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Graduate School of Health Sciences



Master of Nursing Science Thesis

IDENTIFICATION OF SOCIOCULTURAL AND PREGNANCY-RELATED HEALTH RISKS OF ADOLESCENT PREGNANTS UNDER 18 IN IRAQ BABYLON PROVINCE

By

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ÇANKIRI 2023

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The Department of Nursing

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ACCEPTANCE AND APPROVAL

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ETHICS STATEMENT

The thesis entitled “ **Identification of Sociocultural and Pregnancy-Related Health Risks of Adolescent Pragnants under 18 in Iraq Babylon Province**” which was prepared and presented as a thesis, was written by myself and in accordance with the scientific, academic rules and ethical conduct. The idea/hypothesis of my thesis solely belongs to my supervisor and to me. The research pertaining to the thesis was conducted by myself and therefore, all of the used sentences and interpretations within the work belongs to me.

I declare the aforementioned issues to be correct.

14.04.2023

ZAHRAA HAYDER HADI AL-KHAFAJI

ABSTRACT

IDENTIFICATION OF SOCIOCULTURAL AND PREGNANCY-RELATED HEALTH RISKS OF ADOLESCENT PREGNANTS UNDER 18 IN IRAQ BABYLON PROVINCE

ZAHRAA HAYDER HADI AL-KHAFAJI

Master of Science in Nursing

Advisor: Asst. Prof. Dr. Esra ARSLAN GÜRCÜOĞLU

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Adolescent pregnancy has interaction with socioeconomic and other multifacet factors health-related factors. They are more likely to grow a higher risk of accidents, behavioral problems, and becoming adolescent mothers because adolescence is a critical period in which the girl is in the process of physical and mental development. This study aimed to identificate sociocultural and pregnancy-related health risks of adolescent pregnancy in the department of pregnant women who came for antenatal control in hospitals in the center of Babylon Governorate in Iraq. A simple random sampling method, which is accepted as one of the probability-based sampling methods, was used in the sample selection of the descriptive study. The study was conducted on 196 adolescent pregnant women. The data of the research were collected between 1 March to 31 May 2022. London Scale of Unplanned Pregnancy (LMUP), Thoughts on Teen Parenting, Adolescent Sexual Attitudes and Behavior, Adolescent Health Risk Factors questionnaires were used to collect data. It was determined that 36% of the adolescents were 17 years old and 63.3% of them lived in the rural area. Only 9.2% adolescents were still studying. Regarding the level of education 54.1% of adolescents education level was primary level and 90.8% were housewives. Adolescents' 89.3% lived with both parents. The majority of the adolecents with 64.8% married due to parents request and 43.9% of them divorced one year later. and 32.1% of them gave their first birth at the age of 17. LMUP mean score was 7.64 ± 1.25 which means adolescents had feeling of ambivalence of planning pregnancy. There was a significant difference in the LMUP scores between students and housewives ($p < 0.05$). Housewives' LMUPS scores were lower than students' which means housewives were found to be more ambivalent about getting pregnant than students. The majority of adolescents stated that being a parent at a young age will negatively affect their friendship relations and they will need more money financially. Furthermore, more than half of them reported that it was not easy to be a parent at a young age, although they stated that they would get support from their families in baby care and there would be problems in education. All adolescent pregnantants did not have sexual experiences and they thought most men did not have intercourse

before marriage. Although the majority of adolescent did not believe in the efficacy of sex education, they thought it was needed for sex education in school. It has been determined that adolescents had very less knowledge about health risk factors during pregnancy. Adolescent pregnant face many challenges, including unplanned pregnancies, financial constraints, limited social life and education and knowledge access. In this context, it is thought that these difficulties that they experience may be adversely affected both in terms of their health and socioeconomic status, and may cause negative effects on their children's lives in the long term. Accordingly, it is recommended to organize training, counseling and follow-up programs to identify and improve the sociocultural and pregnancy-related health risks of pregnant women under the age of 18 and carry out studies on this subject with a larger sample.

