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Evaluation of Health Education Program Activities Regarding Pregnancy

Thesis

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By

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وَوَصَّيْنَا الْإِنسَانَ بِوَالِدَيْهِ حَمَلَتْهُ أُمُّهُ
وَهْنًا عَلَى وَهْنٍ وَفِصَالُهُ فِي عَامَيْنِ
أَنِ اشْكُرْ لِي وَلِوَالِدَيْكَ إِلَيَّ الْمَصِيرُ ۝

صدق الله العلي العظيم

سورة لقمان- اية ١٤

Dedication

To the one who spread flowers on my path with her supplications, love and support.....my dear mother, to the one whose name I carry with pride.....my dear father, to the souls of the martyrs of Iraq from the popular crowd, without whose blood we would not be safe and we would not have reached these stations.....

Supervisor Certificate

I certify that this thesis, entitled (**Evaluation of Health Education Program Activities Regarding Pregnancy**) submitted by **Bushraa Haider Jassm** and prepared under my supervision and guidance at the Department community health, college of Nursing, University of Babylon as partial fulfillment of requirements for the Degree of Master Sciences in Nursing.

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Committee Certification

We the members of a Thesis Discussion committee, certify that we have reviewed the thesis **(Evaluation of Health Education Program Activities Regarding Pregnancy**) carried out by "Bushraa Haider Jassm" and examined the researcher in its contents, and what is related to it on / / 2023

We decide that the thesis is accepted as partial fulfillment for awarding the degree of Master in Nursing Sciences with a specialty in community health Nursing and the estimate of ( ).

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Abstract

Background: Pregnancy it is a physiologic and emotional state of being that is associated with hormonal changes and physical changes brought about by an enlarging uterus. Health education provides the necessary subsidies to obtain new habits and behaviors in health. The gestational period is characterized as a propitious moment for the development of activities in health education that allow the acquisition and formation of new knowledge

Objectives: To assess the level of health knowledge related to pregnancy, Evaluate the level of information obtained from the programs activities.

Methods: A descriptive analytic study from the period of November 15th 2022 to April 19th 2023. Was accomplished at primary health care centers. A non-probability convenient sample of (200) pregnant women was selected visit the maternal department of primary health care centers. The overall items included in the questionnaire were divided into two parts; Socio-demographical data and reproductive history. And four domains (48 items) to assess maternal health knowledge, maternal health information, assessment of maternal health literacy, maternal health decision making and behavior.

After completing the required approvals and pilot study, the data was gathered by using a questionnaire and interviews with participants. The researcher explained the aim of the study after introduced myself to every participant (pregnant) to obtain her agreement. The questionnaire fills out with an answer of the participants (pregnant). Each pregnant was interviewed on an individual basis. Approximately every interview took (25 to 30) minutes. The content validity of the instrument was determined by a group of (20) experts. They revealed their agreement to all items of questionnaire as being clear and sufficient to measure the spectacle on which the study was based .Adjustments have been made to some items and the suggestions of experts have been taken into account. The reliability of the study was used to determine the accuracy of the questionnaire, and it was obtained by evaluating the questionnaire,

where the reliability coefficient of (Cronbach Alpha) was (0.88), which is statistically acceptable.

Results: The results of the study showed that (37%) of women had a poor maternal health knowledge .and (63%) fair search of maternal health information. As well as the study found a significant and highly significant relationship between women's maternal overall health education program activities and their sociodemographic data (age, educational level, residency, economic status, obstetric history, the pattern of receiving medical care) at $p \leq 0.05$, In addition, there is a significant and highly significant relationship between overall maternal health literacy levels and demographic data, concerning (age, educational level, residency, economic status, obstetric history, and the pattern of receiving medical care).

Conclusion: However, evidence by the women results indicated poor level of knowledge regarding health education program activities.

Recommended: There is an urgent need to develop health education programs related to pregnancy through primary health centers and various media to improve the level of knowledge among women in general and pregnant women, in particular, concerning the health problems associated with pregnancy.

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List of Abbreviations

Abbreviations	Full meaning
HIV	Human Immunodeficiency Virus
TB	Tuberculosis
PA	Physical Activity
GWG	Gestational Weight Gain
GDM	Gestational Diabetes Mellitus
FGD	Focus Group Discussion
NICE	National Institute for Care and Health Excellence
PGP	Pelvic Girdle Pain
LBP	Lower Back Pain
ADL	Activities of Daily Living
NVP	Nausea and Vomiting of Pregnancy
UI	Urinary Incontinence
QoL	Quality-of-Life
ISB	Information Seeking Behaviours
HPM	Health Promotion Model
WHO	World Health Organization
HISB	Health Information Seeking Behavior
ANC	Antenatal Care
CFG	Canada's Food Guide
CCAM	Compensatory Carry-Over Action Model
PCA	Principal Component Analyses
MDG	Millennium Development Goals
GPs	General Practitioners
AIDS	Acquired Immunodeficiency Syndrome
ASB	Anemia or Asymptomatic Bacteriuria

Chapter one
Introduction

1.1. Introduction

Pregnancy is a perfectly normal stage of life, though it is a matter of serious concern because of its inherent risks and complications. Ignorance of health and lifestyle during pregnancy may have irreversible health consequences for pregnant women as well as unborn children. The pregnant woman needs adequate knowledge, motivation, and skills to access, understand, appraise, and apply health information to make decisions related to the health of herself and her unborn baby (Pattinson & Hlongwane., 2022).

Pregnancy is a normal process that results in a series of both physiological and psychological changes in expectant mothers. However, normal pregnancy may be accompanied by some problems and complications which are potentially life threatening to the mother and / or the fetus. (Rashad *et al.*, 2010).

Throughout the three quarters that constitute the gestational period, the changes suffered by the woman trigger feelings of fear, insecurity, and anxiety, arising from the expectation related to concerns about pregnancy, childbirth, puerperium and care of the newborn; consequently it is necessary for the pregnant woman to have health support in a comprehensive way, aiming at the health of the mother-child binomial (Vieira *et al*., 2013).

The pregnancy time offers the best window for health promotion and health education initiatives related to pregnancy and childbirth. Throughout this time, communities and women should be educated about risk reduction during pregnancy and childbirth, proper health-seeking behavior, childbirth, newborn care, and parenting. The two delays relating to client behavior will also be

planned for. Health education should concentrate on warning or danger signs in pregnancy and early newborn life, the causes of these illnesses, and what to do when symptoms manifest in order to prevent delays in the choice to seek care. Having a transit plan for reaching a medical facility would be one aspect of health education to prevent delays (WHO 2016).

Pregnancy is an ideal time to implement health behavior changes. The majorities of women are in contact with the health service for antenatal care **.**and are more receptive to health messages. Current guidelines recommend that all pregnant women should receive advice about the important factors which may influence pregnancy outcomes . Women may receive lifestyle information via antenatal classes. However, these classes are often conducted late in pregnancy and mainly focus on birth and labor, rather than facilitating healthier lifestyles. Provision of population-based guidelines alone is not effective for behavior change (Burke *et al*., 2011).

In 2016 WHO introduced its new recommendations on antenatal care for a positive pregnancy experience, prioritized around person-centered health care, the well-being of women and families, and positive perinatal and maternal outcomes(WHO 2018).

Maternal and fetal assessments provide an opportunity for health education in the form of explanations for doing an ultrasound scan and certain tests, e.g. for anemia or asymptomatic bacteriuria (ASB). Where appropriate, counseling on specific lifestyle issues or conditions may be needed, e.g. with regard to intimate partner violence, gestational diabetes mellitus, tobacco and substance use, HIV and TB(WHO 2016).

Messages around the preparation and readiness for birth should also be included at antenatal contacts. Some messages should be tailored one-on-one in the consultation with the pregnant woman and should include negotiated and shared decision making. For example, has a birth plan been discussed with each pregnant woman? Does this plan include transport options to get to the health facility when the woman goes into labor? What should the pregnant woman acquire and take along to the health facility? In some settings, for example, families have to buy their own birth kits. Other messages around danger signs in pregnancy, healthy eating and preparing for breastfeeding are often included as group health-education topics (Tommy .,2019).

Pregnancy health behaviors are associated with pregnancy related and long-term health outcomes for both the mother and infant. Cigarette smoking , poor nutrition (Oteng-Ntim *et al.*,2012).

Insufficient levels of physical activity (PA),and awareness of gestational weight gain GWG) goals (WHO 2019).have been associated with a number of poor outcomes, including an increased risk of caesarean sections, low birth weight ,pre-term birth, inappropriate GWG , and chronic disease in adult life (Pender., 2019).

Adherence to health behavior recommendations during pregnancy has been shown to improve pregnancy outcomes, including decreasing the risk of gestational diabetes mellitus (GDM), pre-eclampsia, physical pregnancy symptoms (e.g. back pain, nausea etc.) , and improved mental health . However, low levels of adherence to pregnancy health behavior recommendations have been demonstrate (MICA., 2019).

Health education can be easily defined by any activity that focuses on achieving better health and wellbeing and includes providing necessary health instruction and interventions to an individual so as to enable them to monitor and control their health and adopt a healthy lifestyle . Health education also involves disease prevention as well as risk management (WHO 2014).

Health education provides the necessary subsidies to obtain new habits and behaviors in health. The gestational period is characterized as a propitious moment for the development of activities in health education that allow the acquisition and formation of new knowledge (Carvalho *et al*., 2013).

Health education is often considered a particular health promotion strategy or intervention that influences individuals' knowledge, attitudes, beliefs and skills. The objectives of health education is to inform and motivate people and to guide them into action(Natasha ., 2018).

In other words, to create change health education can be one-on-one, in a group or as part of population-based health promotion campaigns. Health education in women's reproductive life cycle can take place in different settings. In low and middle-income countries where collective activities are part of the culture, health care facilities and community-based organizations are important vehicles for group. health education In high-income countries health education is more individualistically focused and women are more likely to seek health information from other resources available to them, including the internet and structured parenting classes. Even people with advanced literacy skills struggle to process the overwhelming amount of health information

that is available. If the information is provided in a stressful or unfamiliar situation, not much may be retained (Bergh.,2021).

Healthcare during pregnancy, which includes prenatal and preconception care, is crucial for pregnant women in order to minimize the effects of different complications and issues during pregnancy (Wahabi *et al*.,2014).

Care during the prenatal period is considered essential. However, limited research has been conducted regarding health care and preventive behavior throughout the period of pregnancy. Moreover, health education is vital to increase self-knowledge and preventive behavior among pregnant women regarding preconception related complications (Elsinga *et al*., 2008; Goossens et al.,2018).

Nursing can greatly contribute to the health promotion of the pregnant woman during prenatal care, because having an idea of future pregnancy situations and even what will occur after pregnancy will bring to these pregnant women well-being and tranquility, preventing unnecessary anxieties caused by unawareness of pregnancy intrinsic events, childbirth, and puerperium period (Lima *et al*., 2019).

Health education is any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or enhancing their attitudes." According to WHO, health promotion has three components: good governance for health; health literacy; and healthy cities (WHO , 2019)

In terms of reproductive health, the proximal focus of this chapter is on good governance and health literacy, where as urban planning, preventive health measures and access to primary health care facilities

provide the healthy-city, distal backdrop for the care of women of childbearing age. (WHO, 2019).

The Pender Health Promotion model in nursing is widely used for understanding what is required of health professionals. The focus should not only be on helping people prevent illness and achieve higher levels of well-being, but also on pathways to follow to pursue better or ideal health. Pathways include the provision of positive resources by health care workers to help clients. Essential to health promotion are self-initiated changes to the characteristics of individuals and their environment. Health care workers are part of the interpersonal environment that influences people throughout their lifespan. Pender also provides examples of templates for clinical assessment with a view to develop health promotion (Pender , 2019).

The center of elective health promotion and health education are includes reading health information, interpreting charts (e.g. a pregnancy chart or a baby's growth chart), using tools (e.g. a thermometer or oxygen) and calculating timing or dosage of medicine. (Bohlman *et al*.,2018).

Women require knowledge of their bodies, the nature and causes of diseases and health topics related to pregnancy, childbirth and postnatal care. They also need to understand how lifestyle factors such as smoking, alcohol consumption, diet, physical activity and adherence to specific treatments (e.g. the prevention of mother-

to-child-transmission) can enhance pregnancy outcome and the wellbeing of the newborn. (Intervention MIC., 2019).

Governments are responsible for setting policy and developing consistent key health messages around policy. The same messages should

be used in and at all levels, with the level of language adapted to the level of different audiences. Connecting messages can render health promotion and health education efforts in effective and should be avoided. Information around health topics to include in the health promotion and health education activities in all settings are the following: Nutrition (e.g. own nutrition, breastfeeding); Birth spacing and contraception; Lifestyle issues (e.g. smoking, substance use, physical activity); Safe sex and sexually transmitted infections, including HIV; Mental health; Newborn care and parenting and health education during pregnancy is important to improve maternal and children outcomes (World Health Organization 2014).

The provision of health education during pregnancy has been shown to be an important aspect of prenatal care. This approach has been associated with a broad variety of maternal and child outcomes including reduced prematurity and low birth weight, and increased rates of initiation and continuation of breastfeeding (Renfrew *et al*., 2012).

Scientific advances have been made to improve care during pregnancy in order to reduce pregnancy-related complications, maternal mortality is a major cause of death in some countries due to a lack of awareness and proper care . From 1990 to 2017, the global maternal mortality rate reduced by 44% according to a World Health Organization report. Every day, more than 830 women die because

of preventable problems pertaining to childbirth and pregnancy (WHO, 2018).

Self-efficacy theory, which was developed by Bandura, has been widely implemented in numerous areas of health promotion and health education. According to this theory, self-efficacy determines an individual's confidence in her ability to perform a particular activity

effectively , Self-efficacy acts as a connecting bridge between the behavior, attitude and knowledge of an individual in relation to their ability to perform a certain task evaluated the impact of self-efficacy theory on enhancing self-care behavior among pregnant women. One of the most crucial parts of health education related to antenatal care is to enhance knowledge and understanding of the risks associated with pregnancy and improve self-efficacy to increase self-care attitudes and behaviors among pregnant women. This will help to motivate them to be involved with self-care and develop a positive attitude towards self-care behavior. Different methods can be adopted to stimulate self-efficacy in terms of improving self-care attitudes and behaviors among pregnant women, such as focus group discussion, individual counselling, presentations and lectures . (Zhianian A *et al*.,2018).

Health education related to pregnancy is promoted through the mass media, for example, television and written articles. In other countries, healthcare providers ensure that pregnant women get adequate training on and a good understanding of pregnancy to increase their awareness of good self-care (Atakiti *et al*., 2015).

Providing nutrition and reproductive health education through small groups with interactive methods improves the knowledge,

attitudes, and practices of pregnant women. This intervention has the potential to be replicated and developed for large-scale implementation by optimizing collaboration between government, nongovernmental organizations, and maternal and child health service providers (Permatasari *et al.*,2021).

The interactions between knowledge, attitude, and behaviour initiate a potentially reciprocal and dynamic relationship: knowledge regarding nutrition and reproductive health can inform attitude about that

topic, which can influence behaviour . Improving knowledge, attitude, and behaviour during pregnancy is important as it determines post-partum quality of life for the mother and her babies. For example, success of early breastfeeding initiation and exclusive breastfeeding can be determined by mothers' intention during pregnancy to breastfeed (Permatasari TAE *et al.*,2018)

Knowledge, attitude, and practices regarding nutrition and reproductive health are the main factors that can influence pregnancy outcomes of knowledge of long-chain omega-3 polyunsaturated fatty acids and they reported that their healthcare professionals did not provide them with adequate information on the importance of eating foods high in long-chain omega-3 polyunsaturated fatty acids during pregnancy In the same study, books and magazines were reported to be the women's main source of information **(**Khan *et al.*,2019;Permatasari *et al.*,2021)

The educational intervention was designed according to the characteristics and information required by pregnant women based on the result of the FGD that involved stakeholders, community leaders, community health workers, and pregnant women who provided

suggestions so that the educational methods used would be easy to understand and implemented during the pregnancy period(Dinas Kesehatan *et al*., 2017).

Health education and health promotion are two terms which are sometimes used interchangeably. Health education is about providing health information and knowledge to individuals and communities and providing skills to enable individuals to adopt healthy behaviors voluntarily. It is a combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes, whereas health promotion takes a more comprehensive approach to promoting health by involving various players and focusing on multispectral approaches. Health promotion has a much broader perspective and it is tuned to respond to developments which have a direct or indirect bearing on health such as inequities, changes in the patterns of consumption, environments, cultural beliefs,ect (WHO ,2011).

Health literacy is a multi-dimensional concept, which can be defined as a person's knowledge, motivation, and skills to access, understand, appraise, and apply health information to make decisions in everyday life concerning one's own health .Closely related to health literacy is organizational health literacy, which can be defined as "the way in which services, organizations, and systems make health information and resources available and accessible according to health literacy strengths and limitations" .The World Health Organization (WHO) recommends a health literacy focus and responsiveness in preventive services to respond to inequality. (Kilfoyle *et al*., 2016) and (WHO , 2019).

Health literacy (HL) comprises the knowledge, motivation and competencies of accessing, understanding, appraising and applying health-related information within healthcare, disease prevention and health promotion settings (Sorensen *et al*.,2012).

Health literacy interventions in antenatal care could potentially improve knowledge, behavior, and ultimately reproductive outcomes. Only a few health literacy interventions have been developed specifically for pregnant women in antenatal care (Zibellini *et al*., 2021)

1.2. Importance of the Study

One of the main purposes of health education for pregnant women's is that it promotes self-care behavior among them during the prenatal period, and this may lead to a decreased morbidity and mortality rate, improved quality of life for pregnant women and a reduction in healthcare costs(Chichirez *et al*.,2018).

According to a World Health Organization report. Every day, more than 830 women die because of preventable problems pertaining to childbirth and pregnancy, Maternal mortality is a major cause of death in some countries due to a lack of awareness and proper care from 1990 to 2017 (Zhianian *et al* .,2015)and (WHO, 2018).

According to a 2015 estimate, the mortality rate at that time was 12 deaths out of 100,000 live births, representing a significant decrease since 1996 when the maternal mortality rate was 30 deaths per 100,000 live births (Unicef , 2012) and (WHO, 2018).

However, the current mortality rate is still high and unacceptable. A number of risks and complications give rise to this

high mortality rate during the period of pregnancy and childbirth. Several high-risk factors that develop during the period of pregnancy and can be present before pregnancy have been identified, and these have a significant impact upon the health of the mother and the new-born child. Hypertensive disease of pregnancy is considered to be one of the major causes of morbidity and mortality related to pregnancy, especially in developing countries around the world, and this risk factor accounts for more than 10-15% of pregnancy-related deaths .Another major cause of morbidity and mortality during pregnancy is diabetes mellitus, which accounts for nearly 3-5% of pregnancy-related mortality (Say *et al* .,2014) and (Muti *et al*.,2015).

The purpose of health education among pregnant women is to disseminate information on pregnancy and other associated matters so as to improve the knowledge of pregnant women (Bert *et al.*, 2013).

Health education is designed to enable pregnant women to improve their attitude, skills and knowledge to promote a healthy pregnancy and childbirth. Because of the risk factors and complications associated with pregnancy, women should be well informed and knowledgeable so that they can take care of their pregnancy through self-monitoring, such as checking their blood pressure (Tucker *et al*., 2017).

1.3. Statement of the Problem

Evaluation of Health Education Program Activities Regarding Pregnancy.

1.4. Objectives of the study are to:

1- Identify the socio-demographic characteristics of the study population.

2-Assess the level of health knowledge related to pregnancy.

3-Evaluate the level of information obtained from the programs activities.

4-Find out the association of the level of knowledge with the socio-demographic.

1.5. Definitions of Basic Terms

1.5.1. Evaluation

Theoretical

The generation and analysis of data to examine how an intervention is put into practice, how it operates to achieve its intended outcomes, and the factors that influence these processes **(**Humphrey *et al*., 2016**).**

Operational

It is a systematic, sequential process for evaluating the performance, program, policy, topic, strategies, or work that has been established by a body specialized in this field.

1.5.2. Health Educational Program

Theoretical

Is a planned sequential program of experience that is designed to motivate people to maintain and improve their health, prevent disease, and reduce health related risk(Jarelnape 2016).

Operational

It is a set of healthy activities that are offered to pregnant women to reduce the risks of pregnancy and prevent diseases.

1.5.3. Pregnancy

Theoretical

Pregnancy is a transient physiological state which brings about different hormonal changes in a woman's body. It defined as 37–41 weeks of gestation (260 – 294 days) **(** Reddy *et al.*,2017).

Operational

It is a stage of a woman's growth and maturation, during which many physical and psychological changes occur and it is a period of transition and change in the world of life for women.

Chapter Two

Review of Literature

2.1. Pregnancy

Pregnancy is that delightful period in a woman's life when she spends each and every day in pleasant anticipation, waiting to hold bundle of joy in her arms at the end of the pregnancy. It is a unique and existing time in a woman's life, as it highlights the woman's amazing creative and nurturing powers while providing a bridge to the future. It is not an illness; it is a physiologic and emotional state of being that is associated with hormonal changes and physical changes brought about by an enlarging uterus) Ammaniti & Gallese., 2014).

Pregnancy is the condition in which products of conception implanted normally or abnormally in the uterus. A myriad of physiologic changes may occur in a pregnant woman, so may affect every organ system in her body. Pregnancy is the normal event in the life of a women body, usually is an exciting and joyous time for her and, it needs special care and medical care from the time of conception to the postnatal stage, every pregnancy is a unique experience for women and each pregnancy the women experience will be new and adequately different from the previous . During the course of pregnancy time there are changes occurring in a woman’s body as a result of hormonal effect and adaptation to the gestational process (Jhon ., 2012).

