generalisability of the results discussed?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Sources of funding acknowledged?	no	no	no	yes	yes	yes	no	no	yes	no

7.3 Data analysis

The aim of using content analysis was to accomplish a concise and extensive description of the phenomenon of anxiety in first-time birthing mothers and to demonstrate the analysis process an inductive content analysis was chosen. The content analysis is “the process of organizing and integrating materials from documents, often narrative information from a qualitative study, according to the key concepts and themes” (Polit & Beck 2012, 723). Qualitative data refers to the “information collected in narrative forms, such as the dialog from a transcript of an unstructured interview (Polit & Beck 2012, 739). The content analysis aims to clarify the contents and make it easier to come up with conclusions (Silius 2005), using inductive content analysis the results can be express in a written in a secure and precise manner.

The inductive content analysis is a qualitative method of content analysis which allows the researcher to reduce the material of area of interest into categories or themes. Its analysis relies on inductive reasoning, of which making a broad generalization from specific observation (Elo & Kyngas 2008).

In analyzing articles, the researcher organized the collected data and reviewed them. Reading through the results, conclusion and discussion part of each article. The researcher made notes and text heading. Researcher identifies knowledge whether it is or not linked to the research, grouping its data and combined similar heading into broader categories. Materials that have common variables are selected and recorded.

Multiple times of re-reading of materials and putting up a list and categorizing each item that answers or connects to the research question.

Materials that answered the research question are then condensed and categorized. The result of the categorization process is presented in table 3. Four categories were obtained: Fear related to the baby, fear related to childbirth, fear related to pregnant women itself and other contributing factors.

Table 3. Factors contributing to anxiety among first time birthing mothers.

Code	Sub-categories	Category
• Afraid that the baby will be mentally handicapped • Afraid the baby will suffer physical defect • Concered for possible neonatal developmet disorder • Fear that child will prone to illness • Worried about taking care of newborn • Worried if baby will die, possible birth trauma	• Wellbeing • Newborn care • Retardation • Neonatal disorder • Birth trauma	• Fear related to the baby

• Fear about the outcome of delivery • Fear of delivey pain and contractions, bleeding • Birth stimulation • Fear for vaginal and perineal trauma	• Delivery • Pain • Trauma	• Fear related to childbirth
• Anxious of weight gain, breast and skin changes • Concern of being unattractive • Feeling lost in new situation • Worried if they become a good mother • Worry about the effect of intemacy after delivery	• Body changes • Becoming a mother • Sexual concerns	• Fear related to the pregnant women itself

• Women dont get attention and moral support from family or husband. • Financially unstable, weak household income • Under high school, low leveleducation • Too old & young to get pregnant • Low of perceive knowlegde due to lack of screening and dont have enough information from healthcare provider.	• Support • Relationship • Financial status • Education • Age • Health care professionals	• Other contributing factors

8 RESULTS

The results of this research are intended to answer the research question: What kind of factors contribute to the anxiety in first time birthing mothers? The author obtained answers from the relevant materials found, the factors that contributed to anxiety among first-time birthing mothers are obtained in four main categories; Fear related to the baby, fear related to childbirth, fear related to pregnant women itself and other contributing factors such as age, education, knowledge and understanding, support, relationship, financial status, and contact with health care professionals.

8.1 Fear related to the baby

The included studies provided results that the contributing factors of anxiety among first-time birthing mothers are related to the baby. The studies reported that primigravida; a woman pregnant for the first time, showed high concern in regards to the well being of the baby (Preis, Eberhard-Gran & Garthus-Nieget 2018; Raksha, Anjali & Kirna 2017). Furthermore, compared to parity nulliparous are more anxious in many factors concerning the baby such; worried for possible neonatal development disorder, scared of having to have a disabled child, afraid that the baby will be mentally disabled or having any physical, or congenital disability and are prone to illness or in poor health. They also expressed worries about the baby's ability to initiate effective breathing after being born (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Huizink et al. 2016; Lubis & Sinambela 2017).

Pregnant women also expressed worries about the issue of breastfeeding and newborn care; anxious of not being ready to take full responsibility of the baby (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Lubis & Sinambla 2017; Madhavanprabhakaran, Melba & Karkada 2015; Raksha, Anjali & Kirna 2017). Moreover, one study also reported one-factor causing anxiety among first-time mothers were related to gender issue; among 60-65% of women are surprisingly

concerned about baby's gender (Raksha, Anjali & Kirna 2017). On the other hand, other studies reported first-time mothers expressed fear to share the happy news of being pregnant for the reason that they are scared having a miscarriage after sharing the story or losing the baby (Lubis & Sinambela 2017; Modh, Lundgren & Bergbom 2011).