2023, 68 pages

Key Words: Adolescent pregnancy, Sociocultural factors, Risk factors.

ÖZET

IRAK BABYLON VİLAYETİNDE 18 YAŞ ALTI ERGEN GEBELERİN SOSYOKÜLTÜREL VE GEBELİKLE İLGİLİ SAĞLIK RİSKLERİNE İLİŞKİN ÖZELLİKLERİNİN TANIMLANMASI

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Tez Danışmanı: Asst. Prof. Dr. ESRA ARSLAN GÜRCÜOĞLU

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Adölesan gebeliğin sosyoekonomik ve sağlıkla ilgili diğer çok yönlü faktörlerle etkileşimi vardır. Adölesan dönem, kız çocuğunun fiziksel ve zihinsel gelişim sürecinde olduğu kritik bir dönem olduğu için kaza yapma, davranış sorunları yaşama ve adölesan anne olma riskleri daha yüksektir. Bu çalışma, Irak'ta Babil Valiliği merkezindeki hastanelerin antenatal servislerine kontrol için gelen adölesan gebelerin sosyokültürel ve gebeliğe bağlı sağlık risklerinin belirlenmesi amacıyla yapılmıştır. Tanımlayıcı tipteki araştırmanın örneklem seçiminde olasılığa dayalı örnekleme yöntemlerinden biri olarak kabul edilen basit tesadüfi örnekleme yöntemi kullanılmıştır. Araştırma 196 adölesan gebe kadın üzerinde yapılmıştır. Araştırmanın verileri 1 Mart – 31 Mayıs 2022 tarihleri arasında toplanmıştır. Verilerin toplanmasında Londra Planlanmamış Gebelik Ölçeği (LMUP), Genç Ebeveynlik Üzerine Düşünceler, Ergenlerde Cinsel Tutumlar ve Davranışlar Üzerine Düşünceler, Ergen Sağlığı Risk Faktörleri anketleri kullanılmıştır. Adölesanların %36'sının 17 yaşında olduğu ve %63,3'ünün kırsal kesimde yaşadığı belirlenmiştir. Sadece %9,2 adölesan gebenin hala eğitimine devam ettiği, %54,1'inin ilkökul mezunu olduğu ve %90,8'inin ev hanımı olduğu saptanmıştır. Adölesanların %89,3'ü her iki ebeveyni ile birlikte yaşamakta olup, %64,8'i anne babasının isteği üzerine evlenmiş ve %43,9'u bir yıl sonra boşandığını bildirmiştir. Adölesanların %32,1'i ilk doğumunu 17 yaşında yapmıştır. LMUP ölçeği ortalama puanı $7,64 \pm 1,25$ olup, adölesanların gebeliği planlama konusunda kararsız olduğunu göstermektedir. Öğrenciler ile ev hanımları arasında LMUP puanları arasında anlamlı fark olduğu tespit edilmiştir ($p < 0.05$). Ev hanımlarının LMUP ölçek puanları öğrencilerinkinden daha düşük bulunmuştur. Ev hanımı adölesanların öğrencilere kıyasla gebe kalmada daha fazla kararsız olduğunu göstermektedir. Adölesanların çoğunluğu, genç yaşta ebeveyn olmanın arkadaşlık ilişkilerini olumsuz etkileyeceğini ve maddi açıdan daha fazla paraya ihtiyaç duyacaklarını belirtmişlerdir. Ayrıca bebek bakımı konusunda ailelerinden destek alacaklarını belirtmelerine rağmen, adölesanların yarısından çoğu genç yaşta ebeveyn olmanın kolay olmadığını ve bunun eğitim hayatlarında sorunlara neden olabileceğini düşünmektedir. Adölesan gebelerin tamamı evlenmeden önce cinsel deneyim yaşamadığını ve çoğu erkeğin de evlenmeden önce cinsel ilişkiye girmediğini belirtmişlerdir. Adölesanların çoğunluğu cinsel eğitimin etkinliğine inanmasa da, okulda cinsel eğitimin gerekli olduğunu düşüncesindedirler. Gebelikte sağlık risk faktörleri