In women’s life, there is a period called productivity, which is known as pregnancy. It needs specific and proper care from fertilization to postpartum period. A lot of women undergo some discomforts during their pregnancy time, even though these discomforts are not dangerous, still they can be bothersome Pregnancy is the most beautiful and pleasing event in women's life. During this period, a lot of physiological changes may occur

as an adaptation for pregnancy. These changes are necessary to support the function of the maternal, placental and fetal unit (Miller & Thomson.,2010)

Becoming a parent is one of the most emotional and life-changing experiences in a person's life. Some people are well prepared to become parents, while others are not, Prepared or not, pregnancy, childbirth and the transition to becoming a parent should be experienced alongside the opportunity to receive support (Hildingsson *et al*., 2013).

Pregnancy is a time of change, and the transition to parenthood can be challenging; however, for many parents, it can be an immensely enjoyable experience. The majority of pregnancies are unplanned, with 51% of pregnancies reported as unintended, and not all pregnancies are healthy or low risk. Optimum maternal health during preconception and pregnancy is recognized as an essential component to the outcome of the pregnancy and may have a potentially lifelong impact on infant wellbeing (Bird *et al*.,2017)

Pregnancy is an important transitional period in a new parent's life, and appropriate antenatal care, information and advice are important for new parents. The experience of having a new baby presents numerous challenges for women, as they deal with the physical and emotional postnatal changes associated with childbirth, and resume most aspects of their previous life roles (Sami *et al*., 2014).

Pregnancy puts great demands on the body of a woman that pose psychic, somatic and often also social burden. A woman's experience is individual and depends on a number of factors and circumstances that affect the health and quality of life of mothers to

various degrees. Evaluation of quality of life is currently becoming a relatively separate interdisciplinary area (TĚHOTENSTVÍ *et al*., 2012).

Experiences to these changes are varied among the pregnant women. Because of the common minor discomforts from the physiological changes of pregnancy and this physiological changes may had result in feeling uncomfortable, feeling of being overwhelmed or anxious. These discomforts are varied according to trimester, and it can be presented throughout pregnancy (Yates. 2010).

Report that women's vitality is reduced during pregnancy, leading to a decrease in quality of life even during normal pregnancy, women's health should be assessed based on the improvement of the quality of life. In recent decades, the concept of quality of life has been used more and more by researchers, particularly in the area of healthcare. At present, the evaluation and measurement of quality of life provides important information on the health status of different populations. Assessing quality of life is important in terms of prevention and treatment programs used during pregnancy (Mogos *et al*., 2013) and (Mirghafourvand *et al*., 2016).

Quality of life includes various aspects such as health, physical comfort, and mental and social dimension. As the main indicators of quality of life, mentions the demographic predictors such as age and sex; the socio-economic characteristics such as education and social status; cultural influences and values; health factors such as functional status; health care services and personality traits. Quality of life in pregnancy is of great importance (Soósová, 2016)

2.2. Physical Change & Discomfortibal

Given that during pregnancy a woman's body increases in size, her body shape changes, and pregnancy-related physical symptoms become more pronounced, women who retain societal standards of appearance are likely to experience increased body dissatisfaction (Fuller-Tyszkiewicz *et al*., 2012).

During pregnancy, maternal physiology undergoes continual adaptation. These often interlinked changes affect all the body systems and are effected by the hormonal influences of the placenta and mechanical adaptations required to accommodate the growing fetus. . A sound knowledge of the expected maternal changes is essential to enable accurate interpretation of physiological and laboratory parameters and implementation of care plans to reduce complications(Talbot, & Maclennan. 2016).

Pregnancy is characterized by significant physiognomic and psychosocial changes, such as hormonal fluctuations, the experience of pregnancy related physical symptoms and changes to one's appearance (e.g., rapid weight gain, nausea, back ache, varicose veins, stretch marks, acne, and swollen ankles and feet), and changing relationship dynamics with partner, family, and friends (Skouteris .,2011).

During the pregnancy period, women experience many physical and emotional changes. Regarding the physical and physiological aspects, such changes occur in order to maintain the stability of the mother-child dyad, and fetal vitality. In this phase, discomforts that are characteristic of pregnancy arise, permeating the common complaints related to structural

and/or functional changes of the maternal organism (Aziz & Maqsood., 2016).

Pregnancy is a period in which a woman carries a developing fetus. It consists of three trimesters marked by specific fetal developments Pregnancy is accompanied by certain physiological and psychological changes that can be stressful for pregnant women (Herbell & Zauszniewski, 2019).

These changes lead to minor discomforts that can predispose pregnant women to some difficulties, the anatomical, and physiological and biochemical changes that occur during pregnancy can lead to certain discomforts. The minor discomforts occur due to hormonal, metabolic, accommodation and postural changes, while major discomforts are due to changes in musculoskeletal, digestive, nervous, integumentary, cardiovascular, renal and endocrine systems (Ayoub & Awed., 2018)

Women experiencing multiple discomforts longer than few weeks are most likely to have health and well-being problems in early-mid pregnancy. Many pregnant women experience discomforts that may not be severe but reduce their wellbeing, and if neglected, they may lead to serious health problem. Pregnancy-related minor discomforts may also result in feelings anxious and overwhelmed. Evidence has shown the high rate of sick leave in pregnant women due to such discomforts (Truong *et al*.,2017).

The most common minor discomforts include nausea and vomiting, fatigue, heartburn, insomnia, varicose vein, back ache, pelvic pain, leg cramps, frequent micturition and constipation .The prevalence of lower back pain among pregnant women is estimated to be 45-75% and up to 70%

of women experience pelvic girdle pain .Moreover, about 50- 90% of pregnant women experience nausea and vomiting during their first trimester . Heartburn becomes more severe at about 30-40th week of gestation (Aldossary *et al*., 2018) and (Jafaru. 2022).

During pregnancy, leading to a decrease in quality of life even during normal pregnancy, women's health should be assessed based on the improvement of the quality of life. In recent decades, the concept of quality of life has been used more and more by researchers, particularly in the area of healthcare. At present, the evaluation and measurement of quality of life provides important information on the health status of different populations. Assessing quality of life is important in terms of prevention and treatment programs used during pregnancy (Mogos *et al*., 2013).

During pregnancy a woman's body changes. These changes can sometimes be uncomfortable, but most of the time they are normal. Abnormal signs and symptoms may lead to serious complications like morning sickness may develop into hyperemesis gravidarum. So, make the mother as alert as possible for any complications that are likely to arise. A recent summary of maternal causes of death, data available from a large number of low and middle-income countries included hemorrhage (25%), infection/sepsis (15%), high blood pressure (12%), obstructed and /or prolonged labor (8%) and others (8%)(Merson *et al*., 2011) and (Amasha & Heeba ., 2013).

Developing a better understanding of how women manage these discomforts during pregnancy is a clear need as some women use home remedies that may have potential side effects for the mother and fetus , Obstetric nurse /midwife plays a crucial role in promoting an awareness of

the public health issues for the pregnant women and her family, as well as helping for the pregnant women and her family, to recognize abnormal signs and symptoms of pregnancy, and where to seek medical assistance (Okour *et al*., 2011).

The physical symptoms of pregnancy were a contextual factor that impacted the individual experience of nutrition and physical activity. Fatigue, physical discomfort, food aversions, nausea and complications were described as barriers to healthy behaviours (Grenier *et al*., 2021).

The common pregnancy minor discomforts may be physiological (backache, leg cramps, oedema, constipation, fatigue, nausea and vomiting, sleep disturbance, heartburn, and increased urinary frequency, etc.), or psychosocial (anxiousness, mood swing and lack of family support, etc.). Experiences of these changes are varied among pregnant women. These discomforts aren't serious in themselves, but their presence affects and decrease a woman's feeling of wellbeing and comfort. Pregnancy-related minor discomforts can be managed by proper explanation, simple remedies, and lifestyle pattern modification. Consequently, pregnant women should have basic knowledge of common minor discomforts. Also, they should know how to overcome these discomforts during pregnancy. So that they can avoid the complications related to their minor discomforts of pregnancy and they can maintain their health condition. Providing information about physiology, prevention, and self-care of pregnancy discomforts can assist in relieving certain anxiety and fears related to the maternity care is healthy pregnancy with physically safe and emotionally satisfying outcome for mother, infant, and family (Zhu *et al*., 2017) and (Hassan *et al*., 2019).

These changes occurring during pregnancy begin soon after fertilization and continue through gestation, occur in response to physiological stimuli provided by the fetus and placenta These changes are not comfortable as well as worrying but they are not due to alarm as most of these changes are usually normal, minor discomforts of pregnancy can be troublesome on a day to day basis and may affect the women's normal life. The anatomical, physiological and biochemical adaptations to pregnancy are profound (Aziz & Maqsood ., 2016)

Complications related to their minor discomforts of pregnancy and they can maintain their health condition. One study shows that 87% of antenatal women have inadequate level of knowledge about minor discomforts of pregnancy and 65% of them had inadequate knowledge regarding its management (Latha & Indira., 2016)

A study shows that there is a high rate of women who are using herbal medicine to alleviate the discomforts during their pregnancy. They think that herbs are natural, not harmful and free of adverse effects. But using some herbs during all stages of pregnancy is toxic and they have to face more health risks. Such as Pimpinella anisum (anise), Cuminum cyminum (cumin), Cinnamomum verum (cinnamom tree), Mentha spicata (peppermint) and Chinese herbs. As some of these herbs, may cause abortion, toxicity and congenital malformations to the fetus (Sangeetha *et al*.,2015).

Therefore, it is very important that the obstetrician, maternity nurses and other health care providers must ask the pregnant women about their health practices and any herbal medicines used by them to manage the discomforts. In this way, the wrong practices and strategies can be

determined and appropriate education to correct practices can be given. They can provide consultation in alleviating, preventing and avoiding the minor discomforts of pregnancy and also they can inform the pregnant women about the risks of herbs and self-medication (Ali Shtayeh *et al*.,2015).

A lot of pregnant women do not know how to deal with the minor discomforts during pregnancy, which will lead to complications. The prim gravida women require, teaching to promote their knowledge and practices to overcome these minor discomforts during their pregnancy. Few studies examined this context in knowledge and practices of Prim gravida women regarding their minor discomforts of pregnancy. Previous studies were conducted in Asian countries, and they show that most of pregnant women need help and guidance during this period especially prim gravida women (Patil & Salunkhe., 2015).

Minor discomforts are occurring in pregnant mothers like, nausea, vomiting, back ache, leg cramps and constipation and also the pregnancy is a period of drastic change in the women's body these minor discomforts are indicators and due to that the body is normally preparing itself for new life . Women's experiences a different of physiological and psychological symptoms. The anatomical and physiological changes in pregnancy are associated with minor discomforts among women during pregnancy (Ryan & Sawin., 2013)

Most of the pregnant women experienced minor discomforts in their normal pregnancies. These minor discomforts may result in physiologic, anatomic, endocrinal/hormonal changes (Deklava *et al*., 2015).

The hormonal changes during pregnancy may play havoc with women's emotions, making them more vulnerable to anxiety. The gestational period is thus a potential stressor and relatively a high-risk period for women with pre-existing many psychological health problems which arise during or soon after pregnancy. Many views of mundane life provoke anxiety, various situations and conditions can increase the frequency and severity of the anxiety and pregnancy can often amplify this anxiety. Some women are most worried about whether their babies are healthy. Anxiety during pregnancy may be associated with a variety of adverse consequences in term of obstetrics complications and pregnancy outcomes. (Hassan. 2016).

Although minor discomforts aren't life-threatening, nevertheless their presence detracts from the mother feeling of comfort and well-being as well as their negligence may lead to serious problems. In many instances, they can be avoided by preventive and self-care measures ones can do. (Chan *et al*.,2013).

Self-management is a process by which individuals and families use knowledge and beliefs, self-regulation skills and abilities, and social facilitation to achieve outcomes of health especially during pregnancy . Nevertheless these minor discomforts are considerably improved by offering a proper explanation and with simple treatments. Minor discomforts are common during pregnancy and non-pharmacological therapies should be considered as the first-line treatment before going to pharmacological therapy. However, medication or drugs may be used to ensure, the well-being of the mother and prevent secondary adverse effects to the fetus or some times mothers (Malone & Hamilton., 2013).

National Institute for Care and Health Excellence (NICE) report in 2008 shows that minor discomforts are very common, and are reported by 50% - 80% of pregnant women. Nausea occurs in 80-85% of all pregnancies during the first trimester . Clinical gastroenterology report in 2007 shows that heartburn occurs in 30% to 50% of pregnancies, with prevalence approaching 80% in some populations (Bor *et al*.,2015).

According to American Society for Nutrition, 2011, leg cramps have been reported in up to 30% of pregnant women, most commonly in the second and third trimester. occur at night in 75% of cases . Back pain may be experienced during any stage of pregnancy; it most commonly occurs later in the pregnancy as the weight of the baby increases and effect the body weight. American Pregnancy Association in March 2007 reports that 50% to 70% of all pregnant women may have back pain.. These minor discomforts might affect the health of mother and fetus lifestyle is affected by physical and mental functions therefore, if pregnant women are helped to change behaviors related to lifestyle, it effectively restores their health. (Indhumol *et al*.,2014).

Musculoskeletal discomforts and pains are common during pregnancy. 20% of women experience pelvic girdle pain (PGP) and more than 65% of women experience lower back pain (LBP), with the pains occurring separately or concurrently and interfering with the performance of Activities of Daily Living (ADL) (Fitzgerald & Segal., 2015)

Management of heartburn in pregnancy reveals that heartburn is a normal consequence of pregnancy. The predominant etiology is a decrease in lower esophageal sphincter pressure caused by hormones, especially progesterone. Serious reflux complications during pregnancy are rare; hence

upper endoscopy and other diagnostic tests are infrequently needed. Gastro esophageal reflux disease during pregnancy should be managed with a step-up algorithm beginning with lifestyle modifications and dietary changes. Antacids or sucralfate are considered the first-line drug therapy (Rosy.,2014).

Lifestyle changes including validation, supportive counseling and dietary adjustments are important components that can be used to counsel women with NVP, concomitantly with safe and effective treatment (Vincent *et al*.,2015).

In fact, in addition to the metabolic demand associated with the fetus' growth, rises in blood volume, extracellular liquids, adipose tissue, and placental weight all lead to an increase in the mother's dietary requirements (Lemieux *et al*., 2019).

As insufficient sleep duration and poor sleep quality, also become common during pregnancy Pregnant women are easily affected by sleep disruption, and deprivation and sleep disorders A high prevalence of sleep disorder-related symptoms was detected in pregnant women and also may lead to increase the risk of adverse pregnancy outcomes, including growth restriction of fetus, and postpartum depression. Poor sleep quality and shorter/longer duration of sleep during pregnancy are independently associated with an increased risk of gestational diabetes (Hutchis *et al*.,2012) , (Cai *et al*., 2013), (Fung *et al* .,2013) ,(Palagini *et al*.,2014) (Grigsbytoussaint *et al*.,2015) and (Wang *et al*.,2016) and (Tsai *et al*.,2016) .

During pregnancy the prevalence Urinary incontinence of has been observed at 23% in first trimester to 67% at the end of pregnancy, and from 6% to 29% from 6 months up to 1 year post-partum. , and the QoL worsens as gestational age increases Important factors implicated in causation of UI in reproductive age group females are pregnancy, anatomical defects developing after delivery, changes in hormonal and urethra vesical angle, increased pressure on levator muscles, connective tissue and ligaments. The other risk factors which contribute towards UI include advanced age, multiparty , multiple pregnancy (Slack *et al*., 2015)and (Berhe *et al*., 2020).

Frequency is generally reported as being the most common urinary symptom in pregnancy. Pregnancy has significant impact on physiology of lower urinary tract irrespective of parity. We found a high prevalence of frequency (81.25%) in the study subjects. The reported prevalence of urinary frequency in various studies ranged from 12.9% in third trimester, 40% by Cutner et al to 70.3% by (Adaji *et al*., 2011).

High prevalence rate (89%) of nocturia in the present study is comparable to other studies. similarly reported a prevalence of nocturia as 94.6% by the third trimester. However Cutner et al found a prevalence rate of 23% for nocturia by end of first trimester. We think that prevalence of nocturia may vary with definition and also with gestational age (Nigam *et al*., 2016).

Increased bladder neck and urethral mobility is attributed to cause urethral sphincter incompetence. Pelvic floor muscle exercises have been shown to be an effective treatment for prevention as well as treatment of SUI during pregnancy and post-partum period. They are a safe and simple

treatment modality and can be done irrespective of time and place (Huebner *et al*., 2015).

Many women experience some discomfort or minor complains during pregnancy. Although these discomforts are not dangerous, they can be Professional nurse is an invaluable member of the health care team when working with pregnant patients. Being knowledgeable and capable to support the patient and to give her advice to make her more comfortable is very important during the pregnancy. The minor discomforts of pregnancy present difficulties for the health care provider as well as for the pregnant woman herself. Management of the various symptoms requires astute observations and the ability to individualize therapy. Knowledge of a variety of treatment options, therefore, allows practitioners to collaborate with their patients in selecting the best therapeutic approach for the specific (Vincent *et al*., 2015).

Most of minor discomforts during pregnancy are due to normal physiological changes. Minor discomforts can be managed by proper explanation, simple remedies and lifestyle pattern modification. As the pregnancy progress most of these discomforts are relived. Pregnant women could be affected by these minor discomforts. The impact of minor discomforts during pregnancy has been examined; a study shows that women who experience the multiple discomforts longer than a few weeks, their health and well-being will be compromised in early to mid-pregnancy. Such as nausea and vomiting, those are accounted for 43.1% of hospital admissions (Gartland *et al*.,2010)and (Pinto *et al*.,2014).

Consequently, pregnant women should have basic knowledge on common minor discomforts and also they should have knowledge on how to

manage these discomforts during pregnancy. So that they can avoid the complications related to their minor discomforts of pregnancy and they can maintain their health condition. (Latha & Indira., 2016)

Women's overall experiences during childbirth are an important outcome of labour and may affect them for years to come. Therefore, it is important to gain knowledge and understanding of women's experiences, in particular those arising contact with the health care system. Pregnancy for the first time is a special period in a woman's life characterized by rapid physiological, psychological, and social changes during a relatively short period as a result of hormonal effect and adaptation to the gestational process ((Murray & Hendley., 2020).

Throughout the three quarters that constitute the gestational period, the changes suffered by the woman trigger feelings of fear, insecurity, and anxiety, arising from the expectation related to concerns about pregnancy, childbirth, puerperium and care of the newborn; consequently it is necessary for the pregnant woman to have health support in a comprehensive way, aiming at the health of the mother-child binomial. (Vieira & Parizotto ., 2013).

2.3.1. Theory about Learning

Wilson's Model of information Behaviour

In 1981, Wilson proposed his first model in information behaviour. Wilson relates this model to the field of user studies and states that this model is not aimed to present an information seeking behaviour, but to present the interrelationships among the concept of information seeking behaviour (Wilson, 2006). In this study, this model has been employed as a

supplementary tool for the 1996 model to better explain the information seeking pattern. Therefore, different parts of this model relevant to the purpose of this paper, will be studied in detail in subsection "Information seeking behaviour" Wilson 1981 model claims that ISB arises in response to a user's realization of a need. The user consequently seeks through formal and informal information sources to satisfy that need. Depending on the results retrieved, the user will act accordingly; if successful, he/she will use the information and/or share it with others and if not successful, the user will reiterate the searching process. This pattern more or less represents the different steps in what he later calls an active search. In 1994 he altered his first model by combining Ellis model of information seeking stages. He based his model on the following propositions: 1. Information seeking is not initiated by information need as a primary need, but as a secondary which is provoked by individuals physiological, cognitive, and affective needs and 2. The enquirer is likely to face some barriers in an attempt to discover information. These two propositions are the basis of his first model in which, he focused on how information needs arise and "the understanding of human information seeking behavior .He later described it as a model of gross information seeking behavior or a macro-model. He argued that this model is based on hypothesis and is not explicitly going through the information context and its effect on a person and his/her perception of a barrier. (Sanginan ., 2018).

2.3.2 Pender's Health Promotion Model

Pender's health promotion model (HPM), which is based on Bandura's social learning theory, emphasizes motivational factors and adoption of healthy behaviors. This model is effective in reducing risk

factors and disease symptoms, specifically in chronic diseases, and promotes a healthy lifestyle Several studies have widely shown the positive effect of HPM-based educational inter-vention on lifestyle and related factors (Safabakhsh *et al*. 2016) and (Parsapure *et al*. 2016)and (Khoshnood *et al*., 2018).

Pender the theoretical basis of the HPM as drawing upon social cognitive theory, expectancy value theory, and the nursing perspective of holistic human functioning. The social cognitive theory contribution might be considered the attitude of I can do it . . . and the expectancy value theory as . . . and it will be worth it. Social cognitive theory concepts were drawn from the works of Bandura (1977, 1985). This theory emphasizes self-direction, self-regulation, and perceptions of self-efficacy. Self-direction and self-regulation are the abilities to direct and control one's thinking and actions; perceptions of self-efficacy involve one's view of the personal ability to perform an identified set of actions. , Bandura (1985) identifies the following basic human capabilities: Symbolization—the ability to process and transform experiences to create internal models to guide action in the future Forethought—the ability to anticipate possible consequences of potential actions and plan courses of action to achieve goals of value (Pender. 2011)

Learning is the ability to obtain rules for selecting actions through observation of others without having to use trial and error, as well as Self-regulation will be the ability to use internal standards and self-evaluation to inspire and adjust behavior and to arrange the external environment to construct encouragement for action while Self-reflection—the ability to consider one's own thought processes and change them Other contributions

to the HPM from Bandura include consideration of the interaction of inner forces and external stimuli and that self-beliefs (self-attribution, self - valuation, self-efficacy) influence functioning (Alaviani *et al*. 2015).

2.4. Learning Needs

One of the objectives of the World Health Organization (WHO) by 2020 is to promote healthy lifestyle in all people and this is an effective factor in removing risk factors to prevent diseases and promote health. Providing empathetic and sound advice about measure to elevate these discomforts helps promote the overall health and wellbeing of pregnant women. Pregnant women need knowledge to cope with the experience of pregnancy. Also needs knowledge when she present with discomforting or worrying symptoms (Al-Khafaji *et al*., 2015).