8.2 Fear related to childbirth

Included studies assessed the fear related to childbirth. Studies reported that one of the contributing factors of anxiety is being a nulliparous; a woman who has never been given birth. There is a higher risk of fear of childbirth among women who were expecting their first child (Madhavanprabhakaran, Melba & Karkada 2015; Preis, Eberhard-Gran & Garthus-Nieget 2018; Öznur, Mehmet & Kamile 2010).

Furthermore, studies stated that nulliparous women are anxious concerning labor and possible birth stimulation. For instance, they are concerned about the possibility of being not in control during delivery, worried about the pain and suffering from contractions during labor. Correspondingly, women also expressed fear in regards to stillbirth, afraid that the baby might die during or after delivery. Similarly, expressed worries in regards to vaginal and perineal trauma and fear of bleeding or blood loss (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Huizink et al. 2016; Preis, Eberhard-Gran & Garthus-Nieget 2018; Raksha, Anjali & Kirna 2017). In terms of obstetric aspect, women who lacked knowledge in regards to the delivery process reportedly showed a maximum level of childbirth fear, likewise it is also reported that another factor causing fear related to childbirth is due to heard horrible experiences about giving birth from other women (Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016; Raksha, Anjali & Kirna 2017).

8.3 Fear related to the pregnant woman itself

Included studies assessed the fear related to pregnant women. One study reported that one area linked to pregnancy-specific anxiety is the anxiety of being pregnant. The study examined the stress of being pregnant per inter-trimester differences and revealed that women had moderate anxiety during the first trimester and showed severe anxiety during the third trimester (Madhavanprabhakaran, Melba & Karkada 2015). Also, several studies agreed that among primigravida or nulliparae fear of bodily changes is one of the factors that cause stress. Generally, pregnant women are concern about their appearance. Studies have shown that women fear of being unattractive due to enormous weight gain, breast changes and worried about how to regain figure after giving birth, especially those women who had an unplanned pregnancy (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Huizink et al. 2016; Raksha, Anjali & Kirna 2017). One study that examined the cause of anxiety among primigravida who planned between vaginal delivery and cesarian section, in comparison, the result showed that primigravida who planned cesarean section 75% are more concerned about the effect on the sexual life of the process after giving birth, and also expressed fear about the cesarean section scar that stayed for life (Raksha, Anjali & Kirna 2017). A study about the first time pregnant women reported that women expressed fear, in doubts and feeling lost in the new situation.

They reported feeling happy however felt doubts wondering if they are matured enough or too old to be become a mother (Modh, Lundgren & Bergbom 2011), in addition, women are worried about the issue of becoming a good mother; wondering will they be a good mother themselves (Deklava, Lubina, Circenis, Sudraba & Millere 2015). Other factors are women feeling lonely and expressed of lacking self-efficacy (Preis, Eberhard-Gran & Garthus-Nieget 2018).

8.4 Other contributing factors

Other factors that are contributing to anxiety among first time birthing mother is first related to age. The studies stated that women who got pregnant at a very young age were associated with pregnancy-related anxiety, correspondingly being too old to be pregnant is also another factor that causes anxiety (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Madhavanprabhakaran, Melba & Karkada 2015; Raksha, Anjali & Kirna 2017). Second is education. Studies reported that pregnant women with low level of education showed severe anxiety (Deklava, Lubina, Circenis, Sudraba & Millere 2015), on the other hand, one study which examined the fear of childbirth reported that pregnant women who have under high school diploma obtained minimum anxiety related to childbirth fear (Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016). And one study found that education has no significant to have any impact on the concern among primigravida (Raksha, Anjali & Kirna 2017)**.**

The third is financial status. Studies stated that low economic income contributes to anxiety. Women expressed worries of being not able to afford the newest member of the family, the report added that among household who fear childbirth belong to pregnant women who has a low income, women who don't have a husband or partner is also a contributing factor (Raksha, Anjali & Kirna 2017; Rosario, Premji, Nyanza, Bouchal & Este 2017; Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016). Fourth is relationship status, relationship with family, a husband or a partner. Studies reported that who did not get attention and moral support showed high anxiety, especially during labor, for instance, women expressed loneliness because the husband is not around and not supportive (Deklava, Lubina, Circenis, Sudraba & Millere 2015; Lubis & Sinambela 2017).