hakkında çok az bilgiye sahip oldukları belirlenmiştir. Adölesan gebeler, planlanmamış gebelikler, finansal kısıtlamalar, sınırlı sosyal yaşam ve eğitime erişim ve bilgiye ulaşım dahil olmak üzere birçok zorlukla karşı karşıyadır. Bu bağlamda yaşadıkları bu zorluklardan, hem sağlık hem de sosyoekonomik olarak olumsuz etkilenebilecekleri ve çocuklarının da yaşamları üzerinde uzun vadede olumsuz etkilere neden olabileceği düşünülmektedir. Buna göre, 18 yaş altı gebelerin sosyokültürel ve gebelikle ilgili sağlık risklerini belirlemek ve iyileştirmek için eğitim, danışmanlık ve izlem programları düzenlenmesi ve bu konuda daha geniş örnekleme çalışmalarının yapılması önerilmektedir.

2023, 68 sayfa

Anahtar Kelimeler: Adölesan gebelik, sosyokültürel faktörler, risk faktörleri.



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INDEX OF ABBREVIATIONS AND SYMBOLS

%	percent
N	Number
P	The level of marginal significance within a statistical hypothesis test
SD	Standard Deviation
WHO	World Health Organization
ABR	Adolescent Birth Rate
ANC	Prenatal Nutritiona Care
GWG	Gestational Weight Gain
DALYs	Disability-Adjusted Life Years
LAC	Latin American and Caribbean
SSA	Sub-Saharan African
BMI	Body Mass Index
LBW	Low Birth Weight
PPH	PostPartum Hemorrhage
CPD	CephaloPelvic Disproportion
NVB	Normal Vaginal Birth
IDPS	Internally Displaced People
MICS4	Multiple Indicator Cluster Survey
SA	South Asia
HIV	Human Immunodeficiency Virus
STDs	Sexually Transmitted Diseases
HÜNEE	Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü

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1. INTRODUCTION

According to the United Nations Children's Fund, the term "teenage pregnancy" refers to the process of getting pregnant between the ages of 13 and 19. Nevertheless, in everyday speech, the phrase "teenage pregnancy" is widely used to describe instances in which young women fall pregnant before they are of legal adulthood. In addition, despite the fact that these terms have different connotations depending on their circumstances, the terms "adolescent," "young person," and "child" are frequently used synonymously with "teenager" (UNICEF, 2022).

Although becoming a teenage mother can be a happy experience for some young women, it is also associated with negative effects on the mother's and the child's social and health lives. Even when existing social, economic, and health disparities are taken into consideration, these correlations continue to exist. Therefore, teen pregnancy is frequently both a sign of early social and economic hardship and a root cause of eventual poverty and problems with emotional and physical health. when a young person is more impressionable vulnerable (UNICEF, 2022; Todhunter *et al.*, 2021).

Over 90% of these births occur in nations with low or between incomes, and it is estimated that adolescents between the ages of 15 and 19 account for about 11% of all births. Giving birth while a woman is still a teenager not only increases the likelihood that the pregnancy will have unfavorable results, but it also has a deleterious effect on both the mother's and the child's long-term health and wellbeing. According to past research, there has been a rise in the incidence of undesirable maternal and newborn outcomes. (WHO, 2020 ; Kassa GM *et al.*, 2018).