In 2014, the Maternal Health Task Force consulted 26 global maternal health researchers to identify persistent and critical knowledge gaps to be filled to reduce maternal morbidity and mortality and improve maternal health. The vision of maternal health articulated Priorities for knowledge generation encompassed improving the availability, accessibility, acceptability, and quality of labor and delivery services and other evidence-based interventions, such as contraception and safe abortion services (Kendall & Langer., 2015).

The pregnancy, the main focus of concern, terms the ‘virtual risk object' is self-evident – risk categorizations are intended to result in the safe birth of the baby, attention has shifted to different outcomes, including women's experience of birth, and rates of intervention which are practiced in both ‘normal’ and complex labours. Interventions such as operative birth

(ventouse, forceps or caesarean) impact upon women's physical and emotional health following the current birth , and also on future pregnancies and births; this means that the events of one labour and birth can significantly impact upon a woman's 'childbearing career' . Women expecting their first babies carry a higher burden of intervention than those expecting second or subsequent baby with little evidence of improvement in outcomes for babies. Yet the strong social consensus in favour of 'risk managing' birth make it difficult to tackle what is meant by the 'necessity' or otherwise of birth interventions, or to ascertain the extent to which decisions made in labour (when the outcome remains uncertain) constitute informed choices, are negotiable, or are effectively delegated to staff in the midst of complex clinical scenarios (Bragg *et al* .,2010).

Unpacking these concepts from a social science perspective will enhance understanding of why interventions become characterized in moral terms (e.g. good, clinical and necessary caesareans, undertaken appropriately to save lives, versus the bad, social or consumer-driven unnecessary caesareans, which might include those conducted at the woman's request (without clinical indication) or to fit in with the obstetricians' working weeks (Kingma., 2011).

Risk is a key element in the conflict over hegemony and autonomy in maternity care. Given the on-going debates about the nature and location of childbirth, Childbirth can be seen as a fateful moment in which life is changed irreversibly. If all goes well, then a healthy baby is born. But if things go wrong then the mother and/or her baby can be seriously harmed or even die (Scamell & Alaszewski ., 2012).

If childbirth is fateful, this affects not only the woman and her immediate family but also the professionals and organizations involved in providing her with care and support. If things go wrong they can and will be blamed (Hood *et al*., 2010).

Pregnant women need health information to increase their empowerment while practicing preventive health behaviors, boosting self-care capabilities, and reducing anxiety in case of new health issues or stressful situations. Merrell et al. showed that exploring HISB of pregnant women is the first step in understanding the health literacy in this significant population In this regard, researchers believed that healthcare providers should allocate efficient amount of time for discussing information-seeking methods with pregnant women(Mousavi Chalac, & Riahi ., 2017)and (Javanmardi *et al*.,2018).

The World Health Organization (WHO) recommendations to achieve further maternal mortality reduction include the following: four or more ANC visits during pregnancy, a skilled birth attendant at delivery, and access to postnatal care Achieving these WHO recommended guidelines are frequently the focus of maternal Health interventions (Nations., 2015).

As pregnant women need extensive information to be able to take care of themselves and their babies, their information needs should be identified and taken into consideration when planning educational programmers for this group of women. Pregnant women seek information during pregnancy to prepare themselves for their maternal responsibilities. As a result, they are exposed to a wide range of information sources and opportunities for antenatal education, including informal education carried out by family and friends, formal education within the context of antenatal

care, discussion with health care professionals and midwives, and review of printed materials (Grimes *et al*., 2014).

Providing relevant and adequate information is the first and most important step to help pregnant women make informed decisions. The quality of the decisions made at any time, to a large extent, depends on the type of information made available to the user (Ogunmodede *et al*., 2013).

That information helps to reduce the degree of uncertainty. Although pregnant women like to receive required information from a health care professional in person, provision of information by means of other resources is a good alternative, when professionals have little time for Awareness of health information needs, sources of health information, and barriers to accessing health information among pregnant women is critical for the development of health interventions and provides high-quality prenatal care for them. Hence, evaluating health information needs, sources of information and barriers to accessing health information of women during pregnancy (Song *et al*.,2013).

2.4. A. Maternal Health Information

Pregnant women should increase their protein intakes in the second and third trimesters, but no specific recommendation exists for carbohydrates and fats during pregnancy. Higher energy intakes should allow pregnant women to meet their higher essential fatty acid, dietary fiber, folic acid, iron, vitamin D, calcium, vitamin B12, and vitamin C requirements (Weisnagel *et al*., 2019).

However, previous research highlighted various dietary inadequacies, namely folate, iron, vitamin B12, and vitamin D insufficiencies (Scholing *et al*., 2018).

Thus suggesting that pregnant women may have difficulty meeting their higher micronutrient requirements through diet alone. Moreover, since inadequate folate and iron status during pregnancy has been associated with numerous adverse health outcomes (Martin *et al*., 2016).

Health Canada recommends that pregnant women should take, on a daily basis, a multivitamin that contains at least 400 µg of folic acid and 16–20 mg of iron. There are currently no specific recommendations in terms of supplementation for other micronutrients. The use of a multivitamin combined with the increase in total energy intakes is probably sufficient to allow pregnant women to fill other micronutrient requirements (Dubois *et al*.,2017).

Initiating and maintaining healthy eating behaviours is essential during pregnancy since poor maternal nutrition can adversely affect both the mother and her future child(Symonds *et al* .,2010).

Consequently, as recommended by the Institute of Medicine and Health Canada, daily pre-pregnancy energy intakes should be increased by 340 and 452 kcal in the second and third trimesters, respectively, in order to create a positive energy balance (Savard *et al*., 2019).

In the past, prenatal nutritional epidemiology was primarily concerned with the impact of malnutrition and nutritional deficiencies, but current literature is now increasingly interested in the overall quality of the maternal diet (Martin *et al*.,2019).

Combined assessment of maternal dietary intake and global diet quality would allow for the detection of nutritional excesses and deficiencies, and the identification of dietary patterns associated with adverse pregnancy outcomes. For these reasons, various dietary patterns and diet quality indexes, such as the Healthy Eating Index were developed. Since then, greater diet quality during pregnancy has been associated with positive pregnancy outcomes (Emond *et al*., 2018).

that a diet rich in fruits, vegetables, whole grains, and fish combined with lower intakes of red and/or processed meats and high-fat dairy products was associated with a lower risk of gestational diabetes (Schoenaker *et al.*, 2016).

Moreover, poorer diet quality during pregnancy has been associated with birthweight and neonatal adiposity. However, in these studies, diet quality was not assessed at each trimester of pregnancy. It is important to address this gap in the literature, since diet during pregnancy may change and have different implications depending on the trimester during which diet is assessed (Wu *et al* ., 2012).

In fact, during organogenesis, dietary intakes are more likely to play a role in the development of organs and systems, while during the fetal period, the diet would rather influence the growth and weight gain of the fetus as well as the mother's gestational weight gain. For example, folic acid supplementation is recommended before and during early pregnancy in order to reduce the risk of neural tube defects. However, little is known about the role of folic acid during the 2nd and 3rd trimesters, i.e., the fetal period, and a study by Wang et al. recently reported an association between folic acid

supplementation after the 1st trimester and the risk of large-for-gestational-age birth (Wu *et al* ., 2012)and (Wang *et al*., 2016).

According to national guidelines, pregnant women should increase their daily energy intake progressively, i.e., in the 2nd and 3rd trimesters, in order to account for the high metabolic demand related to the fetus' growth. In Canada, pregnant women are advised to eat one to three additional servings from any of the four food groups (fruits and vegetables, grain products, milk and alternatives (yogurt, cheese, soy milk, almond milk, etc.), as well as meat and alternatives (red meat, fish, poultry, grains, nuts, legumes, etc.)) of Canada's Food Guide (CFG), in order to increase their daily energy intake in the 2nd and 3rd trimesters. Numerous studies have investigated pregnant women's dietary intakes from a quantitative point of view, i.e., by the assessment of specific or various nutrient intakes (Savard *et al*., 2018).

Every year more than 5 million women1 become pregnant in the European Union and the majority takes at least one medication during a pregnancy (Mitchell *et al*., 2011) and (Lupattelli *et al*., 2014)

Yet, most medications lack evidence-based information about safety and efficacy during pregnancy, because pregnant women are routinely excluded from most clinical research, due to a fear of harming the developing fetus (van der Graaf *et al*., 2019).

Even less information is available about the exposure of the newborn to the medication through breastfeeding.

Only 5% of the available medications have been adequately monitored, tested, and labelled for use in pregnancy and breastfeeding and often long-term effects remain unknown (Adam *et al* ., 2011)

Information seeking is a complex activity that requires access to various information resources to solve personal, social, and occupational problems. A review of related literatures on information needs and health information seeking behavior (HISB) revealed more attention to a specific user groups in recent years (Nasrollahzadeh., 2014).

One of these groups that are of great importance in terms of their information seeking includes women. Undoubtedly, women's health and their updated level of awareness and knowledge will have tremendous effect on society (Onuoha, & Amuda ., 2013).

Pregnancy is not only a period of physical changes; it is also a phase in the life of a woman where health-related behaviors are critical to decisions made and can affect the life of the mother and her neonatal outcomes (Ahmad *et al*.,2019).

Pregnant women need health information to increase their empowerment while practicing preventive health behaviors, boosting self-care capabilities, and reducing anxiety in case of new health issues or stressful situations) .Merrell et al. showed that exploring HISB of pregnant women is the first step in understanding the health literacy in this significant population In this regard, that healthcare providers should allocate efficient amount of time for discussing information-seeking methods with pregnant women(Mousavi Chalac & Riahi., 2017) .

The World Health Organization (WHO) recommendations to achieve further maternal mortality reduction include the following: four or more ANC visits during pregnancy, a skilled birth attendant at delivery, and access to postnatal care Achieving these WHO recommended guidelines are frequently the focus of maternal Health interventions (Nations ., 2015).

Pregnant women seek to modify their lifestyle because of motherhood responsibility and having a healthy baby. Access to information and supports from various sources promote a mother's inner decision to change, leading to modifying different aspects of life. However, these modifications often shift to the pre-pregnancy lifestyle due to cessation of supports and care, despite reminding the benefits of the lifestyle change. Health care providers should consider supportive measures during pregnancy and postpartum (Bagherzadeh *et al* .,2021)

It has been documented that positive healthy behaviors such as appropriate nutrition, adequate physical activity, vitamin intake, regular perinatal care, and health care utilization can have long-term positive effects on maternal and child health. In contrast, unhealthy behaviors can lead to a wide range of pregnancy complications and long-term adverse effects on maternal and child health such as preterm labor, mother's obesity and overweight, low birth weight, preeclampsia, hypertension, sudden abortion, and emergency cesarean section (Rajan *et al*., 2018).

Therefore, health decisions during pregnancy are important and can affect the life of the mother and baby. Thus, promoting lifestyle behaviors that can reduce the negative consequences of pregnancy and protect individuals during this critical period of life has become an important aspect of public health research (Merrell *et al*., 2016).

In this regard, due to the confirmed relationship between lifestyle modification during pregnancy and pregnancy outcomes, many studies have examined the correlation of intention to pregnancy and lifestyle improvement practices among women. However, the results are different and, in some cases, confusing (Hill *et al*., 2019).

A study on 430 women with planned pregnancy reported that 83% of the participants had at least one change in their lifestyle behaviors in preparation for pregnancy. The modifications included behaviors such as smoking, alcohol consumption, caffeine consumption, nutritional status, weight control, and folic acid multivitamin supplements intake (Goossens *et al*., 2018) .

A similar study on 283 pregnant women has showed that actively preparing for pregnancy is associated with choosing a healthier lifestyle by women during the preconception period (Poels *et al*., 2017).

Also, studies show that women who receive pre-pregnancy health information are more likely to modify their lifestyle behaviors during pregnancy than those not prepared for pregnancy .Therefore, information-seeking behavior can be considered as a motivational facilitator for lifestyle improvements before and during pregnancy (Poels *et al*., 2017).

In recent years, the Internet has become a common source of health information for pregnant women Various studies have shown that the Internet use is increasing among pregnant women due to some reasons such as availability and accessibility, ease of use, low cost, anonymity, ability to retrieve a large amount of information in a short time, and

opportunity to find the support and live experiences of similar people (Javanmardi *et al*., 2018)(Jaks *et al*., 2019).

Healthy lifestyle including physical activity, healthy eating, and weight control is the main predictor of health status. During pregnancy, women have a strong motivation to choose a healthy lifestyle to have a healthy infant. Even, some believe that pregnancy can be an opportunity for women to return to healthy lifestyle (Bagherzadeh *et al* ., 2021).

Therefore, supporting pregnant women in modifying their lifestyle is among the priorities and responsibilities of health care providers. Typically, health systems at different levels provide parts of these supports in routine prenatal cares such as pregnancy consults. Pregnant women have traditionally received the advice and information needed to improve their lifestyle during pregnancy from health professional (Goossens *et al*., 2018).

Determines the mechanisms of multiple health behavior changes that are required during pregnancy. It explains how altering one health behavior can affect multiple behavior changes in different areas of life and how these behaviors are interrelated. The main difference with the other models is that the CCAM assumes that higher-level goals can be achieved by different behaviors (e.g., remaining fit and delivering a healthy baby). Hence, an individual needs to intend, plan, and implement the necessary behaviors. The model is characterized by carry-over mechanisms, which suggest that the resources from one health behavior can be carried over to another or that one behavior can initiate another one (e.g., being more physically active can lead to more energy for the uptake of a healthy diet). Alongside the carry-over mechanisms, there are compensatory mechanisms taking place which explain the cognitive dissonance between behaviors and

justify the unhealthy ones (e.g., not changing an unhealthy diet as being physically active is perceived as "enough" to achieve higher-level goals) (Lippke *et al*., 2021).

The Compensatory Carry-Over-Action Model can be applied to pregnancy .The desire to give birth to a healthy baby would serve as a higher-level goal in this case. Different health behaviors, such as a healthy diet and physical activity, are conducive to this goal. Other health behaviors are risky and viewed as unhealthy, including smoking and alcohol and drug use during pregnancy (Herzog-Petropaki, *et al*., 2022).

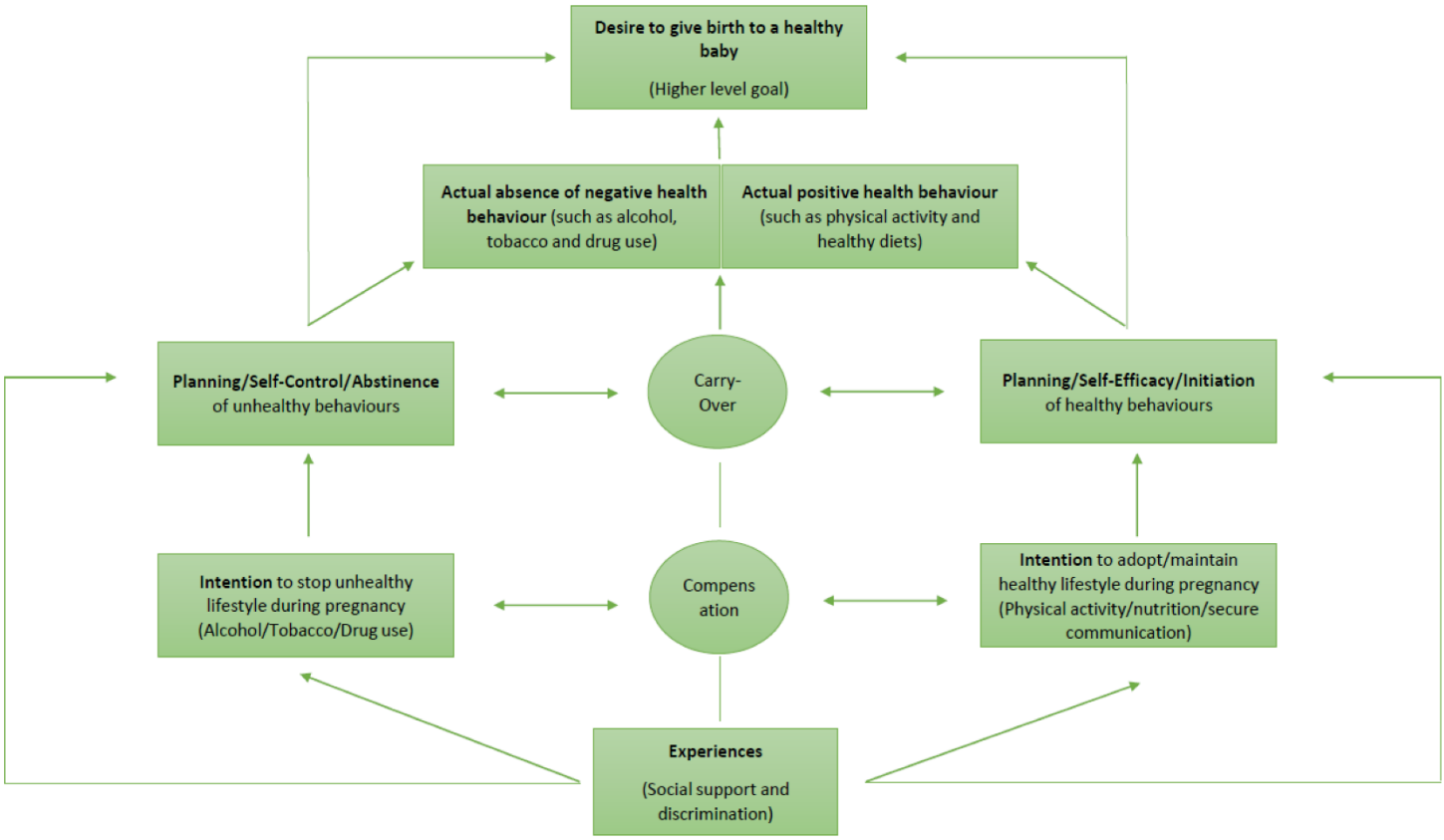

Figure 1 ; Schematic illustration with assumption of the Compensatory Carry-Over Action Model (CCAM, adapted from Lippke, 2021), applied to health behaviors during pregnancy, including experiences (e.g., social support and discrimination)

Health promotion Seeks to improve or protect health through behavioral. Biological. Socio-economic and environmental changes. It can include health education. Personal services. Environmental measures. Community and organizational development. And economic and regulatory activities (Talbot & Verrinder ., 2017).

Health promotion embraces the concepts of disease prevention as well as the notion of positive health the promotion of a sense of physical and mental wellbeing. A major emphasis is to make the healthy choices, the easy

choices. Health education is a core component. And it is unlikely that health promotion will succeed without it. •Personal services designed specifically for health promotion comprise: Preventive medicine services, e.g. immunization. Family planning, hypertension screening and cortisol. Positive health services comprising individual and group programmes, e.g. smoking cessation. Keep ftt, weight reduction (Viner *et al*.,2012) .

Timely identification and appropriate management of factors that increase the risk of progression from severe maternal morbidity to mortality have the potential to improve pregnancy care and to prevent deaths. Have identified a number of factors that are thought to contribute to an increased risk of progression from severe maternal morbidity to death, such as delay in the identification of high-risk status and inappropriate management and referral, inadequate antenatal care, and suboptimal clinical care during delivery and postpartum (Storeng *et al*., 2012).

2.4. B. Maternal Health Knowledge

Education has positive impact on health but education alone will not help in recognizing and reporting health problems and utilization of health care. Women need proper health knowledge to recognize health problems. And its systematic association with the reporting of maternal health problems and health care utilization . , a 'Health Knowledge Index' is constructed by using Principal Component Analyses (PCA) to understand how the level of women's health knowledge influences reporting of their own reproductive health. A huge variation has been found in reporting of maternal health problems and maternal health care utilization within same socio-economic groups by level of health knowledge. Increasing level of health knowledge is positively associated with reporting of greater

pregnancy and post-natal complications by women. Higher is the level of health knowledge, greater is the level of ante-natal, institutional delivery and post- natal care seeking by women. Health education to women can help in improving their reporting of health problems and health care seeking (Butawa *et al*.,2010).

Health knowledge is a relatively new concept in health promotion research. It is a much broader term than health literacy .Rendering to WHO (1998), "health literacy implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions" Studies in a global context foster that health literacy skills are critically important for both health and health care.. By improving people's access to health information, thereby health literacy is critical to maximize the capacity to use health care facilities (Nutbeam, 2008)and (Napel., 2016).

Health information and knowledge, regardless of education, can impact on reporting of health problems and decision making of women in seeking health care services access to health care. reproductive health knowledge is important for women to understand the woman's health and well-being. "consequences of health knowledge include improved self reported health status, lower health care costs, increased understanding of health problems, shorter hospitalizations, and less frequent use of health care services" (Altindag *et al*.,2010) and (Bhat *et al*., 2011).

Overall maternal health care utilization in terms of key indicators such as at least three ANCs and institutional deliveries is not satisfactory. , identification of health problems and healthcare utilization largely depends on health beliefs and knowledge, but across the globe there are a few efforts

to link health knowledge of women with their self-reported health status and health care utilization Which examined health knowledge of women with their self-reported health status and health care utilization. Therefore. Measuring the levels and pattern of health knowledge among women helps in the formulation of health policies and planning. An assessment of 3 interaction among these three aspects namely; level of health knowledge, reporting of maternal health problems and utilization of medical care context is important for planning and preparing strategies to improve maternal health outcomes, thereby achieving Millennium Development Goals (MDG). (Desai et al.,2010) and (Patra *et al*.,2016)

2.5. Health Education Programs

The purpose of health education practices is to provide moments of reflection and action that enable people to learn consciously without the intention of controlling their lives. Health education, can be understood in order to facilitate meetings between professionals and users of the health service. This face to-face relationship represents a way of fostering dialogue and the exchange of experiences. (Ferreira *et al*.,2014).