Family and friends were not supportive with the decision to have a child. Other women expressed the feeling of joy and positivity through having faith however also expressed sadness because they could not share the joy of being pregnant towards their family

for the reason that they were not in a good relationship (Modh, Lundgren & Bergbom 2011; Preis, Eberhard-Gran & Garthus-Nieget 2018; Raksha, Anjali & Kirna 2017).

Last is the contact with healthcare professionals, women were worried in regards to their knowledge and understanding of things related to pregnancy and childbirth, expressed the lack of information given to them by health care professionals consequently it has resulted to anxiety. Low perceived knowledge of birth and parenting due to lack of formal screening on pregnant women concerning pregnancy-specific anxiety is one of the factors causing anxiety (Rosario, Premji, Nyanza, Bouchal & Este 2017; Soltani, Eskandari, Khodakarami, Parsa & Roshanaei 2016).

9 CONCLUSIONS

This research is about the anxiety among pregnant women most especially the first-time birthing mothers. Becoming a mother for the first time is a beautiful and exciting feeling; however, being it is the first time many questions will come to the mother's mind and can cause an overwhelming sense. This research found that the contributing factors of anxiety among first-time pregnant mother is fear related to the baby, to the childbirth, to the mother itself and other contributing factors such as financial status, age, education and contact with health care professionals. These results described the anxiety among first-time birthing mothers.

Pregnant women anxiety is related to the fear and worries towards the things that are not seen just like the saying ”fear of the unknown is the greatest fear of all.” and which is of course understandable. Women are worried about the baby, expressed fear that something might happen or some might be wrong with the baby inside their womb. Also, they are concerned about the upcoming labor and its process, pregnant women also worried about their selves.

Another factor like financial and support from family play a significant role in contributing anxiety to them. Also, the lack of knowledge was also found in this research to be the cause of anxiety. Women expressed the lack of idea on some things or issues that are happening during their pregnancy. Also expressed fear that not enough knowledge is given to them and expressed concerned that health care personnel cannot help them. These findings suggest that better guidance from health care professionals is needed.

The author of this study gives high importance about the finding related to the health care professionals giving lack of guidance to the patients. The author thinks it is a proper way to address it since this is nursing research which aims to develop knowledge about health promotion and nursing actions to help improve each patient’s

ability to face health problems. Moreover, health care professionals assume greater responsibility for the delivery of health care.

Health care professionals have a vital role in guiding the patients for they are the entrusted individuals with the obligation to guide and help. Therefore, it is essential for them to have adequate knowledge and understanding about the issue, necessary to provide appropriate support and guidance to prevent or at least minimize any harmful effects towards the mother and the baby. Health care professionals in health care settings must acknowledge the mother's feelings and experiences so that a better approach and screening can be given. To provide better patient-centered guidance in order to promote a good quality of care.

It is essential that health care professionals have an attitude of compassion for every patient. Giving understanding and importance to new or first-time mothers is necessary. Health care professionals who handle pregnant women must not only focus on doing primary care like checking the weight and blood pressure. Checking the mental health of the patient's is also a priority example by asking their emotions, opinion on things, in case they do not understand something proper guidance can be provided so that their mind will be at ease, to lessen their worries. The author of this research thinks that this research will help or at least give as a guide to professionals who will be dealing with pregnant patients. These findings will provide them with some insight to have a better idea about the thoughts and feelings of pregnant women especially those first-time birthing mothers.

Considering that English is the only language used in inclusion criteria in choosing relevant articles, the possibility that the author has missed valuable and related studies is high. Therefore, a suggestion for future research, the researcher could use other languages of articles choices to include in their study. Future research may also focus on the appropriate evaluation or screening of first-time birthing mothers.

10 ETHICAL ASPECTS OF THE STUDY

Ethics is “a generic term for various ways of understanding and examining the moral of life.” Morality refers to the difference between right and wrong or good and bad behavior in human conduct and respecting the rights of others (Maule et al. 2017, 101-116). In the ethical aspect, the researcher followed the moral principles. The researcher used acknowledgment of works of authors through the inclusion of the correct citations in any part of the thesis, to avoid plagiarism. Treated the work of the existing researcher in an accurate and fair manner and gave the review findings in complete honesty and without bias.