1.2. Importance of the study

Adolescence is a crucial stage of life characterized by rapid physical, mental, and social growth and development. Given that half of Iraqi women give birth before the age 18, there is a relatively high rate of early marriage and pregnancy. Even though it is a severe health and social problem that affects everyone, emerging nations account for more than 90% of the complicated cases. Compared to women in their thirties, the risk of dying during childbirth is five times higher for girls under the age of 15 and ten times higher for females between the ages of 15 and 18. One of the countries with a disproportionately high rate of child marriages (UNESCO, 2000; Ibitoye *et al.*, 2017).

There are several contributing factors to teen pregnancy, not the least of which is a lack of maturity. When a woman is still undergoing both physical and mental growth, a pregnancy that occurs while she is still a teenager is considered a high-risk pregnancy. Social problems include a lack of education, poverty, inadequate family support, premature birth, bleeding during delivery, Many health risks such as anemia and difficulty in childbirth, preeclampsia, placenta previa, fetal growth retardation, and child death carry the potential for negative effects on a person's health (Shawky and Milaat, 2000; Das *et al.*, 2017).

In addition, the children who are born are confronted with many challenges, and parents cannot adequately care for them. According to several studies, children born to teenage mothers have an increased risk of being abused, neglected, and failing in school (American Academy of Pediatrics, 2019). This issue is considered essential for society because teenagers are the parents of the future, not today. We should focus on educating and caring for them well to be the builders of society (Birhanu, 2020). Therefore, it is essential to identify sociocultural and pregnancy related health risk factors of adolescent pregnant women and make society aware of this problem. Public attention should be drawn to the negative effects of adolescent pregnancies. This situation can be prevented by educating the society on this issue. In this way, the goal of healthy mother, healthy baby and healthy society can be achieved.

1.3. The Objective of the Study

Iraq is one of the countries with the highest rate of adolescents getting married before 18, according to the World Health Organization (Mahdi, 2017). The fact that a person is immature is not the sole factor that contributes to teen pregnancy. Because the expecting mother is still maturing both physically and intellectually, a pregnancy that occurs while the teen is still developing is classified as a high-risk pregnancy (WHO, 2020). Social issues such as lack of education, poverty, poor family support, premature birth, bleeding during birth, and many other risks such as anemia and difficulty in childbirth, preeclampsia, placenta previa, fetal growth retardation, and child death all carry the potential to impact a person's health negatively (Shawky and Milaat, 2000, Das *et al.*, 2017).

In addition, the children who are born are confronted with parents who are unable to properly care for them and a myriad of other issues (Ellis, 2018). Children conceived at an early age had an increased risk of being neglected, abused, and failing in school (American Academy of Pediatrics, 2001). According to this information, the aim of this study is to Identify the Sociocultural and Pregnancy-Related Health Risks of adolescent pregnancy at a young age in the settings of pregnant women who come for antenatal control in hospitals in the center of Babylon Governorate in Iraq.

1.4. Limitations

Age is the first and most important obstacle to research because adolescent girls are in the mental and physical stage; in addition, they are pregnant with great changes that occur within their bodies, and most of them do not know how physiology happens. Some pregnant teenage girls who are present in the maternity hall are at the stage of delivery or cesarean section, and this negatively affects the taking of information by the researcher and the giving of information by the pregnant teenage girls because they are going through a big and difficult stage for adolescence like her, wrote patiently, and it took longer than expected. Among the obstacles were the pregnant teenage women going through the stage of labor and those coming to the gynecological department suffering

from health problems such as high pregnancy pressure, diabetes, anemia, abortion, and stillbirth, in addition to difficult health problems. In addition, there are only two hospitals in the city center that have a maternal health department.



2. LITERATURE REVIEW

A good opportunity to make positive changes to one's way of life that can be of value to both the mother and the child is presented by pregnancy. The woman's age is one of the most critical elements determining whether she will become pregnant. Anemia, early delivery, low birth weight, and preeclampsia, and congenital fetal defects are some of the pregnancy-related conditions that are more likely to occur in adolescents under the age of 15 who are pregnant (Ganchimeg *et al.*, 2014; Ayanaw *et al.*, 2018).