Health education provides the necessary subsidies to obtain new habits and behaviors in health. The gestational period is characterized as a propitious moment for the development of activities in health education that allow the acquisition and formation of new knowledge (De Carvalho *et al*.,2013).

The use of educational printed materials in health care is a common practice . Handbooks for health care, guidelines, information leaflets and booklets are able to promote expressive outcomes for the

participants of educational activities . The contribution of these materials to health promotion depends on the principles and ways of communication involved in the process of elaboration.(Wallerstein., 2010).

Communication models based on dialogue and multi-directive principles allow the existence of dialogue among people involved in the process of construction of the booklet .The interaction and exchange of knowledge in view of people´s life-style is an essential aspect of this process. The analysis of booklets available for pregnant women who receive prenatal care The adoption of these approaches is considered essential for the existence of correspondence between the needs of pregnant women and the contents of a booklet(Di Mario *et al*.,2010) and (Reberte *et al*.,2012) .

In today's world, we are challenged by time restraints and information overload. Disseminating appropriate health education requires a delicate balance between giving too much or too little information. Managing information can be a major source of anxiety,4 and anxiety in pregnancy is considered to be more prevalent than depression, with estimates of 6.6–21.7%.5 Additionally, the rapid increase in internet use and accessing health information online, and with smartphone applications, (apps) increases the potential for information overload. Health information is cited as a common reason for use of the internet and apps, and some of the information accessed may have reduced evidence-based content (Salanova *et al*.,2013)and (Taki *et al*.,2015).

General practitioners (GPs) are ideally placed to implement effective health promotion, and there is no better time than Background For many women, a major pregnancy goal is to achieve an enjoyable, healthy pregnancy. The continuum of care from preconception counselling,

management of early pregnancy, referral or continued pregnancy care and management into the postpartum period places general practitioners (GPs) in a unique position to meaningfully contribute on many levels to this realization. , regardless of risk. Discussion GPs can play a key role with prospective parents in health promotion, directing them to appropriate resources and services; addressing disease prevention by targeting modifiable lifestyle risks; and managing chronic health concerns in the optimization of pregnancy care. During discussions around pregnancy to achieve this. Pregnancy can be a perfect time, where women are engaged with health services and may be receptive to changes that can improve health outcomes for their unborn child, especially if the changes are perceived to be normal pregnancy behaviours (Atkinson *et al*.,2016)and (Gariepy *et al*., 2016).

Primary care physicians are well placed in the continuum of care for women of reproductive age to initiate preconception counselling around recognized modifiable risk factors. Discussions on reproductive planning, chronic health concerns, medication adjustment, risk reduction for lifestyle factors (WHO 2021).

2.6. Educational Strategies During Pregnancy Period including

In 1st meeting Importance of Presentation dynamics; prenatal care conversation circle and in 2nd meeting gestational changes exhibition of posters; exposure of images; knowledge-setting activity and in 3rd meeting Food and physical exercise group dynamic; physical exercises and in 4th meeting Oral health of pregnant women and newborns exposure of materials suitable for oral hygiene; demonstration of adequate oral hygiene And in 5th meeting breastfeeding, display of posters, exposure of images, practice with

dolls, knowledge-setting activity and 6th meeting childbirth dialogues, exhibition of images and in 7th meeting puerperium period speech dialogue; demonstration of puerperal care; instructions for family planning and in 8th meeting newborn care exposure of materials needed to care for the newborn; demonstration of appropriate care (Silva *et al*., 2016) and (Lima *et al*., 2019) .

Health education provides the necessary subsidies to obtain new habits and behaviors in health. The gestational period is characterized as a propitious moment for the development of activities in health education that allow the acquisition and formation of new knowledge (Wijayanti *et al*., 2022).

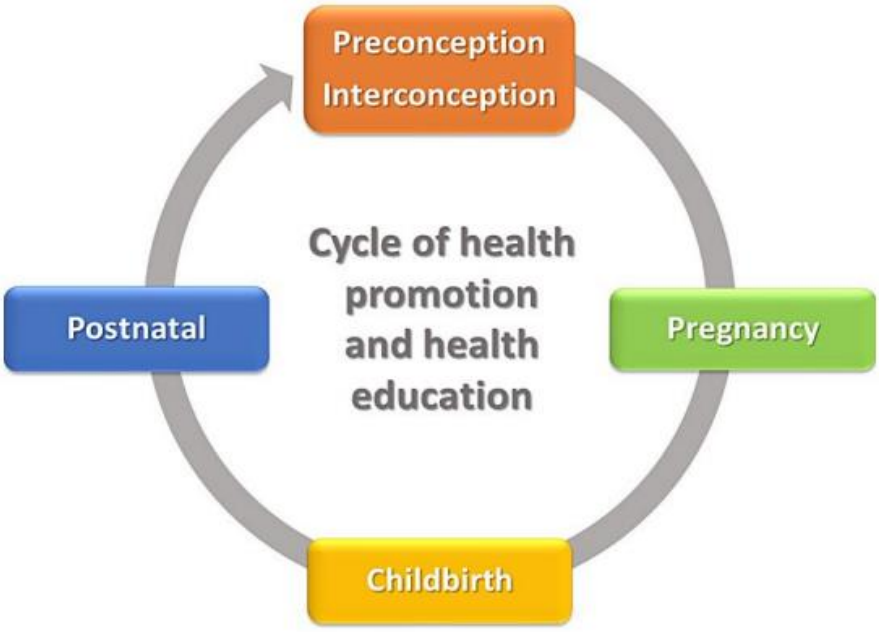

Figure 2: Health promotion and health education in the context of the reproductive health cycle (WHO. 2018).

2.7. A Health Education Services

The basic services should be made available to women and children. They include the before and during pregnancy: Information and services for family planning; antenatal care; tetanus toxoid immunization; advice regarding proper nutrition, breast-feeding, easing discomforts of pregnancy, and place of delivery; early detection and management of problems such as eclampsia/pre-eclampsia, bleeding, miscarriage; detection and treatment of existing diseases such as anemia, malaria, sexually transmitted diseases, hookworm infestation, cardio-vascular disease; and sexually transmitted diseases and AIDS awareness (WHO 2018).

Services also include during delivery clean and safe delivery; and• recognition, early detection management of complications such as hemorrhage eclampsia, prolonged/obstructe labour and After delivery, for the mother: Promotion, early initiation and support for breast-feeding; • advice regarding proper nutrition and hygiene; • management of breast problems; • recognition and management of postpartum complications such as hemorrhage, sepsis, eclampsia; and • information and services for family planning (Mwaniki *et al* .,2016) and (WHO 2018).

well include After delivery and Child care, for the new-born: Immediate new-born care including basic resuscitation and thermal regulation; early and exclusive breast-feeding; and prevention and management of infections including opthalmia neonatorum and cord infection , Immunization; breast-feeding support; advice regarding child care and nutrition; monitoring of growth and development; and management of acute respiratory infections, diarrheal diseases and other common diseases among children (Bryanton *et al*.,2013) and (WHO 2018)

Previous studies.

First study

Study was through by (de Jersey *et al* ., 2022). The aim of this pragmatic implementation study with a historical control was to examine the impact of implementing a service wide education program, and antenatal care pregnancy weight gain chart combined with brief advice on women's knowledge of recommended gestational weight gain (GWG). 478 women. Women who correctly reported their recommended GWG increased from 34% (pre) to 53% (post) (p=0.005). Using theory and implementation science to scale and spread this approach to integrating low intensity strategies into routine care that support recommended pregnancy weight gain may improve the care and advice women receive and reduce excess GWG for normal weight women.

Second study

Study was conducted by (Hassan *et al*., 2020). Aim: evaluate the impact of a tailored educational program on prim gravida anxiety and knowledge regarding minor discomforts. With a purposive sample of 50 prim gravida pregnant women. Result the data in Table 2 presents that the mean age of the study sample was (25.80 ± 7.48). More than half of them (52.0%) were in the middle age (21-30) years old, 28.0% of them had primary education, 58.0% and 56.0% had no work and rural residence, respectively. The bulky percent of them (78.0%) live in extended family; the majority (90.0%) of them had unsatisfied family income. Recommendations: Based on the findings of this study, provision of the educational guidelines of the minor disorders to the antenatal clinics to be distributed to all the

women attending to the clinic is of great value which is prepared in simple Arabic language.

Third study

Study was carried out by (Javanmardi *et al*., 2019). The aim of this research was to explain challenges to access health information during pregnancy. The present qualitative study was carried out on 28 participants who were selected using the purposeful sampling technique. Showed that about half of the mothers (48.6%) were dissatisfied with the information provided by healthcare providers, and they made use of the internet because healthcare providers spend insufficient time to provide information .recommended Based on the results, pregnant women experienced personal, social, and structural barriers when accessing health information. Therefore, policymakers and health planners should remove the barriers, encourage self-care, and enhance the quality of life for pregnant women, thus, promoting their health status in the end.

Fourth study

Study was accomplished by. (Mazúchová *et al*., 2018). The aim of this study was to find out the quality of life of women during pregnancy, which areas of quality of life are the most risky, and to determine the impact of age, parity and period of pregnancy on the quality of life of pregnant women. The work is a quantitative cross-sectional study. The study consisted of 304 pregnant women. Most women (55.60%) stated a very good quality of life, 33.89% stated excellent, 9.86% stated good, and 0.65% a not very good quality of life during pregnancy. Recommended necessary to address the quality of life with an emphasis on screening the quality of life

of pregnant women and also to pay special attention and special care (especially to pregnant women who have a lower quality of life). Evaluating quality of life is important in terms of early preventive measures during pregnancy. It should lead to an increase in the quality of care for pregnant women and their well-being, with an emphasis on improving their quality of life.

Fifth study

A study done by (Wallwiener *et al*.,2016). The aim to analyze the current proportions and characteristics of women using Internet (eHealth) and smartphone (mHealth) based sources of information during pregnancy and to investigate the influence, this information-seeking behavior has on decision-making. 220 pregnant women. A cross-sectional study. 50.7 % of pregnant women were online information seekers. 22.4 % used an mHealth pregnancy application. Stepwise backward regression analysis explained 25.8 % of the variance of mHealth use. 80.5 % of cases were classified correctly by the identified predictors.

Sixth study

A study was conducted by (Scaioli *et al*., 2015). The aim of the present study to assess the sociodemographic and geographic differences existing in a sample of Italian pregnant women who search for information on the web. A Multicenter cross-sectional survey. Overall, 1347 responders were interviewed. Eighty-six percent of them declared to surf the internet to retrieve pregnancy-related information. The most searched topics were fetal development (51.3%), healthy lifestyle during pregnancy (48.7%), physiology of pregnancy (39.8%), generic and specific tips/advices during pregnancy (37.2%) and lactation (36.8%). Statistically significant

differences ($P < 0.05$) according to geographic origin, age and educational level were found with regard to the most frequently searched information on the Web, the reasons that pushed pregnant women to practice e-health, and the possibility to change lifestyles after e-health.. It might encourage healthcare professionals to be more available and exhaustive during routine visits and to be more careful about web content on this topic, also addressing the different needs into different geographic contexts.

Seven study

A study was prepared by (Bert *et al*., 2013). This study aimed to estimate the prevalence of pregnancy e-Health seekers in a large Italian sample; to explore the factors influencing the choices of the childbearing women regarding their lifestyles after Internet consultation; finally to investigate potential differences between prim parous and multiparous women in Internet use to find information about pregnancy. A multicenter survey was carried out in seven Italian cities. after contacting 1576 pregnant women aged 18-44y, we interviewed 1347 responders (the mean age of respondents was 32.4±5.4 years). We found indeed a refusal rate of about 17%, ranking from 13% to 21%. After the exclusion of missing data about parity, the sample consisted of 790 primiparous women (60.5%) and 516 multiparous women (39.5%). Most women were Italian (89.4%), married (66.9%) and workers (76.9%). More than 80% of women declared to have a medium or high educational level (high school/university) and a good/excellent self-perceived health. Internet users were found to be 94.6% of the total sample (n=1274; 96.2% of prim parous and 91.7% of multiparous women, p= 0.6). Recommended To reduce the likelihood for

women of both finding erroneous information or misinterpret correct ones, healthcare professionals should commit to fill the information gap and to guide pregnant women in the online searches. Also, future studies are strongly needed to analyze the quality and accuracy of health information found on the Web.

Chapter Three

Methodology

Chapter Three

Methodology

This chapter presents the methods used in the present study; such as study design, administrative agreement, and approval, study preparation and sample, instrument, as well as data collection methods, pilot study, and data analysis.

3:1 Design of the Study

A descriptive analytic study was accomplished at primary health care center. The study aims to study evaluation health education programs activates regarding pregnancy.

3.2. Administrative Agreements

Formal administrative agreements were obtained before data collection, and are required to conduct the study, presented in: Appendix as follows:

1. The initial approval was obtained from the University of Babylon / College of Nursing / Higher Education Committee after submitting the protocol (Appendix A).

2. An ethical committee from the Department nursing at the University of Babylon / College of Nursing approved the study protocol (Appendix B).

3. Approval was obtained from the Training and Development Center in the Babylon Health Department (Appendix C).

4. Official approvals, which included the of Al-Hilla first sector for primary health care, Hilla second sector for primary health care (Appendix D1,D2).

5. Consent of the participants had been collected to start the interview.

3.3 Ethical Considerations

Ethical considerations and issues are very important to the performance of all researchers before collecting data from the study sample. The objective of the current study has been well explained by the researcher and has also committed herself to protect the privacy of this data and its use for the study. Likewise, all women who participated in the study have the right to apologize for completing their participation if they feel upset or discomfort.

3.4. Setting of the Study

The investigation was done in the maternal health unite of primary health care centers, and it consisted of Al-Hilla first sector for primary health care, Hilla second sector for primary health care, including Al-Jamiyah health center, Al-Kawthar health center, Al-Mohandessin health center, Al-Akrameen Health Center, Imam neighborhood health center.

3.5. Sample of the Study

Pregnant women who are convenient in the multipara who attend and visit the maternal health unite of primary health care centers were chosen as a non-probability convenes sample of (200) for the study.

3.5.1. Inclusion Criteria

1. Multi-Pregnant women.
2. Women who agree to participate in the study**.**
3. Pregnant women over 20 years old.

3.5.2. Exclusion Criteria.

1. Single women were excluded (The virgins).

2. Women who were mentally disturbed

3.6. Instrument of the Study:

A large number of relevant literatures was extensively reviewed in search of a valid instrument for approval and suitable for the current study, which ended with the adoption and modification of a data collection tool by the researcher and includes six parts as shown in

Part I: Socio-demographic Data of Women.

The demographic datasheet consists of (5 items) and is categorized as socio demographic characteristics (Age, educational level, occupation, Residency, economic status)

Part II: Characteristics of Women according to Reproductive Variables:

A Number of pregnancies, number of deliveries, Presence of miscarriage history, stillbirth, number of live babies, pattern of primary health care center visit.

Part III: - Maternal Health Knowledge

Knowing mothers about the health education program activities that you gain in several ways, such as by searching for the information and knowledge that you gain by yourself.

- Maternal Health Knowledge (21 items).

Part IV: Maternal Health Information

The information you obtain from the health education program provided by health care providers through her visit to health centers

- Maternal health information (6 items).

Part V: Assessment of Maternal Health literacy

Evaluating the health literacy of a woman who is pregnant

- Assessment of Maternal Health literacy (6 items).

Part VI: Maternal Health Decision Making and Behavior

 Maternal Health Decision Making and Behavior (15 items).

3.7. Validity of the Questionnaire

The validity of the content of the tool was determined by a committee of (20) experts as shown in Appendix C. They specialize in mother and neonatal health nursing, specializing in family and community health nursing, Nursing and family medicine specialists were distributed to Colleges of Nursing and Medicine at the University of Babylon University of Baghdad, University of Kufa and University of Karbala in addition to doctors specializing in obstetrics and gynecology, doctors specializing in family medicine, and the questionnaire translated by an expert. Expert opinions are reviewing the study instrument, they showed their agreement with all items as clear a sufficient and appropriate tool to conduct the study. Modifications, it was introduced to some items, and expert suggestions were taken into account.

3.8. Pilot Study

This pilot was carried study out to ascertain the dependability, credibility, clarity, and efficiency of the study instrument, to estimate the average time needed to collect data for each character through interview procedures, and to spot any potential problems that may arise during the identification process. A pilot study was run before the official data gathering began. The period from February 13th / 2023 to February 23th / 2023, in (Hilla II sector for primary health care). The pilot study indicated that the time required for each interview and self-report ranged between (25-30) minutes. Chapter Three Methodology A sample of (20) pregnant women was selected from the place of study and they were excluded from the main sample.

3.8.1. The pilot study tries to accomplish the following objectives:

1. The questionnaire is reliable.

2. The questionnaire's items are clear and can be understood easily.

3. An estimate of the time needed to collect the data.

4. Identification of barriers that may not be counted during the data collection process

3.8.2. Reliability of the Questionnaire:

The validity of the survey was established by looking at previous studies' reliability., and it was obtained through the evaluation of the questionnaire, as the reliability coefficient of (Maternal Health Knowledge) (Alpha Cronbach) reached (0.94), and reliability coefficient of (maternal health information) (Alpha Cronbach) reached (0.83), The fields of study at the

level of the questionnaire items were all enumerated using version 23 of the Statistical Programme for the Social Sciences (SPSS).

Table (3.2) Reliability Coefficients of the Study Questionnaire:

Questionnaire.	N. Items	Cronbach's alpha
Maternal Health Knowledge	21	0.94
maternal health information	6	0.83
Assessment of Maternal Health literacy	6	0.86
Maternal Health Decision Making and Behavior	15	0.92

3.8: Rating Scales and Scoring:

The one part included maternal health knowledge the scale adopted three-point Likert scale (No =1 score) (Uncertain=2 score) (Yes =3 score). Women answer all questions and can select one option for each question.

While the two part included maternal health information also three score (Never=1 score) (Sometimes=2 score) (Always=3 score). Respectively the women answered all the questions, and an option can be selected One for each question.

Table (3.3): Rating Scales and Scoring

Grand	**Score**	**Scales**
Poor knowledge	1-1.6	Knowledge
Moderate knowledge	1.67 - 2.33	

Good knowledge	2.34-3	
Poor search	1.67-2.33	Information
Fair search	1-1.66	
Good search	2.34-3	

3.9. Data Collection Methods

After completing the required approvals and pilot study, the data was gathered by using a questionnaire and interviews with participants. The researcher explained the aim of the study after introduced myself to every participant (pregnant) to obtain her agreement. The questionnaire fills out with an answer of the participants (pregnant). Each pregnant was interviewed on an individual basis. Approximately every interview took (25 to 30) minutes**.**

3.10. Statistical Analysis

Descriptive and inferential statistical methods used to analyses data and obtained the results. SPSS (version 23) statistical package was used.

1. Demographic information and overall and subdomain levels of maternal health literacy are described through descriptive statistics.

2. Correlation Analysis used to measure the relationship among maternal health literacy subdomains

3. Nonparametric test of association (Chi-square) (used to determine the relationship between overall health literacy and demographic variables**.**

3.10.1. Descriptive approach

A. Statistical tables "Frequencies and percent" which are

$$\% = \frac{\text{Frequency}}{\text{Sample Size}} \text{x100}$$

B. Mean of scores M.s.

The average score can be calculated by using the following:

$$M.S = \frac{\sum \text{ri} = 1\text{Fi x Si}}{\sum \text{ri} = 1\text{Fi}} x100$$

C. Standard Deviation (±S.d) calculated as following.

$$SD = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(Xi - \bar{\chi})^2}$$

D. It uses a correlational coefficient "Cronbach alpha" used in estimating the Internal consistency of the study tool, which can be calculated by using the following:

$$\alpha = \frac{\text{K}}{\text{K}-1}\left[1 - \frac{\sum_{\text{i}=1}^{\text{K}} \sigma_{\text{ii}}}{\sum_{\text{i}=1}^{\text{K}}\sum_{\text{j}=1}^{\text{K}} \sigma_{\text{ij}}}\right]$$

"K is the items number questions and is investigated covariance between the items I and j. is the variance not standard deviation" of item I

3.10.2. Inferential approach

1. Test of the Chi-Squared

The difference between tests the numbers of standards of random variables nominal dichotomous as nurse's knowledge, awareness and their demographic characteristics.

$$\chi^2 = \frac{\sum_{all\ i}(O_i - E_i)^2}{E_i}$$

Chi-squared=" X 2"

"Sum ="∑

"Where is the observed frequency of group I and is the expected frequency".

The level, are used as Shortcuts for measuring important compared to follows:

(1)**N.S**: AT probability-value>0.05. Significantly None

(2) **S**: Significantly At probability-value <0.05.

(3)**HS**: Highly significantly at probability-value <0.01.

Chapter four

Results of the Study

Chapter Four

Results of the Study

The finding of data analysis systematically the following figures and table based on stated objectives:

Table 4-1. Socio-Demographic Characteristics of Study Sample

Age Groups/years	**Frequency**	**Percent**
20 – 25	64	32.0
26 – 31	***75***	***37.5***
32 – 36	39	19.5
37 – 42	12	6.0
43 and Older	10	5.0
Mean ± SD = 29.57 ± 6.421		
Total	200	100.0
Educational	**Frequency**	**Percent**
Unable to read and write	41	20.5
Read and write	14	7.0
Primary School graduate	30	15.0
Intermediate	19	9.5
Secondary	24	12.0
Institute and above	***72***	***36.0***
Total	200	100.0

Occupation	**Frequency**	**Percent**
Employed	**89**	**44.5**
Unemployed	85	42.5
Student	11	5.5
Others	15	7.5
Total	200	100.0
Residency	**Frequency**	**Percent**
Urban	**136**	**68.0**
Rural	64	32.0
Total	200	100.0
Economic	**Frequency**	**Percent**
Not enough	59	29.5
Enough to some extent	70	35.0
Enough	**71**	**35.5**
Total	200	100.0

Table 4.1: Shows the distribution of 200 women according to the socio-demographic characteristics. Approximately sample's age was between (26-31) years, with a mean age of (41.40) and a standard deviation of 1.159, and that one-third of the study sample's education level was instituted or higher. And about a third (44.5%) were employed. In terms of economic status, it was discovered that less than half (71), 35.5%) were sufficient.