10.1 Reliability and validity

Reliability refers to the consistency of materials with which it measures to what is intended to. Three significant aspects have given considerable attention regarding reliability, and they include stability, internal consistency, and equivalence. Another important criterion in assessing data is validated. Validity “refers to the degree to which an instrument measures what it is supposed to be measuring.” (Polit & Hungler 1999, 411-418).

Reliability and validity define trustworthiness; furthermore, trustworthiness in research address the study finding to be credible, transferable, confirmable, and dependable. The credibility refers to the accuracy of the survey, while transferability demonstrate the findings of the study to be relevant to other situation or can be repeated. The confirmability relates to the extent of the findings neutrality, and which is based on the actual view and opinion of participants. The dependability defines that the study can be repeated and the same findings can be found quickly and would be consistent (Moule et al. 2017, 177).

To ensure reliability and validity the author of the study read and checked each found evidence-based articles concerning its methods consistency, accuracy, and integrity of the conclusion. A concise and appropriate research methodology has been used and followed in researching to ensure credibility and transferability. The evidence-based articles were reviewed with neutrality without bias and findings has been recorded consistently, and methods of data collection to its analysis was highlighted in details to ensure dependability and confirmability.

10.2 Strength and limitation

The strength of this study lies in several factors. Firstly, the objective of this study was precisely stated also its inclusion and exclusion criteria. Secondly, multiple databases were searched from 2010 to present as mentioned in the inclusion criteria, study collection was described, and the flowchart was given. Lastly, the list of included studies and its characteristic was presented systematically, a table for the found evidence-based articles characteristic was provided. The chosen genuine articles were relevance on account that items were done from a different part of the world (Finland, India, Indonesia, Iran, Latvia, Norway, Pennsylvania, Sweden, Tanzania, and Turkey).

The study is limited by focusing only to first-time birthing mothers or women who are pregnant for the first time or going to give birth for the first time. Also, as mentioned in the research limitation part, The study excluded any health issues or circumstances that the treating personnel knows how to deal with as a standard practice. For example, 1. Multiple pregnancies (e.g., twins, triplets) 2. pregnant women who have medical, obstetric or genetic problems (e.g., epilepsy, hypertension, diabetes, alcohol, and substance abuse), 3. women who experience domestic violence (e.g., physical or sexual abuse). Women who experienced domestic violence (physical or sexual abuse), for the basis that these following issues have already some point that can result in anxiety.

Language bias was not overseen because the only language included in the inclusion criteria is English. The author experienced a setback when a few materials were chosen that seem to answer the research question are inaccessible through the full text. Nonetheless, despite the delay, the author found relevant articles that are acceptable allowing the possibility to review, therefore, answered the research question.

11 DISCUSSION

The anxiety is considered to be a healthy emotion; it is the person or body's reaction to things that are happening, as it pictured as a normal part of life. Although every individual is different when handling or dealing with a situation that can cause stress. Others may feel it positively and easily, others may take it differently. However too much stress does not do good to a person, how much more to pregnant women. Stress can do a lot of harm not only to the expectant mother but most especially to the growing fetus. The effect of anxiety toward the baby and mother is also mentioned in these previous studies (Alder, Fink, Bitzer, Hosli & Holzgreve 2007; Ding et al. 2014; Kurki, Hiilesmaa, Raitasalo, Mattila & Ylikorkala 2000; Sanchez, Puente, Atencio 2013; Skouteris, Wertheim, Rallis, Milgrom & Paxton 2009; Qiao, Wang & Li 2012). In this research the role of health care professional is very important the guidance of health care professionals for first-time birthing mothers is a priority in order to generate knowledge to guide in promoting health and well-being.

In Finland, pregnant women are well-taken care off. The well-being of the mother and the unborn baby is carefully monitored. Either a woman is a Finnish or a foreigner a guide will be given. Online, there is the site called Living in Finland (infofinland.fi) where instructions are being posted of what to do, where to go when a woman knows she is pregnant. Moreover, all women that are pregnant are also given a guidebook

produced by the National Institute for Health and Welfare (Terveyden ja hyvinvoinnin laitos). The "We are having a baby." guidebook contains an up to date information on pregnancy, delivery, and newborn care. It also contains some instructions to some services for families and children. The guidebook provides many pieces of information and tips for daily life and parenthood (Hakulinen, Pelkonen, Salo & Kuronen 2017). Aside from guidebook, if a woman is a foreigner an interpreter will be given to a proper communication is provide and also there is no misinformation or misunderstanding between health care professionals and patients. Financial support for pregnant women is also given.