Table4-2. Characteristics of women according to obstetric history variables No.200

Gravida	**Frequency**	**Percent**
1 – 2	63	31.5
3 – 4	***100***	***50.0***
5 – 6	30	15.0
7 – 8	7	3.5
Total	200	100.0
Para	**Frequency**	**Percent**
1 – 2	***146***	***73.0***
3 – 4	46	23.0
5 and More	8	4.0
Total	200	100.0
Miscarriages	**Frequency**	**Percent**
No	**134**	**67.0**
Yes	66	33.0
Total	200	100.0
Stillbirth	**Frequency**	**Percent**
No	**188**	**94.0**
Yes	12	6.0
Total	200	100.0
No. of alive Children	**Frequency**	**Percent**

No Children	6	3.0
1 – 2	**144**	**72.0**
3 – 4	43	21.5
5 and More	7	3.5
Total	200	100.0
Centre Visit	**Frequency**	**Percent**
Irregular	**112**	**56.0**
Regular	88	44.0
Total	200	100.0

Findings indicate that the 112 (56%) respondents have an irregular pattern of receiving medical care and that half (100%) were gravida, less than three-quarters (146, 73%) were have (1-2) para, and less than a third (134, 67%) were without miscarriage, 188 (94%) had a history without stillbirth, and 144 (72%) were have (1-2) without children

Table 4.3: Maternal Health Knowledge

No.	Items	Group	F	%	Mean	S.D	Asses
1	Are you aware of the normal changes in the body during pregnancy?	No	57	28.5	2.06	0.796	Moderate
		Uncertain	***73***	***36.5***			
		Yes	70	35.0			
		Total	200	100.0			
2	Do you know natural psychological changes during pregnancy?	No	64	32.0	2.03	0.82	Moderate
		Uncertain	66	33.0			
		Yes	***70***	***35.0***			
		Total	200	100.0			
3	I know proper nutrition during pregnancy.	***No***	***74***	***37.0***	1.96	0.841	Moderate
		Uncertain	59	29.5			
		Yes	67	33.5			
		Total	200	100.0			

4	I know personal healthcare.	No	68	34.0	1.83	0.764	Moderate
		Uncertain	63	31.5			
		Yes	***69***	***34.5***			
		Total	200	100.0			
5	Are you aware of appropriate pregnancy activity and status?	No	78	39.0	1.91	0.784	Moderate
		Uncertain	***78***	***39.0***			
		Yes	44	22.0			
		Total	200	100.0			
6	I am aware of the safe prenatal exercise.	No	71	35.5	1.98	0.833	Moderate
		Uncertain	***76***	***38.0***			
		Yes	53	26.5			
		Total	200	100.0			
7	I know pregnancy supplements (vitamins).	***No***	***71***	***35.5***	1.91	0.769	Moderate
		Uncertain	62	31.0			
		Yes	67	33.5			
		Total	200	100.0			
8	Are you aware of the ideal time to refer someone for a pregnancy examination (visit)?	No	68	34.0	1.88	0.774	Moderate
		Uncertain	***81***	***40.5***			
		Yes	51	25.5			
		Total	200	100.0			
9	I know diagnostic examination (ultrasound and test) of maternal and fetal health in pregnancy.	No	73	36.5	1.72	0.773	Moderate
		Uncertain	***78***	***39.0***			
		Yes	49	24.5			
		Total	200	100.0			
10	Are you familiar with the acceptable and typical weight gain during pregnancy?	***No***	***96***	***48.0***	1.72	0.773	Moderate
		Uncertain	65	32.5			
		Yes	39	19.5			
		Total	200	100.0			
11	Do you know common pregnancy problems such as nausea, vomiting, and lower back pain?	No	47	23.5	2.29	.824	Moderate
		Uncertain	48	24.0			
		Yes	***105***	***52.5***			
		Total	200	100.0			
12	Do you know injecting safe (allowed) vaccines during pregnancy?	No	69	34.5	1.89	.755	Moderate
		Uncertain	***84***	***42.0***			
		Yes	47	23.5			
		Total	200	100.0			
13	Are you aware of the appropriate sex to have while pregnant?	No	82	41.0	1.77	.735	Moderate
		Uncertain	***82***	***41.0***			
		Yes	36	18.0			
		Total	200	100.0			
14	Do you know how many fetal movements are typical?	***No***	***92***	***46.0***	1.70	.735	Moderate
		Uncertain	75	37.5			
		Yes	33	16.5			
		Total	200	100.0			
15	I know the factors affecting fetal health such as photography, medications, chemicals such as Botox, etc...	***No***	***85***	***42.5***	1.83	.809	Moderate
		Uncertain	64	32.0			
		Yes	51	25.5			
		Total	200	100.0			

16	Are you aware of pregnancy risk factors?	***No***	***76***	***38.0***	1.88	.797	Moderate
		Uncertain	71	35.5			
		Yes	53	26.5			
		Total	200	100.0			
17	Do you know pregnancy disease symptoms such a Gestational diabetes, high blood pressure in pregnancy and other diseases?	***No***	***80***	***40.0***	1.87	.806	Moderate
		Uncertain	67	33.5			
		Yes	53	26.5			
		Total	200	100.0			
18	Are you familiar with childbirth, including the benefits and drawbacks of each natural delivery method, C-section, and the associated medical treatment?	***No***	***84***	***42.0***	1.79	.767	Moderate
		Uncertain	74	37.0			
		Yes	42	21.0			
		Total	200	100.0			
19	I know the methods of pain relief in virginal delivery	***No***	***108***	54.0	1.60	.717	Poor
		Uncertain	65	32.5			
		Yes	27	13.5			
		Total	200	100.0			
20	Do you know neonatal and infant care in the postpartum period?	No	58	29.0	2.05	.797	Moderate
		Uncertain	73	36.5			
		Yes	***69***	***34.5***			
		Total	200	100.0			
21	I know required postpartum care of mother.	No	41	20.5	2.28	.784	Moderate
		Uncertain	62	31.0			
		Yes	***97***	48.5			
		Total	200	100.0			

"F13= Frequency, %= Percentage, M= Mean Poor (1-1.66), Moderate (1.67-2.33), Good (2.34-3), SD= Standard deviation"

Table 4.3: Demonstrates the distribution of Maternal health knowledge. The highest mean of score (2.29) in the item (Do you know common pregnancy problems such as nausea, vomiting, and lower back pain?), while the lower mean of score (1.60) in the items (I know the methods of pain relief in virginal delivery).

Table 4.4: Maternal health information

No.	Items	Group	F	%	Mean	SD	Assess
1	Do you obtain your knowledge from written sources such books, educational notes, pamphlets, and drug brochures?	**Never**	**106**	**53**	1.55	0.632	Poor search
		Sometime	79	39.5			
		Always	15	7.5			
		Total	200	100			
2	I acquire information from radio and television?	Never	50	25	1.93	0.658	Fair search
		Sometime	**113**	**56.5**			
		Always	37	18.5			
		Total	200	100			
3	Do you acquire information from internet sources such as websites, Instagram and telegram?	Never	7	3.5	2.74	0.516	Good search
		Sometime	39	19.5			
		Always	**154**	**77**			
		Total	200	100			
4	I acquire information from other pregnant women.	Never	8	4	2.7	0.54	Good search
		Sometime	44	22			
		Always	**148**	**74**			
		Total	200	100			
5	Do you acquire information from family, friends and acquaintances?	Never	8	4	2.72	0.532	Good search
		Sometime	40	20			
		Always	**152**	**76**			
		Total	200	100			
6	I acquire information from healthcare professionals such as a physician or midwife.	Never	51	25.5	1.85	0.588	Fair search
		Sometime	**127**	**63.5**			
		Always	22	11			
		Total	200	100			

"F= Frequency, %= Percentage, M= Mean Fair search (1-1.66), Poor search (1.67-2.33), Good search (2.34-3), SD= Standard deviation"

Table 4.4: Shows distribution the maternal health information. That the highest mean of score (2.74) in the item (Do you acquire information from internet sources such as websites, Instagram and telegram), while the lower mean of score (1.55) in the item (Do you obtain your knowledge from written sources such books, educational notes, pamphlets, and drug brochures?).

Table 4.5: Assessment of Maternal Health literacy

No.	Items	Group	F	%	Mean	SD	Assess
1	It is easy for me to read and pronounce pregnancy-related vocabulary from information sources such as books, educational booklets, internet, telegram and Instagram.	**Never**	**93**	**46.5**	1.74	0.778	Fair assessment
		Sometime	66	33.0			
		Always	41	20.5			
		Total	200	100.0			
2	The information obtained from different sources of information are understandable for me.	**Never**	**87**	**43.5**	1.74	0.738	Fair assessment
		Sometime	78	39.0			
		Always	35	17.5			
		Total	200	100.0			
3	Are you looking for valid and verified sources for getting the right pregnancy related information?	**Never**	**94**	**47.0**	1.72	0.759	Fair assessment
		Sometime	69	34.5			
		Always	37	18.5			
		Total	200	100.0			
4	Do you ask of the doctor or midwife to make sure pregnancy related information?	**Never**	**90**	**45.0**	1.76	0.773	Fair assessment
		Sometime	69	34.5			
		Always	41	20.5			
		Total	200	100.0			
5	Do you Evaluate the accuracy of pregnancy-related information obtained from online sources such as websites, Instagram and telegram?	**Never**	**103**	**51.5**	1.6	0.694	Poor assessment
		Sometime	73	36.5			
		Always	24	12.0			
		Total	200	100.0			
6	Do you Evaluate the accuracy of pregnancy-related information obtained from friends and relatives?	**Never**	**103**	**51.5**	1.6	0.694	Poor assessment
		Sometime	73	36.5			
		Always	24	12.0			
		Total	200	100.0			

"F= Frequency, %= Percentage, M= Mean Poor assessment (1-1.66), Fair assessment (1.67-2.33), Good assessment (2.34-3), SD= Standard deviation"

Table 4.5: Demonstrates the distribution of Assessment of Maternal Health literacy. The highest mean of score (1.74) in the items (The information obtained from different sources of information are understandable for me), while the lower mean of score (1.6) in the items (Do you Evaluate the accuracy of pregnancy-related information obtained from friends and relatives?).

Table 4.6: Maternal Health Decision Making and Behavior

No.	Items	Group	F	%	Mean	SD	Assess
1	Can you handle and/or control the physical and psychological changes that come?	**Never**	**99**	**49.5**	1.57	0.606	Poor Involved
		Sometime	89	44.5			
		Always	12	6.0			
		Total	200	100.0			
2	I implement a proper diet for pregnancy.	**Never**	**96**	**48.0**	1.61	0.655	Poor Involved
		Sometime	85	42.5			
		Always	19	9.5			
		Total	200	100.0			
3	I implement necessary measures for personal health care during pregnancy.	**Never**	**102**	**51.0**	1.62	0.712	Poor Involved
		Sometime	71	35.5			
		Always	27	13.5			
		Total	200	100.0			
4	Do you follow the guidelines for exercise and healthy living while pregnant?	**Never**	**130**	**65.0**	1.4	0.575	Poor Involved
		Sometime	61	30.5			
		Always	9	4.5			
		Total	200	100.0			
5	I take pregnancy supplements as prescribe by doctor or midwife.	**Never**	**105**	**52.5**	1.62	0.727	Poor Involved
		Sometime	66	33.0			
		Always	29	14.5			
		Total	200	100.0			
6	Do you consult a doctor or midwife before taking any	**Never**	101	50.5	1.7	0.789	Moderately Involved
		Sometime	58	29.0			

	medications (both pharmaceutical and natural) during pregnancy	Always	41	20.5			
		Total	200	100.0			
7	I attend for prenatal care (examinations)as scheduled.	**Never**	**100**	**50.0**	1.7	0.783	Moderately Involved
		Sometime	60	30.0			
		Always	40	20.0			
		Total	200	100.0			
8	Do you carry out the prenatal ultrasound and other tests that a doctor or midwife has advised?	**Never**	**101**	**50.5**	1.64	0.723	Poor Involved
		Sometime	70	35.0			
		Always	29	14.5			
		Total	200	100.0			
9	I monitor and control the weight gain during pregnancy.	**Never**	**122**	**61.0**	1.44	0.59	Poor Involved
		Sometime	68	34.0			
		Always	10	5.0			
		Total	200	100.0			
10	I use the appropriate methods of sexual rela tion during pregnancy.	**Never**	**108**	**54.0**	1.59	0.704	Poor Involved
		Sometime	67	33.5			
		Always	25	12.5			
		Total	200	100.0			
11	Do you avoid taking actions that are harmful to pregnancy?	**Never**	**114**	**57.0**	1.55	0.7	Poor Involved
		Sometime	62	31.0			
		Always	24	12.0			
		Total	200	100.0			
12	Do you visit a doctor or midwife as soon as you can if any pregnancy-related risk symptoms are noticed?	**Never**	**99**	**49.5**	1.66	0.739	Poor Involved
		Sometime	69	34.5			
		Always	32	16.0			
		Total	200	100.0			
13	If the facts and advice are unclear, do you contact the doctor or midwife for more details?	**Never**	**103**	**51.5**	1.63	0.725	Poor Involved
		Sometime	68	34.0			
		Always	29	14.5			
		Total	200	100.0			
14	Do you participate in decision making about pregnancy issues with the doctor or midwife (providing	**Never**	**105**	**52.5**	1.605	0.708	Poor Involved
		Sometime	69	34.5			
		Always	26	13.0			
		Total	200	100.0			

	personal opinions)?						
15	I pay attention to the accuracy and appropriateness of information given to other pregnant women.	Never	67	33.5	2.015	0.829	Moderately Involved
		Sometime	63	31.5			
		Always	**70**	**35.0**			
		Total	200	100.0			

"F= Frequency, %= Percentage, M= Mean Poor involved (1-1.66), Moderately Involved (1.67-2.33), Good involved (2.34-3), SD= Standard deviation"

Table 4.6 : : Shows distribution the Maternal Health Decision Making and Behavior .That the highest mean of score (2.015) in the item(I pay attention to the accuracy and appropriateness of information given to other pregnant women), while the lower mean of score (1.4) in the item (Do you follow the guidelines for exercise and healthy living while pregnant?).

Table 4.7: Distribution of the statistics of overall maternal health literacy

Overall Maternal Health Literacy Levels	Frequency	Percent
Poor Health Literacy	76	38.0
Moderate Health Literacy	**90**	**45.0**
Good Health Literacy	34	17.0
Total	200	100.0

This table shows that 90 (45.0%) of samples have been moderated health literacy.

Figure 4.1: Descriptive statistics of maternal health literacy sub domain

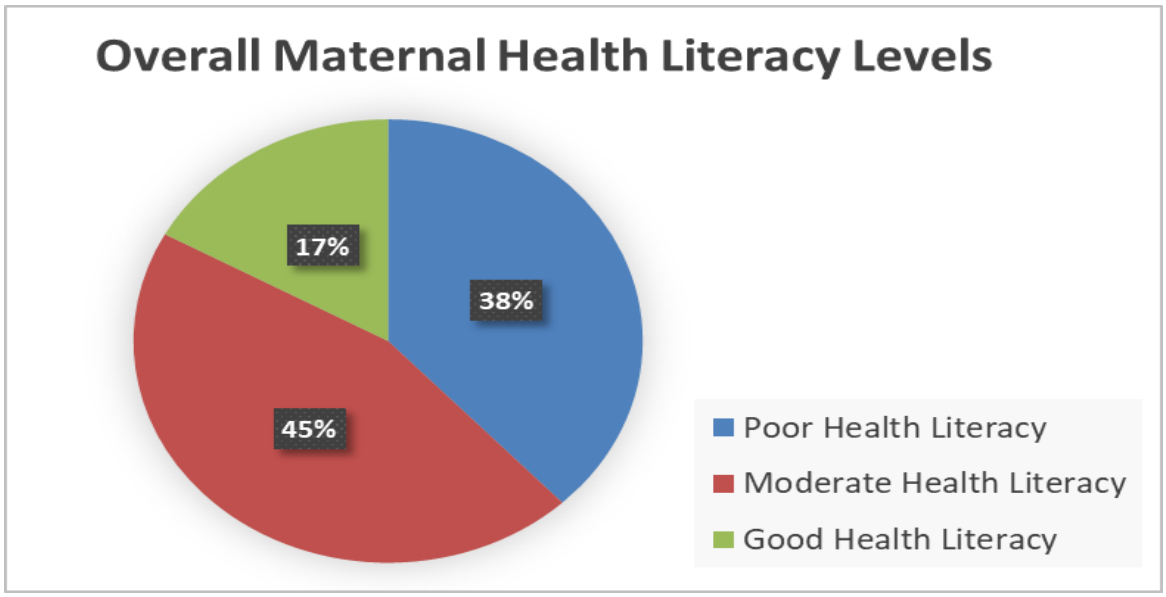

Figure 4.1. Shows descriptive statistics of maternal health literacy sub domain one-third of the sample moderate health literacy.

Table 4.8: Relationship among maternal health literacy sub domains

Domain 1: Maternal Health Knowledge	Frequency	Percent
Poor Maternal Health Knowledge	***74***	***37.0***
Moderate Maternal Health Knowledge	74	37
Good Maternal Health knowledge	52	26
Total	200	100.0
Domain 2: Maternal health information	Frequency	Percent
Poor search	60	30.0
Fair Search	***126***	***63.0***
Good search	14	7.0

Total	200	100.0
Domain 3: Assessment of Maternal Health literacy	Frequency	Percent
Poor Assessment	***103***	***51.5***
Fair Assessment	70	35.0
Good Assessment	27	13.5
Total	200	100.0
Domain 4: Maternal Health Decision Making and Behaviour	Frequency	Percent
Poor Involved	***111***	***55.5***
Moderately Involved	71	35.5
Good Involved	18	9.0
Total	200	100.0

*Scale used as: Poor = (1-33), fair = (34-66), Good= (67-99)

In Table 4.8, the relationship between maternal health literacy subdomains is explained, where it was discovered Poor Maternal Health Knowledge 74(37%), and by percentage (63%) Some Search Maternal Health Information, and half of the sample 103 in the field Assessment of Maternal Health Literacy Percent (51.5%).

Little assessment of pregnant women was needed. Maternal Health Decision Making and Behaviour was found to be Mildly Involved in 111 (55.5%) cases.

Table 4.9: Relationship between women's maternal overall health education program activities and their sociodemographic data

Correlations					
		Domain 1	Domain 2	Domain 3	Domain 4
Maternal Health Knowledge	Pearson Correlation	1	.512**	.732**	.714**
	Sig. (2-tailed)		.000	.000	.000
	N	200	200	200	200
Maternal health information	Pearson Correlation	.512**	1	.420**	.359**
	Sig. (2-tailed)	.000		.000	.000
	N	200	200	200	200
Assessment of Maternal Health literacy	Pearson Correlation	.732**	.420**	1	.788**
	Sig. (2-tailed)	.000	.000		.000
	N	200	200	200	200
Maternal Health Decision Making and Behaviour	Pearson Correlation	.714**	.359**	.788**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	200	200	200	200
**. Correlation is significant at the 0.01 level (2-tailed).					

The relationship between women's maternal overall maternal health literacy and their sociodemographic data is shown in table 4.9, where the result was and there was no relationship between the fields.

Table 4.10: Age Groups * Overall Maternal Health Literacy Levels

Overall Maternal Health Literacy * Age Groups	
Overall Maternal Health Literacy	
Age Groups	Mean
20 – 25	36.3281
26 – 31	41.4000
32 – 36	40.3590
37 – 42	47.7500

43 and Older	47.9000
Total	40.2800

		Overall Maternal Health Literacy Levels			
		Poor Health Literacy	**Moderate Health Literacy**	**Good Health Literacy**	**Total**
Age Groups	20 – 25	32	21	11	64
	26 - 31	27	34	14	75
	32 - 36	13	20	6	39
	37 - 42	3	7	2	12
	43 and Older	1	8	1	10
Total		79	84	37	200

In this table 4.10, the relationship between age groups and its relationship to health literacy are discussed. It shows us the highest mean score for age groups 43 and older (47.9000, with the Less mean score 20–25 (36.3281), less than a quarter of the sample (43 and older) age group having moderate health literacy

Table 4.11. **Overall Maternal Health Literacy * Educational**

Educational	Mean
Unable to read and write	15.3902
Read and write	29.8571
Primary School graduate	32.9333p
Intermediate	37.4211
Secondary	49.5000
Institute and above	57.2222
Total	40.2800

Educational * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	Total
Educational	Unable to read and write	36	5	0	41
	Read and write	8	6	0	14
	Primary School graduate	12	16	2	30
	Intermediate	9	7	3	19
	Secondary	4	14	6	24
	Institute and above	7	72	23	72
Total		76	90	34	200

In the table 4.11, the relationship according to educational level and its relationship to health literacy are shown. The highest mean score forInstitute was found to be greater than 57.2222, with the less mean score a Unable to read and write (15.3902), more than a quarter of the sample of 72 Institute and above (72%) having moderate health literacy.

Table 4.12. Overall Maternal Health Literacy * Occupation

Overall Maternal Health Literacy * Occupation					
Occupation					Mean
Employed					53.5506
Unemployed					27.5412
Student					45.5455
Others					29.8667
Total					40.2800
Occupation * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Occupation	Employed	14	49	26	89
	Unemployed	51	28	6	85
	Student	3	6	2	11
	Others	8	7	0	15
Total		76	90	34	200

In Table 4.12, he links occupation and health culture and explains the relationship between them. Show us the mean score for Employed that is the highest at 53.5506 and the lowest at Unemployed27.5412. Realistically 89 (49%) of the sample had a Moderate Health Literacy.

Table 4.13: Overall Maternal Health Literacy * Residency

Overall Maternal Health Literacy * Residency					
Residency		Mean			
Urban		41.9118			
Rural		36.8125			
Residency * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Residency	Urban	48	65	23	136
	Rural	28	25	11	64
Total		76	90	34	200

Table 4.13: shows a relationship between the residency and its relationship to healthy literacy, with the highest mean score for urban 41.9118 and the lowest mean score for rural 36.8125. A third of the sample was Urban 136 (65), indicating moderate health literacy.

Table 4.14. Overall Maternal Health Literacy * Economic

Overall Maternal Health Literacy * Economic					
Economic					Mean
Not enough					20.6949
Enough to some extent					45.2429
Enough					51.6620
Total					40.2800
Economic * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Economic	Not enough	45	14	0	59
	Enough to	19	34	17	70

	some extent				
	Enough	12	42	17	71
Total		76	90	34	200

Table 4.14 shows a relationship between the economic status and its relationship to healthy culture, with the highest mean score for enough being 51.6620 and the lowest mean score being not enough 20.6949. A quarter of the sample was (42%) Enough Moderate Health Literacy.

Table 4.15. **Overall Maternal Health Literacy * Gravida**

Overall Maternal Health Literacy * Gravida	
Gravida	Mean
1 – 2	45.9683
3 – 4	40.3400
5 – 6	30.9333
7 – 8	28.2857
Total	40.2800

Gravida * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Gravida	1 – 2	17	31	15	63
	3 - 4	37	45	18	100
	5 - 6	19	10	1	30
	7 - 8	3	4	0	7
Total		76	90	34	200

The table 4.15 shows that the highest mean score for Gravida was 45.9683 in items 1–2, and the lowest mean score was 28.2857 in items 7–8. It also explains the relationship between the number of gravida and the healthy literacy of pregnant women; a quarter of the sample was found to have moderate health literacy at (31%) when gravida 1–2 were written.

Table 4.16. **Overall Maternal Health Literacy * Para**

Overall Maternal Health Literacy * Para					
Para					Mean
1 – 2					42.1233
3 – 4					33.7826
5 and More					44.0000
Total					40.2800
Para * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Para	1 – 2	51	63	32	146
	3 - 4	24	16	5	46
	5 and More	1	7	0	8
Total		76	90	34	200

The table 4.16 shows that the highest mean score was 44 in the item (5 and more), and the lowest mean score was 33.7826 (3-4). It also explains the relationship between the number of births and the healthy literacy of pregnant women, as more than half of the sample was found to have moderate health literacy at 146 (63) when paras. 1-2 were written, where she was 5 and More Totally from the percentage of the sample Moderate Health Literacy.

Table 4.17. **Overall Maternal Health Literacy * stillbirth**

Overall Maternal Health Literacy * stillbirth					
Stillbirth				Mean	
No				40.7926	
Yes				32.2500	
Total				40.2800	
stillbirth * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Stillbirth	No	70	84	34	188
	Yes	6	6	0	12
Total		76	90	34	200

The table 4.17. Shows that the highest mean score is 40.7926 in the item (no stillbirth), while the lowest mean score is 32.2500 in the item (yes stillbirth). The study found a link between stillbirth and healthy literacy, with more than two-thirds of the sample 188(79) having Moderate Health Literacy.

Table 4.18. **Overall Maternal Health Literacy * miscarriages**

Overall Maternal Health Literacy * miscarriages					
Miscarriages					Mean
No					42.5149
Yes					35.7424
Total					40.2800
miscarriages * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Miscarriages	No	43	65	26	134
	yes	33	25	8	66
Total		76	90	34	200

The table 4.18 shows that the highest mean score was 42.5149 in the item (no miscarriages), while the lowest mean score was 35.7424 in the item (yes, there Miscarriages). In addition, there is a link between the presence of miscarriages and the level of health literacy. One-third of the sample 134 (65), Moderate Health Literacy.

Table 4.19. **Overall Maternal Health Literacy * No. of Children**

Overall Maternal Health Literacy * No. of Children	
No. of Children	Mean
No Children	54.8333
1 – 2	41.7361
3 – 4	32.4419
5 and More	46.0000
Total	40.2800

No. of Children * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
No. of Children	No Children	1	3	2	6
	1 - 2	51	66	27	144
	3 - 4	23	15	5	43
	5 and More	1	6	0	7
Total		76	90	34	200

Table 4.19: shows that the highest mean is 54.8333 in the item No Children. In the table, there is a link between health literacy and its relationship to the number of children. A percentage of more than a third of the sample showed 1-2 Moderate Health Literacy (63).

Table 4.20. **Overall Maternal Health Literacy * Centre Visit**

Overall Maternal Health Literacy * Centre Visit	
Centre Visit	Mean
Irregular	28.6875
Regular	55.0341
Total	40.2800

Centre Visit * Overall Maternal Health Literacy Levels		Overall Maternal Health Literacy Levels			Total
		Poor Health Literacy	Moderate Health Literacy	Good Health Literacy	
Centre Visit	Irregular	67	38	7	112
	Regular	9	52	27	88
Total		76	90	34	200

The table found relationship between Overall Maternal Health Literacy according center visit the mean showing 55% regular visit. More than a third of the sample was regular Moderate Health Literacy

Chapter five
Discussion of the Study Results

Chapter Five

Discussion of the Study Results

This chapter illustrates the discussion of findings in a systematic and structured manner drawn from the findings, supported literature, and related studies

5-1. Discussion of the Results of Women's Sociodemographic Characteristics:

Socio-demographic characteristics and other personal data have a primary influence on maternal and fetal health and health-related beliefs because those variables are related to coping with the pregnancy disorders and have.

An important role in prevention and coping with treatment. And there are differences between the age groups of pregnant women, the educated – the uneducated, the working and the non-working, etc.

The findings of the current One-third of the age of the study sample was forty-one points forty of the 200 participants were from twenty-six to thirty-one years. A similar study conducted by (Wijayanti et al. 2022) among in Selagalas Village, Cakranegara Indonesia found that the average age of the sample was 66.7% 26-35 years. Regarding educational attainment, the results are from the same table indicated that the highest percentage of women obtained institute and above, fortunately, this is due to a change in society's perception of the importance of educating women. While the results were analogous to a study conducted in Birnin-Kebbi, Kebbi State, Nigeria (Jafaru.

2022) which stated that the educational level of the sample a tertiary education (62.4%)

As for the occupation variable in the current study, it was found that one-third of the sample were employed, (Scaioli et al., 2015) conducted a study that supported the present results, who reported that (79.9%) of the study sample were employed. The results of this study showed that most of the participants were rural residents. This can be due to the distance from the hospitals and the easy access to the health center supportive study was also conducted by (Zagloul et al., 2020) (60.0%) of women live in rural areas.

Concerning the economic situation, the result of the same table that indicates about that less than half their monthly income is enough, Because most women are workers and many things have developed in this field for the development of society and to keep pace with the electronic development, adding many jobs to the arena, such as the work of delegates inside the house without the need to go out, since some Iraqi families are conservative of customs and traditions. Thus, women are able to fill and meet most of their needs. While a study conducted by (Silva et al., 2016) as for family income, 10 (66.7%) reported having income between 1 and 2 times the minimum wage.

As for the obstetrical history, it is fifty percent with 3-4 gravid and seventy-three percent with 1-2 para. And sixty-seven percent are no miscarriages. The vast majority of women, by ninety-four percent, are no stillbirth. There is a study directed in Jordan showed ,As regards obstetrical history, the same table shows that less than one third of the sample (28.5%) were gravida. The mean gravidity was 2.1± 1.03.

The results of the current study show that fifty-six percent have an irregular pattern of receiving medical or health care. This may be due to the lack of health awareness among pregnant women of the importance of pregnancy, follow-up examination and review of health care centers. This may be due to the ease of availability and access to pregnancy-related information on social media, and the ease of contact and communication with most healthcare providers through social media. While a study conducted by (Aguilera, & Muench. 2012) shows that focusing on strategies to support social connectedness, support, and relationship center care.

These results are supported by a study conducted in The Gambia the results of this study show that although a large proportion of women attending antenatal clinics did so repeatedly, they were not benefiting from effective information, education and communication which together form one of the primary purposes of antenatal care. Ninety percent of those interviewed had attended the antenatal clinic more than once and 52% four or more times. However, most of them (70.5%) said that they spent 3 minutes or less with the antenatal care provider and less than 40% could recall being informed or educated about important subjects such as diet and nutrition, care of the baby, family planning, place of birth. An even smaller proportion (19.3%) could recall being educated about what to do if there was a complication

According to the present study, 76% percent of women get their information about acquire information from family, friends and acquaintances. 74% from other pregnant women (77 %) by internet sources such as websites, Instagram and telegram? Internet nowadays, with the

widespread use of social media and other websites, it is possible and simple to get information.

5.2.1. Maternal Health Knowledge

The results of the study that women's knowledge revealed about the health education program regarding pregnancy. She resorted to a medical and diagnostic examination and took the vaccine at the specified time, and the majority of pregnant women appeared to know about the symptoms that accompany pregnancy, such as nausea, vomiting, and lower back pain. Poor's percentage appeared about her knowledge. I know the methods of pain relief in virginal delivery.

While a study was conducted in Canada by (Grenier et al., 2021) we found that the women who participated had a general awareness of the nutritional guidelines; however, they often lack the understanding or ability to put them into practice. They described having difficulty interpreting and implementing the nutritional guidelines and lacked confidence about whether they were eating all the necessary vitamins and food groups (Table 2; Francis, O'connor, &Curran, 2012; Marshman et al., 2016).

5.2.2 Discussion of Maternal health information

Regarding the maternal health information, the measure shows that the highest mean of score in the item (Do you acquire information from internet sources such as websites, Instagram and telegram?), Twenty Point Forty Seven. Then comes (Do you acquire information from family, friends and acquaintances?), (I acquire information from other pregnant women). While the lower mean of score (1.55) in the item (Do you obtain your knowledge from written sources such books, educational notes, pamphlets,

and drug brochures?). These results agree with a study conducted by (Wallwiener et al., 2016) Results show of women using Internet (education Health) and smartphone (maternal Health) based sources of information during pregnancy 50.7 % of pregnant women were online information seekers. 22.4 % used a Maternal Health pregnancy application.

5.3. Assessment of Maternal Health literacy

Pregnant women represent a population where there is an increasing need for adequate health literacy levels due to the abundance of health information they receive throughout this period. The results of the current study showed that the overall assessment of Assessment of Maternal Health literacy was (fair). Although these results might be acceptable, but some of the domain items showed a poor level of Maternal Health literacy such (Do you evaluate the accuracy of pregnancy-related information obtained from online sources such as websites, Instagram and telegram?).

This study Shows (Zibellini et al., 2021) that several studies in Latin America, Canada and Australia have examined health literacy in pregnant women and found the prevalence of low HL to range between 15–44%.

5.4. Maternal Health Decision Making and Behavior

The present results show that Poor Involved in Maternal Health Decision Making and Behavior. A study conducted in Ethiopia by (Woldemicael, & Tenkorang, 2010).The examines the net effect of women's autonomy on their health seeking behavior in Ethiopia. We hypothesize that women with higher autonomy are more likely to seek health care during pregnancy and delivery than those with lower autonomy.

5.5. Distribution of the Statistics of Overall Maternal Health Literacy.

Health literacy is an important factor based on a set of knowledge to change the behavior of individuals, making them more concerned with their health. Health literacy is an important and essential part of reducing negative influences and changing unhealthy behaviors. The results of the study showed that the majority of pregnant women are forty-five percent Moderate Health Literacy. While a study conducted by (Asadi et al., 2020) investigated pregnant women presented to health centers in Yazd, Iran, and found that they had a low level of health literacy.

5.6. Relationship Among Maternal Health Literacy Sub domains

This study shows the relationship between health education and other fields of knowledge and information for pregnant women. The results shown, in table (4.8), the percentage of information that pregnant women acquire on their own is moderate, at a rate of thirty-seven percent.

As for the field of mothers' knowledge that she gains through the health education program by health care providers during her visit to primary health care centers, fairness appeared at a rate of sixty-three percent. The table also shows the results of the field of evaluating the health culture of pregnant mothers, which showed a lack of health education, at a rate of fifty-one percent. Also, in the field of: Maternal Health Decision Making and Behavior, the result was poor involved, with a percentage of fifty-five points, five percent.

5.7. Relationship between Women's Maternal Overall Health Education Program Activities and their Sociodemographic Data

The chi-square test is one of the most famous tests in the statistical analysis of the independence test, as it shows whether there is a relationship between the variables, as it consists of two hypotheses, the null hypothesis and the alternative hypothesis, as the B value is less than 0.0 5. There is a relationship between them and that the variables are not independent.The results showed a significant relationship between sociodemographic variables such as age, educational level, economic status, reproductive history, and knowledge of mothers, based on the p value.

As for the domain of maternal health information, the relationship is clear between the variables and this field, as mothers whose level of education is high, who regularly visit the health care center, have a good income level, and have a reproductive history, show more information and knowledge. In addition to the relationship of the variables and the domain of health education for pregnant mothers, it is clear as we work.

Likewise, pregnant mothers for several times and with a middle age group that differs from teenage and young pregnant women, with a high level of knowledge and a good economic condition. These relationships appear in the table (4.9) with a value of p value, which is less than 0.05. Similar to our study, earlier studies have reported the relationship of educational level with health behaviors during pregnancy. Where the results showed that conducted in the Netherlands by (Baron et al., 2015) Low health control beliefs were ten times more likely in women with low education and almost four times more likely in those with mid-level education, compared to those with high education. Additionally, facing daily struggles, such as

the stresses associated with low income, has been found to negatively influence such control beliefs

5.8 Overall Maternal Health Literacy * sociodemographic

The results show, according to the relationship of health literacy according to age that the highest mean score was 43 and older, as this age group had moderate health literacy. This is because she has years of experience from the number of pregnancies she has had and has gained knowledge from her pregnant peers and friends, and because this age group is a category of maturity that distinguishes good and proper behavior from other negative behaviors in her and her fetus this result appears in the table (4.10).

The results of our research showed during our study of the relationship between the educational level and the health literacy that the categories with the Institute and above have the most healthy literacy compared to the category that is unable to read and write, and this is something that no two people disagree about because this category knows the source of the information and is familiar with the information and its recentness and years studied, as shown in Table 4.11. The results of this research are based on a study conducted in Germany by (Delanoe et al., 2016) the studies show mixed results regarding the health literacy levels of pregnant women. The majority of the studies included in the review indicate that the women surveyed have an adequate health literacy level. The assumption that these groups have adequate health literacy than the general population.

In addition to the relationship of the profession and the working woman to the non-working woman with health literacy, the results of our study show that the mean score for the employed was the highest and the level of culture for them was moderate health literacy, and by 49 percent because they are mixed with different levels of literacy and their involvement in society and their acquisition of information from different sources

Also, there is a relationship between housing and health literacy, where the results showed the highest mean score for urban. A third of the sample was urban, indicating moderate health literacy. Through these matters, in addition to the existence of a difference in the culture of the rural communities from the city, it is an open society that allows women to move freely and comfortably.

In addition to the economic status and the extent of its relationship to health literacy , as the results of the table show, there is a discrepancy between those who have an economic level and whose income is enough (moderate health literacy) and those whose economic level is not enough (poor health literacy), as shown in Table (4-14)in Chapter Four. Research results support a study conducted by (Wilson et al., 2012) In contrast, research suggests that women in countries below poverty level are more likely to possess only limited health literacy.

Similarly, women with a history of childbirth show a clear relationship between it and the cultural level of health. As the table showed, the highest average score for Gravida was 1-2, which was moderate health literacy. The number of births, abortions, and stillbirths are all variables associated with health education. The results of a study approach conducted

by (Kilfoyle et al., 2016) appeared Literacy plays an important role in reproductive knowledge and may impact behaviors and outcomes.

Also, the relationship between health literacy and the number of visits to primary health care centers the results show that pregnant women with a regular pattern had moderate health knowledge compared to others who did not have an irregular pattern, as the results indicated poor health education. This is evident in the results of the fourth chapter and tables (4.15, 16.17, 18.19, and 20).While a study was conducted in Iran by (Tavananezhad et al., 2022). The findings showed that pregnant women had high levels of health literacy. A significant positive relationship was observed between the overall health literacy score and its domains with empowerment during pregnancy. Based on the multiple linear regression model, a significant correlation was shown between health literacy and age with empowerment during pregnancy after adjusting the socio-demographic characteristics. In other words, empowerment during pregnancy improved with increasing health literacy and decreased with aging.

Chapter Six
Conclusions & Recommendations

Chapter Six

Conclusions and Recommendations

6.1. Conclusions:

In view of the findings and their discussion, this quantitative review used an assessment approach with questionnaire objects, and concludes

That:

6.1.1. Sample age distributed between the twenties and thirties with Thirty-seven and a half .

6.1.2. Most of the women have an institute and above level of education

6.1.3. The largest proportion of women are urban residents and believe that their monthly income is sufficient.

6.1.4. In general, the study found that the level of health literacy for pregnant women is moderate.

6.1.5. Women showed poor level of knowledge regarding health education program activities.

6.1.6. The study sample reported fair of regarding maternal health information.

6.1.7. Although the overall of assessment of maternal health literacy results was moderate, some very vital health information was assessed as poor, there is a need to strength this information

6.1.8. The study sample's maternal health decision making and behaviours were poor.

6.1.9. There is a significant and highly significant correlation between maternal overall health education program activities and. sociodemographic data.

6.1.10. This study found a relationship between overall maternal health literacy some demographic data.

6.1.11. The results of the study showed that most of the information that pregnant mothers get from Internet sources.

Recommendations

6.2. Recommendations:

According to the findings and stated conclusions, the following could be recommended for future work:

6.2.1. Advancing clear and simple educational messages about pregnancy, signs and symptoms.

6.2.2. Improve the health literacy of all women of reproductive age. By setting up educational programs and awareness courses in the pre-pregnancy stage through communication sites that are followed by reliable official bodies that are available to everyone and easy to access.

6.2.3. Enhance the health literacy of all women at reproductive ages for further empowerment of pregnant women.

6.2.4. Developing social media or television networks that feature pregnancy-related content, including presentations and meetings on the topic of health education for expectant women that are supervised by governmental healthcare agencies.

6.2.5. There is an urgent need to develop health education programs related to pregnancy through Primary health centers and various media to improve the level of knowledge among women in general and pregnant women, in particular, to worry about the health problems associated with pregnancy.

6.2.6. Follow up the development and training of primary health care providers in maternal and newborn health care units.

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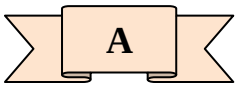

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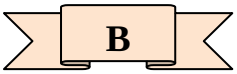

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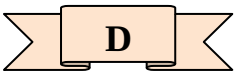

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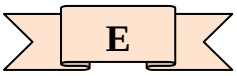

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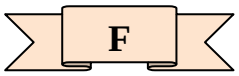

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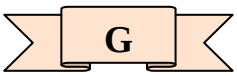

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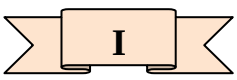

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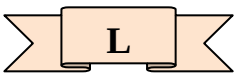

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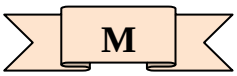

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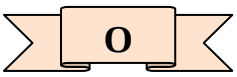

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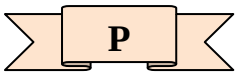

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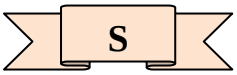

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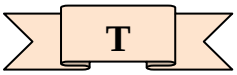

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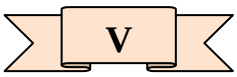

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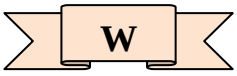

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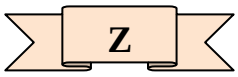

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Appendices

Appendix A

University of Babylon
College of Nursing
Research Ethics Committee

جـــامـعة بـــابـــل
كـــلية التمريـض
لجنة اخلاقيات البحث العلمي

Issue No:
Date: 20/ 3 /2023

Approval Letter

To, بشرى حيدر جاسم

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled **" Evaluation of Health Education Program Activities regarding Pregnancy".**

The Following documents have been reviewed and approved:

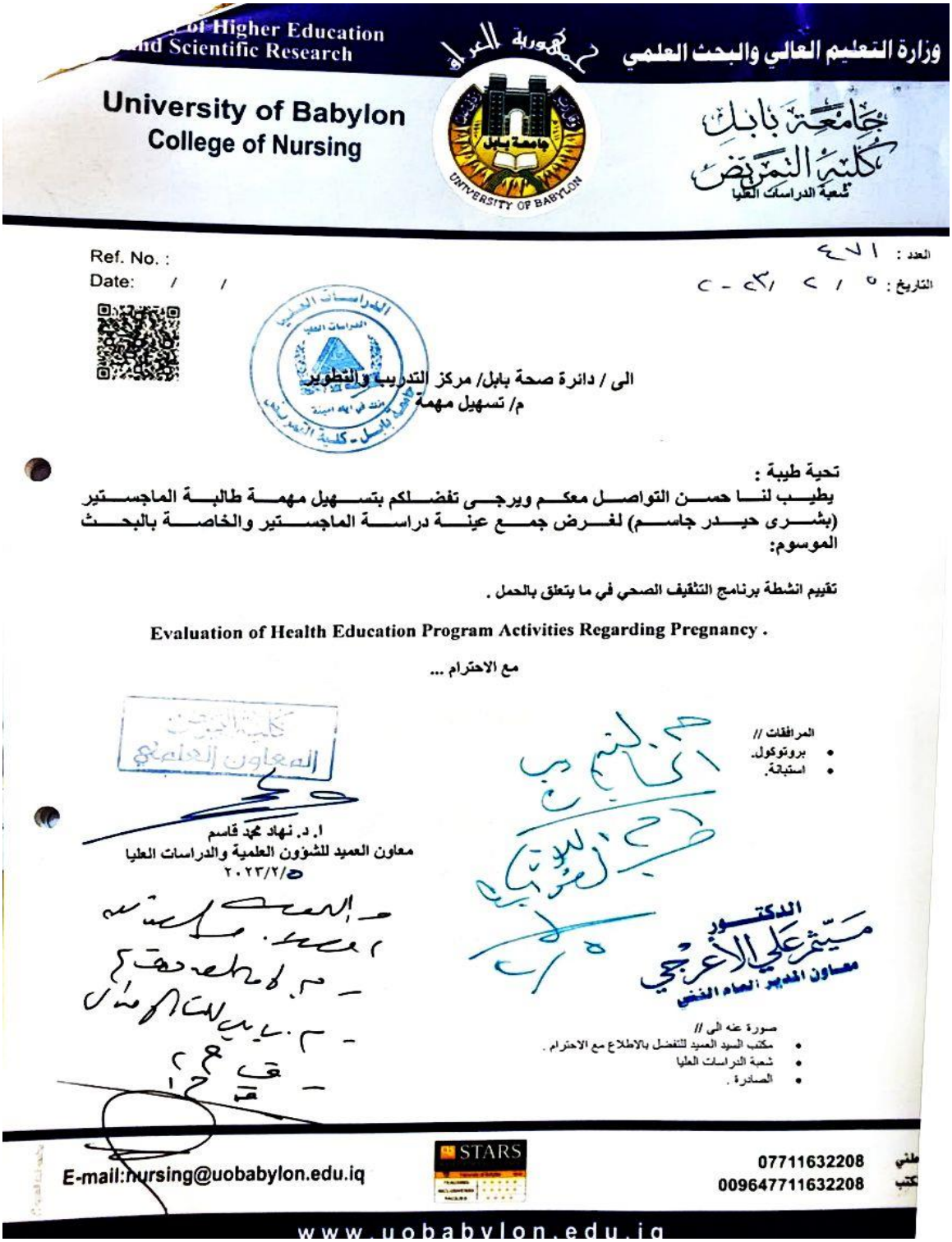
1. Research protocol
2. Research instrument/s
3. Participant informed consent

Committee Decision.