However, these methods and guidance to pregnant women and families mentioned above are only in Finland. Unfortunately, these cannot be applied in all of the included studies because most of the studies in this review are from different part of the world.

Nursing research is a very complicated process. Throughout the process of completing this research, the author experience some few setbacks but have also learned a lot. She has learned a critical way of thinking, being able to evaluate her work and the work of others and being able to appraise data, making a judgment about the data critically and able to make conclusions regarding it. She has developed independently in a way that she can manage to have her own time and projects.

There is no conflict of interest. The researcher did not receive any funding for this study.

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13 APPENDICE

Appendix 1. The general characteristic of studies included in the review. In alphabetical order.

Title, Authors & Year	Purpose	Country	Participants	Methods	Target construct
Deklava L et al. 2015 Causes of anxiety during pregnancy	To examine anxiety during pregnancy and its causes.	Latvia	150 pregnant women	Quantitative research	Pregnancy anxiety
Huizink AC et al. 2016 Adaption of pregnancy anxiety questionnaire-revised for all pregnant women regardless of parity: PRAQ-R2	To test whether a slight rephrasing of 1 item of the 10-item Pregnancy-Related Questionnaire-Revised (PRAQ-R) would result in factorial invariances across nulliparous and parous	Finland	1144 pregnant women (n = 608 nulliparous and n = 536 parous)	Longitudinal study	Pregnancy-related anxiety

	pregnant women				
Lubis, N.L. et al. 2017 The Correlation of the Level of Anxiety of Nullipa-rous Women to the Length of the First Stage of Spontaneous Labor at Private Maternity Clinics in the Working Area of Delitua Puskesmas, Deli Serdang District in 2013.	To analyze the influence of anxiety level to the length of the first stage of labor.	Indonesia	40 childbearing women	A quantitative study with explanatory method approach	Anxiety
Madhavanprabhakarana et al. 2015	To determine the prevalence of pregnancy-	India	500 low risk pregnant women	A prospective explorative survey	Pregnancy-specific anxiety

Prevalence of pregnancy anxiety and associated factors.	specific anxiety (PSA) and its associated factors among pregnant women during the three trimesters of pregnancy.				
Modh et al. 2011 First time pregnant women's experiences in early pregnancy	To describe and understand women's first time experiences of early pregnancy	Sweden	12 first time pregnant women	A qualitative study	Pregnancy experience
Preis H et al. 2018 Childbirth preferences and related fears	To compare Fear of Childbirth (FOC) levels as measured by the W-DEQ	Norway	n = 2918 Norwegian n = 490 Israeli (n = 1463 norwegian nulliparae, n = 191	Secondary analysis	Fear of childbirth

comparison between Norway and Israel	between expectant mothers in Israel and Norway; compare birth prefer-ences; invistigate how FOC factors are related to the women's prefe-rences for CS and EA between two contries.		Israeli nulliparae		
Raksha G et al. 2017 An Explora-tory Study to Assess the Factors Causing Anxiety among Primi-gravida	To assess the factors causing anxiety among primigravid a planned for NVD and caesarean section.	India	40 women Primigravid a	An Exploratory Study	Anxiety in pregnancy

Planned for Normal Vaginal Delivery and Caesa-rean Section Admitted at Mata Kaushalya Hospital, Patiala, Punjab					
Rosario MK et al. 2017 A qualitative study of pregnancy-related anxiety among women in Tanzania	To explore and understand the experien-ces and priorities of pregnant women living with fear and worries related to fetal and maternal health, the birthing process and ability	Tanzania	10 women	A qualitative study	Pregnancy-related anxiety

	to parents the infants in Tanzania.				
Soltani F et al. 2016 Factors contributing to fear of childbirth among pregnant women in Hamadan (Iran) in 2016	To determine some factors contributing to the fear of childbirth among pregnant women.	Iran	335 pregnant women	Cross-sectional study	Fear of childbirth
Öznur Körükcü et al. 2010 Relation-ship between fear of childbirth and anxiety among Turkish pregnant women	To determine the relation-ship between fear of childbirth and anxiety levels of Turkish population.	Turkey	660 healthy women with normal pregnan-cies 49.4% of the pregnant women were nulliparous, and 50.6% were multiparous	Socio-demo-graphic question-naire	Fear of childbirth and anxiety