The committee approves the study to be conducted in the presented form. The Research Ethics committee expects to be informed about any changes occurring during the study, any revision in the protocol and participant informed consent.

Prof. Dr. Shatha Saadi Mohammed
Chair Committee
College of Nursing
Research Ethical Committee
20 / 3 /2023

Appendix B



وزارة التعليم العالي والبحث العلمي
جمهورية العراق
Ministry of Higher Education and Scientific Research
جامعة بابل
كلية التمريض
شعبة الدراسات العليا
University of Babylon
College of Nursing

العدد : ١٨٤
التاريخ : ٥ / ٢ / ٢٠٢٣

Ref. No. :
Date: / /

الى / دائرة صحة بابل/ مركز التدريب والتطوير
م/ تسهيل مهمة

تحية طيبة :
يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالبة الماجستير (بشرى حيدر جاسم) لغرض جمع عينة دراسة الماجستير والخاصة بالبحث الموسوم:

تقييم انشطة برنامج التثقيف الصحي في ما يتعلق بالحمل .

Evaluation of Health Education Program Activities Regarding Pregnancy .

مع الاحترام ...

المرافقات //
- بروتوكول.
- استبانة.

كلية التمريض
المعاون العلمي

ا. د. نهاد محمد قاسم
معاون العميد للشؤون العلمية والدراسات العليا
٢٠٢٣/٢/٥

الدكتور
مستثمر علي الاعرجي
معاون المدير العام الفني

صورة عنه الى //
- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام .
- شعبة الدراسات العليا
- الصادرة .

E-mail:nursing@uobabylon.edu.iq
STARS
07711632208
009647711632208
www.uobabylon.edu.iq

Appendix C

جمهورية العـــراق

Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621		وزارة الصحة والبيئة دائرة صحة محافظة بابـــل المديـــر العـــام مركـــز التدريب والتنمية البشرية لجنة البحوث

استمارة رقم :-٠٣ /٢٠٢١

رقم القرار :- ٢١
تاريخ القرار :- ١٥/ ٢ /٢٠٢٣

قرار لجنة البحوث

تحية طيبة ...

درست لجنة البحوث في دائرة صحة بابل مشروع البحث ذي الرقم (٢١ /٠ ٢٠٢٣/ بابل)
المعنـــون(تقييم أنشطه برامج التثقيف الصحي في ما يتعلق بالحمل)

والمقـدم من الباحثة(بشرى حيدر جاسم)إلى وحدة أدارة البحوث والمعرفي مركز التدريب والتنمية البشرية في دائرة صحة بابل بتاريخ ٢٠٢٣/٢/١٣ وقررت :

قبول مشروع البحث أعلاه كونه مستوفيا للمعايير المعتمدة في وزارة الصحة والخاصة بتنفيذ البحوث ولا مانع من تنفيذه في مؤسسات الدائرة .

مـــــع الاحتـــرام

الـدكتور
محمد عبد الله عجرش
رئيس لجنة البحوث
٢٠٢٣ / /

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية
لجنة البحوث

نسخة منه إلى :
- مكتب المدير العام / مركز التدريب والتنمية البشرية / وحدة إدارة البحوث ... مع الأوليات.

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltrainning@gmail.com

Appendix D1

جمهورية العراق

وزارة الصحة
دائرة صحة محافظة بابـــل
المديـــر العـــام
مركـــز التدريب والتنمية البشرية
وحدة أدارة البحوث

Ministry Of Health
Babylon Health Directorate
Email:-
Babel_Healthmoh@yahoo.com

العدد : ٤٥٤
التاريخ: / /٢٠٢٣

إلى / مستشفى الأمام الصادق (ع)
مستشفى بابل التعليمي للنسائية والأطفال
قطاع الحلة الاول للرعاية الصحية الأولية
قطاع الحلة الثاني للرعاية الصحية الأولية

م// تسهيل مهمة

مستشفى بابل للنسائية والاطفال
وحدة التطوير المهني المستدام
C.M.E

تحية طيبة ...

أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٧١ في ٢٠٢٣/٢/٥

نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحثة طالبة الدراسات العليا/ ماجستير(بشرى حيدر جاسم).

للتفضل بالاطلاع وتسهيل مهمة المومأ اليه من خلال توقيع وختم استمارات أجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

المرفقات :
استمارة عدد /٢

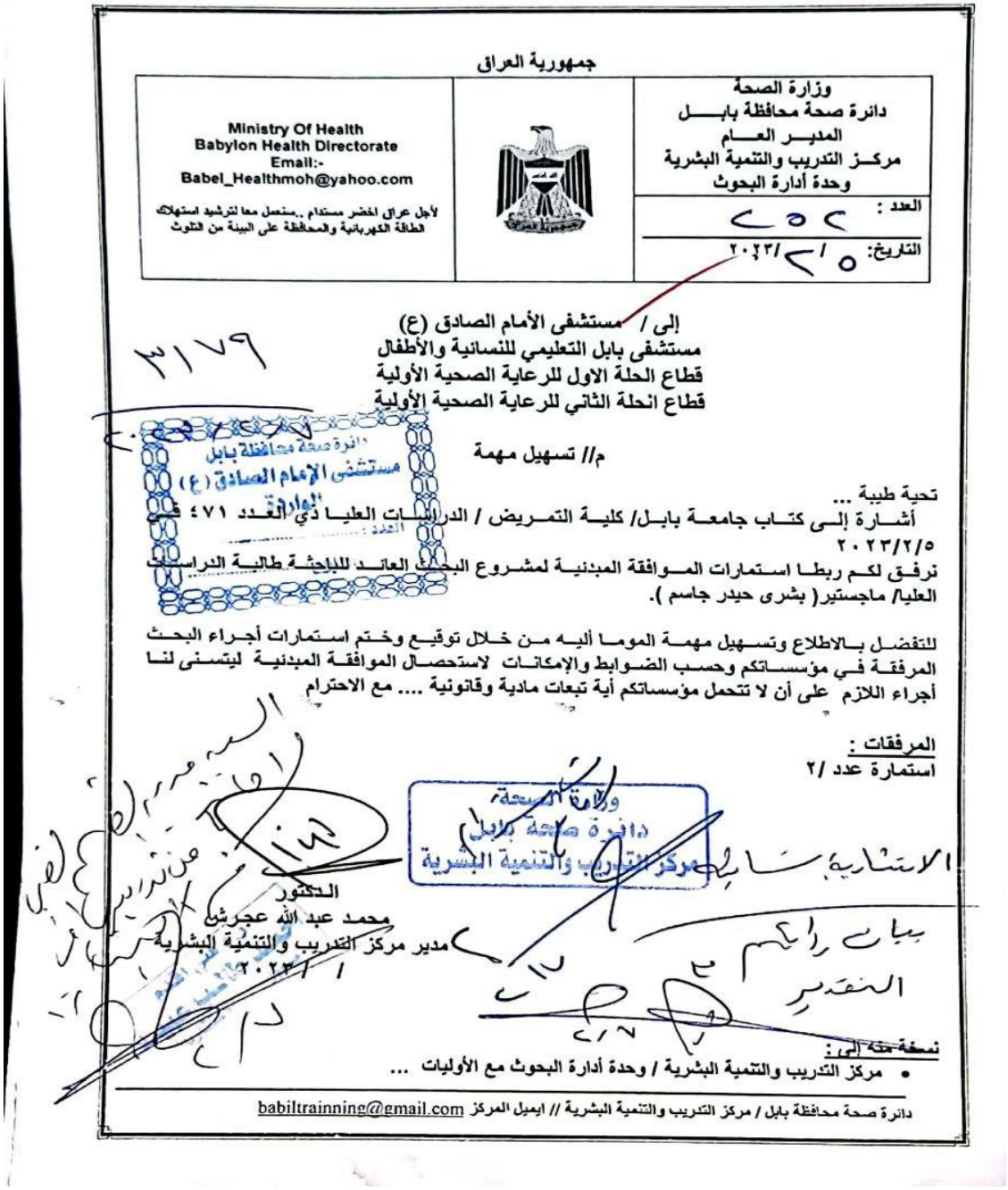
وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ /٢٠٢٣

نسخة منه الى:
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات
- التعليم التمريض المستدام
- مراسلات

الدكتورة
زهراء جاسم السلطاني
اختصاص طب طوارئ

Appendix D2



جمهورية العراق

Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com لأجل عراق اخضر مستدام ..سنعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث		وزارة الصحة دائرة صحة محافظة بابـــل المديـــر العـــام مركـــز التدريب والتنمية البشرية وحدة أدارة البحوث العدد : ٢٥٢ التاريخ: ٢٠٢٣/٢/٥

إلى / مستشفى الأمام الصادق (ع)
مستشفى بابل التعليمي للنسائية والأطفال
قطاع الحلة الاول للرعاية الصحية الأولية
قطاع انحلة الثاني للرعاية الصحية الأولية

٣١٧٩

م// تسهيل مهمة

دائرة صحة محافظة بابل
مستشفى الإمام الصادق (ع)
الواردة

تحية طيبة ...
أشـارة إلـى كتـاب جامعـة بابـل/ كليـة التمـريض / الدراسـات العليـا ذي العـدد ٤٧١ في ٢٠٢٣/٢/٥
نرفـق لكـم ربطـا اسـتمارات المـوافقة المبدئيـة لمشـروع البحـث العائـد للباحثـة طالبـة الدراسـات العليا/ ماجستير(بشرى حيدر جاسم).

للتفضـل بـالاطلاع وتسـهيل مهمـة المومـا أليـه مـن خـلال توقيـع وخـتم اسـتمارات أجـراء البحـث المرفقـة فـي مؤسسـاتكم وحسـب الضـوابط والإمكانـات لاستحصـال الموافقـة المبدئيـة ليتسـنى لنـا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

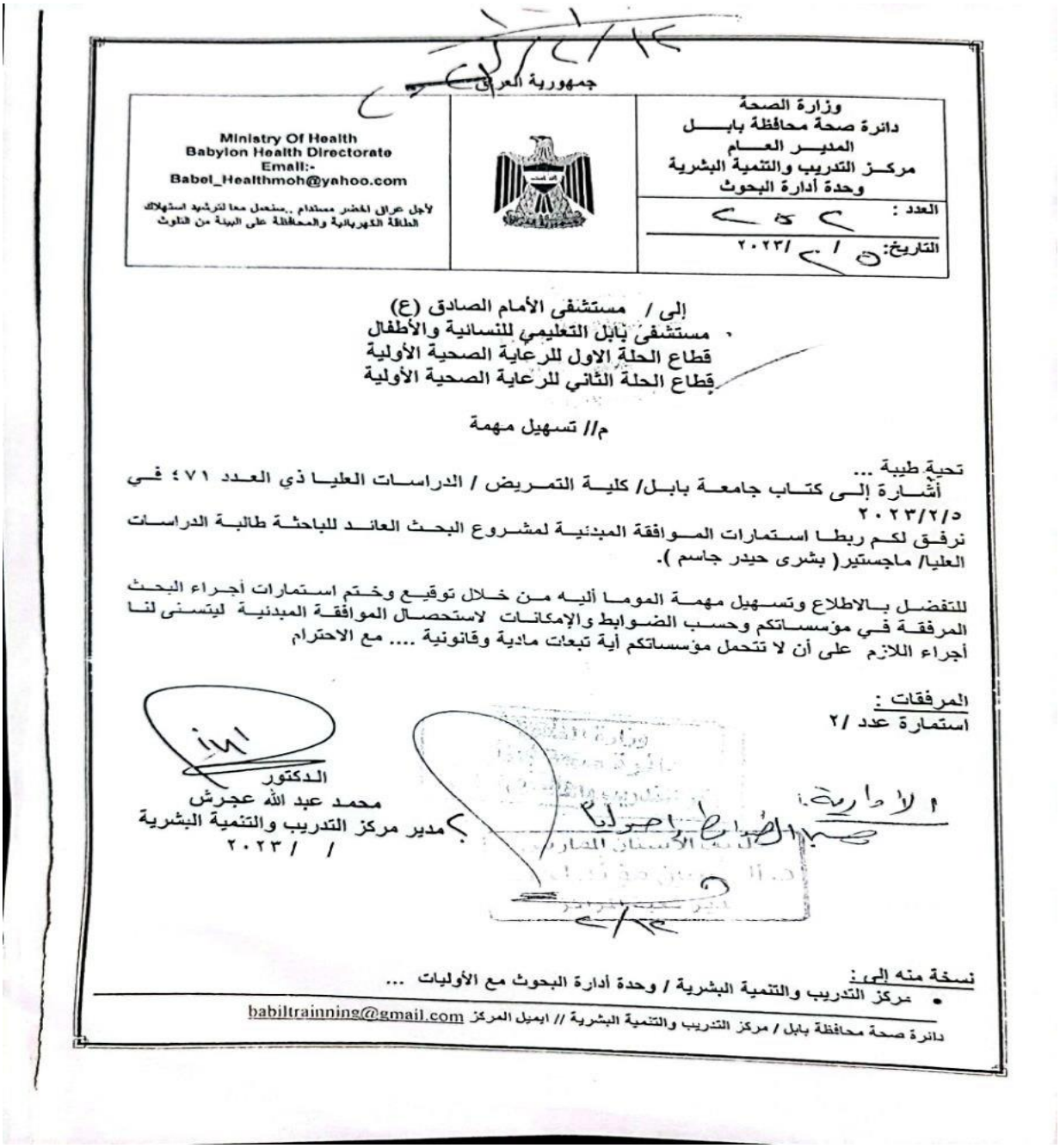
المرفقات :
استمارة عدد /٢

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
٢٠٢٣/ /

نسخة منه إلى :
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

Appendix D3



جمهورية العراق

وزارة الصحة
دائرة صحة محافظة بابـــل
المديـــر العـــام
مركـــز التدريب والتنمية البشرية
وحدة أدارة البحوث

العدد :
التاريخ: / ٢٠٢٣/

Ministry Of Health
Babylon Health Directorate
Email:-
Babel_Healthmoh@yahoo.com

لأجل عراق المختبر مستدام ..سنعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث

إلى / مستشفى الأمام الصادق (ع)
مستشفى بابل التعليمي للنسائية والأطفال
قطاع الحلة الاول للرعاية الصحية الأولية
قطاع الحلة الثاني للرعاية الصحية الأولية

م// تسهيل مهمة

تحية طيبة ...
أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٧١ في ٢٠٢٣/٢/د

نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحثة طالبة الدراسات العليا/ ماجستير(بشرى حيدر جاسم).

للتفضل بالاطلاع وتسهيل مهمة الموما أليه من خلال توقيع وختم استمارات أجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ /٢٠٢٣

نسخة منه إلى:
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltrainning@gmail.com

Appendix D4

جمهورية العراق

وزارة الصحة
دائرة صحة محافظة بابـــل
المديـــر العـــام
مركـز التدريب والتنمية البشرية
وحدة أدارة البحوث

العدد : ٢٥٤
التاريخ: ١/ ٢٠٢٣/ ٢٥

Ministry Of Health
Babylon Health Directorate
Email:-
Babel_Healthmoh@yahoo.com

لأجل عراق أفضل مستقبل يستعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث

إلى / مستشفى الأمام الصادق (ع)
مستشفى بابل التعليمي للنسائية والأطفال
قطاع الحلة الاول للرعاية الصحية الأولية
قطاع الحلة الثاني للرعاية الصحية الأولية

م// تسهيل مهمة

تحية طيبة ...

أشـارة إلـى كتـاب جامعـة بابـل/ كليـة التمـريض / الدراسـات العليـا ذي العـدد ٤٧١ فـي ٢٠٢٣/٢/٥

نرفـق لكـم ربطـا اسـتمارات المـوافقة المبدئيـة لمشـروع البحـث العائـد للباحثـة طالبـة الدراسـات العليا/ ماجستير(بشرى حيدر جاسم).

للتفضـل بـالاطلاع وتسـهيل مهمـة المومـا أليـه مـن خـلال توقيـع وخـتم اسـتمارات أجـراء البحـث المرفقـة فـي مؤسسـاتكم وحسـب الضـوابط والإمكانـات لاستحصـال الموافقـة المبدئيـة ليتسـنى لنـا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

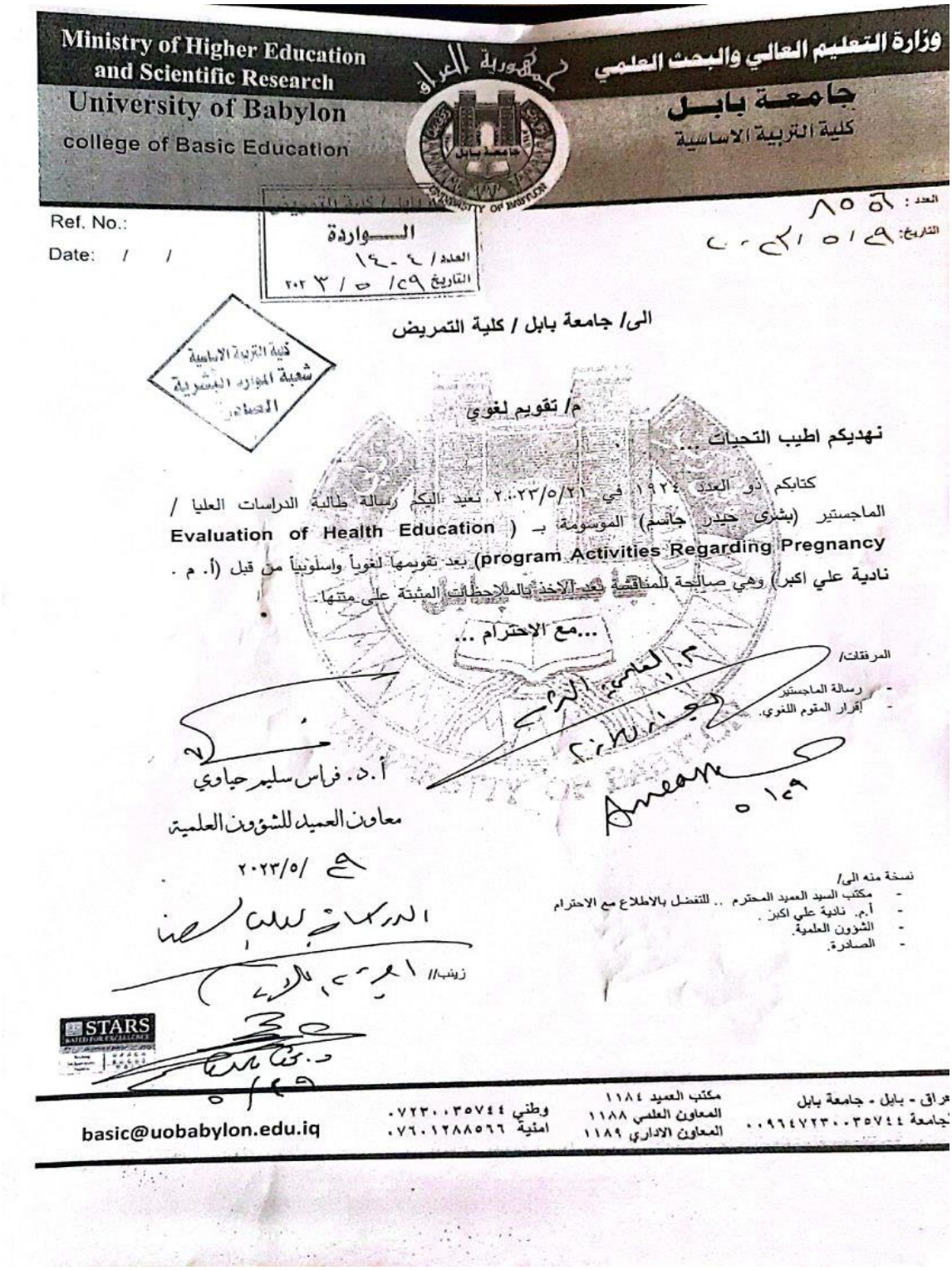
المرفقات :
استمارة عدد /٢

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ /٢٠٢٣

نسخة منه إلى :
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

Appendix



Ministry of Higher Education and Scientific Research
University of Babylon
college of Basic Education

وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التربية الاساسية

Ref. No.:
Date: / /

الواردة
العدد / ٤-١٤
التاريخ ٢٠٢٣/٥/٢٩

العدد : ٨٥
التاريخ: ٢٠٢٣/٥/٢٩

الى/ جامعة بابل / كلية التمريض

كلية التربية الاساسية
شعبة الموارد البشرية
الصادر

م/ تقويم لغوي

نهديكم اطيب التحيات ...

كتابكم ذو العدد ١٩٢٤ في ٢٠٢٣/٥/٢١ نعيد اليكم رسالة طالبة الدراسات العليا / الماجستير (بشرى حيدر جاسم) الموسومة بـ (Evaluation of Health Education program Activities Regarding Pregnancy) بعد تقويمها لغوياً واسلوبياً من قبل (أ. م . نادية علي اكبر) وهي صالحة للمناقشة بعد الاخذ بالملاحظات المثبتة على متنها.

...مع الاحترام ...

أ.د. فراس سليم حياوي
معاون العميد للشؤون العلمية
٢٠٢٣/٥/

المرفقات/
- رسالة الماجستير
- إقرار المقوم اللغوي.

نسخة منه الى/
- مكتب السيد العميد المحترم .. للتفضل بالاطلاع مع الاحترام
- أ.م. نادية علي اكبر .
- الشؤون العلمية.
- الصادرة.

زينب//

STARS RATED FOR EXCELLENCE

basic@uobabylon.edu.iq
وطني ٠٧٢٣٠٠٣٥٧٤٤
امنية ٠٧٦٠١٢٨٨٥٦٦
مكتب العميد ١١٨٤
المعاون العلمي ١١٨٨
المعاون الاداري ١١٨٩
عراق - بابل - جامعة بابل
جامعة ٠٠٩٦٤٧٢٣٠٠٣٥٧٤٤

Questionnaire

Evaluation of Health Education Program Activities Regarding Pregnancy

Part one:

Demographical data

Age ☐ **year**

Educational level :

1. Unable to read and write ☐

2. Read and write ☐

3. Primary School graduate ☐

4. Intermediate ☐

5. Secondary ☐

6. Institute and above

Occupation:

1- Employed ☐

2- Unemployed ☐

3- Student ☐

4- Others ☐

Residency:

1. Rural ☐

2. Urban ☐

Economic status:

1. Enough

2. Enough to some extent

3. Not enough

Part two

1. Obstetric history.

2. Number of pregnancies (gravida)

3. Number of live births (para)

4. History of miscarriages Yes No

5. History of stillbirth Yes No

6. Number alive children

7. The pattern of primary health care center visit

1- Regular

2- Irregular

Appendices

Domain (1) : Maternal Health Knowledge	Yes	Uncertai	No
1. Are you aware of the normal changes in the body during pregnancy?			
2. Do you know natural psychological changes during pregnancy?			
3. I know proper nutrition during pregnancy.			
4. I know personal healthcare.			
5. Are you aware of appropriate pregnancy activity and status؟			
6. I am aware of the safe prenatal exercise.			
7. I know pregnancy supplements (vitamins).			
8. Are you aware of the ideal time to refer someone for a pregnancy examination (visit)?			
9. I know diagnostic examination (ultrasound and test) of maternal and fetal health in pregnancy.			
10. Are you familiar with the acceptable and typical weight gain during pregnancy?			
11. Do you know common pregnancy problems such as nausea, vomiting, and lower back pain?			
12. Do you know injecting safe (allowed) vaccines during pregnancy?			
13. Are you aware of the appropriate sex to have while pregnant?			
14. Do you know how many fetal movements are typical?			
15. I know the factors affecting fetal health such as photography, medications, chemicals such as Botox, etc. .			
16. Are you aware of pregnancy risk factors?			

17. Do you know pregnancy disease symptoms such a gestational diabetes, high blood pressure in pregnancy and other diseases?			
18. Are you familiar with childbirth, including the benefits and drawbacks of each natural delivery method, C-section, and the associated medical treatment?			
19. I know the methods of pain relief in virginal delivery.			
20. Do you know neonatal and infant care in the postpartum period?			
21. I know required postpartum care of mother.			
Domain (2): maternal health information	**Always**	**Sometimes**	**Never**
1. Do you obtain your knowledge from written sources such books, educational notes, pamphlets, and drug brochures?			
2. I acquire information from radio and television?			
3. Do you acquire information from internet sources such as websites, Instagram and telegram?			
4. I acquire information from other pregnant women.			
5. Do you acquire information from family, friends and acquaintances?			
6. I acquire information from healthcare professionals such as a physician or midwife.			
Domain (3): Assessment of Maternal Health Information	**Always**	**Sometimes**	**Never**
١. It is easy for me to read and pronounce pregnancy-related vocabulary from information sources such as books, educational booklets, internet, telegram and Instagram.			
2. The information obtained from different sources of information are understandable for me.			

3. Are you looking for valid and verified sources for getting the right pregnancy related information?			
4. Do you ask of the doctor or midwife to make sure pregnancy related information?			
5. Do you Evaluate the accuracy of pregnancy-related information obtained from online sources such as websites, Instagram and telegram?			
6. Do you Evaluate the accuracy of pregnancy-related Information obtained from friends and relatives?			
Domain (4): Maternal Health Decision Making and Behavior	**Always**	**Sometimes**	**Never**
1. Can you handle and/or control the physical and psychological changes that come with pregnancy?			
2. I implement a proper diet for pregnancy.			
3. I implement necessary measures for personal health care during pregnancy.			
4. Do you follow the guidelines for exercise and healthy living while pregnant?			
5. I take pregnancy supplements as prescribe by doctor or midwife.			
6. Do you consult a doctor or midwife before taking any medications (both pharmaceutical and natural) during pregnancy			
7. I attend for prenatal care (examinations)as scheduled .			
8 .Do you carry out the prenatal ultrasound and other tests that a doctor or midwife has advised?			
9. I monitor and control the weight gain during pregnancy.			
10. I use the appropriate methods of sexual relation during pregnancy.			

11. Do you avoid taking actions that are harmful to pregnancy?			
12. Do you visit a doctor or midwife as soon as you can if any pregnancy-related risk symptoms are noticed?			
13 . If the facts and advice are unclear, do you contact the doctor or midwife for more details?			
14. Do you participate in decision making about pregnancy issues with the doctor or midwife (providing personal opinions)?			
15. I pay attention to the accuracy and appropriateness of information given to other pregnant women.			

Questioner in Arabic

السيده .....

السلام عليكم ورحمة الله وبركاته .....

بين يديك استبانه لدراسة الماجستير : تقوم الباحثه بأجراء دراسة لنيل درجة الماجستير في العلوم التمريضيه فرع صحة الأسرة والمجتمع في كلية التمريض ـجامعة بابل بعنوان (تقييم أنشطة برنامج التثقيف الصحي المتعلقة بالحمل).

راجين منكم الأجابه على الأستماره

الجزء الأول :

البيانات الديموغرافيه :

العمر ☐ سنه

المستوى التعليمي :

١ـلا تقرأ ولاتكتب ☐

٢ـ تقرأ وتكتب ☐

٣ـ ابتدائيه ☐

٤ـ متوسطه ☐

٥ـ اعداديه ☐

٦ـ معهد فما فوق ☐

المهنه :

١ـتعمل ☐

٢ـ لا تعمل ☐

٣ـ طالبه ☐

٤- أخرى ☐

السكن:

١-مدينه ☐

٢- ريف ☐

الحاله الأقتصاديه :

١-يكفي ☐

٢- يكفي لحد ما ☐

٣- لايكفي ☐

الجزء الثاني:

التاريخ الأنجابي

١- عدد مرات الحمل ☐

٢- عدد الولادات ☐

الأجهاض

١- نعم ☐

٢- لا ☐

ولادة جنين ميت

١-نعم ☐

٢- لا ☐

عدد الأطفال الأحياء ☐

نمط زيارة مركز الرعاية الصحية الأولية:

١-منتظم ☐

٢- غير منتظم ☐

تقييم أنشطة برنامج التثقيف الصحي في ما يتعلق بالحمل

أ- المجال معرفة صحة الأم .	دائما	ابدا	احيانا
١- هل تعي التغيرات الطبيعية في الجسم أثناء الحمل؟.			
٢- هل تعلمين التغيرات النفسية الطبيعية أثناء الحمل؟			
٣- أعرف التغذية السليمة أثناء الحمل			
٤- أعرف الرعاية الصحية الشخصية			
٥- هل أنت على دراية بالنشاط والحالة المناسبة للحمل؟			
٦- أنا على علم بممارسة آمنة قبل الولادة			
79- أعرف مكملات الحمل (الفيتامينات)			
٨- هل تعرفين الوقت المثالي لإحالة أحدهم لفحص الحمل (زيارة)؟			
٩- أعرف الفحص التشخيصي (الموجات فوق الصوتية والأختبار) لصحة الأم والجنين أثناء الحمل.			
١٠- هل تعرفين زيادة الوزن المقبولة والنموذجية أثناء الحمل؟			
١١- هل تعرفين مشاكل الحمل الشائعة مثل الغثيان والقيء وآلام أسفل الظهر؟			
١٢- هل تعلمين حقن لقاحات مأمونة (مسموح بها) أثناء الحمل؟			
١٣- هل أنت على علم بالجنس المناسب لممارسته أثناء الحمل؟			
١٤- هل تعلم كم عدد حركات الجنين النموذجية؟			
١٥- أعرف العوامل التي تؤثر على صحة الجنين مثل التصوير الفوتوغرافي والأدوية والمواد الكيميائية مثل مادة البوتوكس وغيرها.			
١٦ - هل تعرفين عوامل خطر الحمل؟			
١٧- هل تعرفين أعراض مرض الحمل مثل سكري الحمل وارتفاع ضغط الدم أثناء الحمل وأمراض أخرى؟			

١٨- هل أنت على دراية بالولادة ، بما في ذلك مزايا وعيوب كل طريقة ولادة طبيعية ، وعملية قيصرية ، والعلاج الطبي المصاحب لها؟			
١٩ - أعرف طرق تسكين الآلام في الولادة الطبيعية			
٢٠- هل تعرفين رعاية الأطفال حديثي الولادة والرضع في فترة ما بعد الولادة؟			
٢١- أعلم أن رعاية الأم مطلوبة بعد الولادة			
ب - معلومات صحة الأم	دائما	بعض الأحيان	ابدا
١- هل تحصل على معرفتك من مصادر مكتوبة مثل الكتب والمذكرات التعليمية والنشرات وكتيبات الأدوية			
٢- أحصل على معلومات من الإذاعة والتلفزيون؟			
٣- هل تحصل على معلومات من مصادر الإنترنت مثل مواقع الويب تليكرام والأنستا ؟ وفايبر ،واتساب			
٤- أحصل على معلومات من نساء حوامل أخريات			
٥- هل تحصل على معلومات من العائلة والأصدقاء والمعارف؟			
٦- أحصل على معلومات من المتخصصين في الرعاية الصحية مثل الطبيب أو القابلة			
ج - تقييم المعلومات المتعلقة بصحة الأم	دائما	بعض الأحيان	ابدا
١- من السهل بالنسبة لي قراءة ونطق المفردات المتعلقة بالحمل من مصادر المعلومات مثل الكتب والكتيبات التعليمية والإنترنت والبرقيات والإنستغرام			
٢- المعلومات التي تم الحصول عليها من مصادر مختلفة للمعلومات مفهومة بالنسبة لي.			
٣- هل تبحثين عن مصادر صحيحة وموثقة للحصول على المعلومات الصحيحة المتعلقة بالحمل؟			

٤- هل تطلب من الطبيب أو القابلة التأكد من المعلومات المتعلقة بالحمل؟			
٥- هل تقيّم دقة المعلومات المتعلقة بالحمل التي تم الحصول عليها من مصادر عبر الإنترنت مثل مواقع الويب والتلكرام والأنستا ؟			
٦- هل تقوم بتقييم دقة الحمل ذات الصله المعلومات التي تم الحصول عليها من الأصدقاء والأقارب؟			
خ- اتخاذ القرارات والسلوك في مجال صحة الأم	دائما	بعض الأحيان	ابدا
١- هل يمكنك التعامل مع و /أو التحكم في التغيرات الجسدية والنفسية التي تصاحب الحمل؟			
٢- أتبع نظاما غذائيا سليما للحمل			
٣- أقوم بتنفيذ التدابير اللازمة للرعاية الصحية الشخصية أثناء الحمل			
٤- هل تتبعين المبادئ التوجيهية لممارسة الرياضة والحياة الصحية أثناء الحمل؟			
٥- أتناول مكملات الحمل على النحو الذي يصفه الطبيب أو القابلة			
٦- هل تستشيرين طبيبة أو قابلة قبل تناول أي أدوية (صيدلانية وطبيعية) أثناء الحمل			
٧- أنا أحضر لرعاية ما قبل الولادة (الفحوصات) كما هو مقرر			
٨- هل تجرين الموجات فوق الصوتية قبل الولادة وغيرها من الفحوصات التي نصح بها الطبيب أو القابلة؟			
٩- أنا أراقب وأتحكم في زيادة الوزن أثناء الحمل			
١٠- أستخدم الأساليب المناسبة للعلاقة الجنسية أثناء الحمل			
١١- هل تتجنبين القيام بأفعال ضارة بالحمل؟			
١٤ - هل تقومين بزيارة الطبيب أو القابلة بأسرع ما يمكن إذا لاحظت أي أعراض مخاطر مرتبطة بالحمل؟			

١٣ـ إذا كانت الحقائق والنصائح غير واضحة ، هل تتصلي بالطبيب أو القابلة لمزيد من التفاصيل؟			
١٤ـ هل تشاركين في اتخاذ القرار بشأن قضايا الحمل مع الطبيب أو القابلة (إبداء الرأي الشخصي)؟			
١٥ -أنني أنتبه إلى دقة وملاءمة المعلومات المقدمة إلى النساء الحوامل الأخريات			

خبراء تحكيم استمارة الأستبانه

ت	اسم الخبير	اللقب العلمي	الأختصاص	مكان العمل	سنوات الخدمه
1.	د.أمين عجيل الياسري	استاذ مساعد	تمريض صحة الأسره والمجتمع	جامعة بابل/ كلية التمريض	٣٦
2.	د.أركان بهلول ناجي	أستاذ	تمريض صحة المجتمع	جامعة بغداد /كلية التمريض	٣٦
3.	د.قحطان هادي الجبوري	أستاذ	تمريض صحه المجتمع	جامعة بابل	٣٥
4.	د.حسن علوان بيعي	أستاذ متمرس	طب صحة الأسره والمجتمع	جامعة بابل /كلية الحله جامعه	٣٥
5.	د.وفاء أحمد امين	أستاذ	تمريض صحة الأم والوليد	جامعة بابل /كلية التمريض	٣٤
6.	د.حيدر عباس العطار	طبيب أختصاص	نسائيه وتوليد	دائرة صحة بابل/مستشفى الأمام الصادق (ع)	٣٠
7.	د.ساجده سعدون عليوي	مدرس	تمريض صحة الأم والوليد	جامعة كربلاء /كلية التمريض	٢٩
8.	د.سلمان حسين	مدرس	تمريض صحة مجتمع	جامعة كربلاء/كلية التمريض	٢٥
9.	د.حيدر حمزه الحدراوي	استاذ مساعد	تمريض صحة نفسيه	جامعة كربلاء /كلية التمريض	٢٢
10.	د.سجال فاضل فرهود	استاذ	طب الأسره والمجتمع	جامعة كبابل /كلية الطب	٢٠
11.	د.أيهاب عبدالأمير الخفاجي	بورد عربي	طب أسره	دائرة صحة بابل /مستشفى الأمام الصادق (ع)	٢٠
12.	د.منصور عبدالله	أستاذ	تمريض صحة	جامعة الكوفه	١٩

	فلاح	مساعد	مجتمع	/كلية التمريض	
13.	د. غزوان عبدالحسين عبدالواحد	استاذ مساعد دكتور	تمريض صحة مجتمع	جامعة كربلاء/كلية التمريض	١٨
14.	د.محمد باقر حبيب عبدعلي	مدرس	تمريض صحة مجتمع	جامعة بغداد/كلية التمريض	١٥
15.	د.أشرف محمد علي	أستاذ مساعد	طب مجتمع	كلية الطب/جامعة بابل	١٥
16.	د.حسين منصور علي التميمي	مدرس	تمريض صحة مجتمع	جامعة الكوفه /كلية التمريض	١٢
17.	د.وسام مشعان مطلب	مدرس- دكتوره		جامعة بغداد/كلية التمريض	١٢
18.	د.أمير كاظم حسن	أستاذ	طب اسره	جامعة بابل/كلية الطب	١٠
19.	د.علي أحمد الحطاب	أستاذ	تمريض صحة نفسيه	جامعة بابل/كلية التمريض	١٠
20.	د.قيس أسماعيل كاظم	أستاذ مساعد	طب الأسرة والمجتمع	جامعة بابل /كلية الطب	٦

الخلاصة

الحمل هو حالة فيزيولوجية وعاطفية مرتبطة بالتغيرات الهرمونية والتغيرات الجسدية الناتجة عن كبر حجم الرحم. يوفر التثقيف الصحي الإعانات اللازمة للحصول على عادات وسلوكيات صحية جديدة. تتميز فترة الحمل بأنها لحظة مواتية لتطوير الأنشطة في التثقيف الصحي التي تسمح باكتساب المعرفة الجديدة وتكوينها.

الغرض من الدراسه هو تقييم مستوى المعرفة الصحية المتعلقة بالحمل ، وتقييم مستوى المعلومات التي تم الحصول عليها من أنشطة البرامج..

دراسة وصفية تحليلية من الفترة من ١٥ نوفمبر ٢٠٢٢ إلى ١٩ أبريل ٢٠٢٣. أنجزت في مركز الرعاية الصحية الأولية. تم اختيار عينة ملائمة غير احتمالية من (٢٠٠) امرأة حامل للدراسة من النساء الحوامل الملائمات في الفقرة المتعددة اللائي يحضرن ويزرن قسم وحدة الأم والوليد في مراكز الرعاية الصحية الأولية. تم تقسيم إجمالي بنود الاستبيان إلى قسمين؛ البيانات الاجتماعية والديموغرافية والتاريخ الإنجابي. وأربعة مجالات (٤٨ بندًا) لتقييم المعرفة المتعلقة بصحة الأم، ومعلومات صحة الأم، وتقييم الثقافة الصحية للأم، واتخاذ القرار والسلوك في مجال صحة الأم.

وبعد استكمال الموافقات المطلوبة والدراسة التجريبية، تم جمع البيانات باستخدام الاستبيان والمقابلات مع المشاركين. وأوضحت الباحثة هدف الدراسة بعد أن قدمت نفسي لكل مشاركة (حامل) للحصول على موافقتها. يتم ملء الاستبيان بإجابة المشاركين (الحامل). تمت مقابلة كل حامل على حدة. استغرقت كل مقابلة تقريبًا (٢٥ إلى ٣٠) دقيقة. وتم تحديد صدق محتوى الأداة من قبل مجموعة مكونة من (٢٠) خبيراً. وأبدوا موافقتهم على جميع بنود الاستبيان بأنها واضحة وكافية لقياس المشهد الذي قامت عليه الدراسة. تم إجراء التعديلات على بعض البنود وتم أخذ مقترحات الخبراء بعين الاعتبار. تم استخدام ثبات الدراسة لتحديد دقة الاستبانة، وتم الحصول عليها من خلال تقويم الاستبانة، حيث بلغ معامل ثبات (كرونباخ ألفا) (٠,٨٨)، وهي مقبولة إحصائياً.تم استخدام مصداقية الدراسة لتحديد دقة الاستبيان ، وتم الحصول عليها من خلال تقويم الاستبيان ، حيث كان معامل ثبات. (0.88) (Cronbach Alpha) وهو مقبول إحصائياً

كشفت نتائج الدراسة أن (٣٧٪) من النساء لديهن معرفة ضعيفة بصحة الأم و (٦٣٪) بحث متوسطه عن معلومات صحة الأم. ووجدنا علاقة معنوية وذات دلالة إحصائية بين العلاقة بين أنشطة برنامج التثقيف الصحي الشامل للأمومة لدى النساء وبياناتهن الاجتماعية والديموغرافية عند0.05 p ، فيما يتعلق مثل (العمر ، المستوى التعليمي ، السكن ، الحالة الاقتصادية ، تاريخ الأنجابي، نمط زيارة مراكز الرعايه الصحيه الأوليه). بالإضافة إلى ذلك ، هناك علاقة كبيرة وذات دلالة إحصائية بين المستويات العامة لمحو الأمية الصحية للأم والبيانات الديموغرافية ، فيما يتعلق (العمر ، المستوى التعليمي ، السكن ، الحالة الاقتصادية ، تاريخ الأنجابي ، نمط زيارة مراكز الرعايه الصحيه الأوليه)

استنتجت الدراسه ضعف مستوى المعرفة فيما يتعلق بأنشطة برنامج التثقيف الصحي.اوصت الدراسه بأن هناك حاجة ماسة لتطوير برامج التثقيف الصحي المتعلقة بالحمل من خلال مراكز الصحة الأولية ووسائل الإعلام المختلفة لتحسين مستوى المعرفة بين النساء بشكل عام والنساء الحوامل بشكل خاص للقلق بشأن المشاكل الصحية المرتبطة بالحمل.

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بابل/ كلية التمريض

تقييم أنشطة برنامج التثقيف الصحي في ما يتعلق بالحمل

رسالة

مقدمه من قبل

بشرى حيدر جاسم

الى جامعة بابل / كلية التمريض / تمريض صحة الأسره والمجتمع

وهي جزء من متطلبات نيل درجة الماجستير في علوم التمريض

بأشراف

الأستاذ الدكتورة

سلمى كاظم جهاد الأبراهيمي

ذو القعدة / ١٤٤٤هجرية **أيار /٢٠٢٣ميلادية**