2.1. Epidemiology

Adolescent birth rates (ABR) fell globally from 64.5 per 1000 women aged 15 to 19 in 2000 to 42.5 per 1000 women in 2021. Sub-Saharan Africa (SSA), Latin America, and the Caribbean (LAC), which have seen slower declines, and South Asia (SA), which has seen the most significant reduction, illustrate the uneven distribution of the pace of change. With 101 and 53.2 births per 1000 women aged 15 to 19 years, respectively, in SSA and LAC in 2021, the rates remained the highest in the world despite declines in other regions (UNDESA, 2021).

Based on recent statistics, teen pregnancy rates in South Asian nations like Bangladesh, Nepal, and India are 35%, 21%, and 21%, respectively. With 62 pregnancies per 1000 women, teen pregnancy is relatively common in India, according to the latest recent data. The number of underage marriages and pregnancies has significantly decreased in both Indonesia and Malaysia. In highly industrialized Asian countries like South Korea and Singapore, for example, the rates of births to teens are among the lowest in the world (Saleh, 2020).

However, it has been discovered that this percentage varies depending on a variety of variables, considering the young woman's levels of income and education, the country, the location (rural, urban vs.), and the region. Every year this percentage jumps to more than one in three females in the world's most impoverished places. (McCarthy, 2014;

UNICEF, 2022). Almost 95% occur in nations with low or intermediate levels of wealth. Within countries, adolescent births are more likely to occur among populations that are poor, have lower levels of education, and live in rural areas. Many different circumstances cause the root causes of adolescent births (WHO, 2021). Just 11% of all births globally occur to adolescents, but according to the amount of disability-adjusted life years (DALYs) connected to pregnancy and childbirth, adolescents are also responsible for 23% of the burden of sickness. Teenage moms worldwide die more often than mothers who have children between the ages of 20 and 24. But this varies from country to country (UNFPA, 2020). Adolescent pregnancy is a problem everywhere in the world. According to estimates from Save the infants, there are 13 million births of infants to mothers under the age of 20 each year, with more than 90% of these births occurring in underdeveloped nations. The main causes of death for young women between the ages of 15 and 19 in these nations are the difficulties that arise during pregnancy and childbirth. Africa, Afghanistan, Bangladesh, Guatemala, Haiti, Nepal, Nicaragua, and Yemen were shown to have the greatest rates of maternal fatalities among young girls (Saleh, 2020). 14% of young women and adolescent girls will give birth before turning 18 in 2021. Early pregnancy and motherhood can harm girls' education, way of life, and health while preventing their otherwise healthy development into adulthood. Girls who are expected are compelled to leave school or are under pressure, which may limit their options for postsecondary education and employment. In addition, early pregnancy and childbirth in women may have social repercussions such as reduced status in the family and community, stigma, rejection, abuse from family, peers, and partners, and early and forced marriage (UNICEF, 2022). 14% of teenage girls and young women between the ages of 15 and 19 reported giving birth before turning 18 between 2015 and 2021. It has been demonstrated that this percentage varies depending on the country, region, city vs rural location, income of the adolescent girl or young woman, and level of education. 10% of young South Asian women between the ages of 15 and 19 gave birth before turning 18 between 2015 and 2021 (UNICEF, 2022).

2.2. Complications of Adolescent Pregnancy

Pregnant teens suffer from many pregnancy problems and complications (Rexhepi *et al.*, 2019; Mustafa and Mirkhan, 2020; Lansford and Banati, 2018).

2.2.1. Premature birth

Teenage girls are more susceptible to premature labor since their uteruses have not yet fully formed. Preterm birth—defined as delivery before 37 full gestational weeks—remains the principal issue in modern obstetrics. Suppose sequelae like cerebral palsy, neurodevelopmental impairment, and retinopathy manifest in mothers, such as postpartum hemorrhage, sepsis, and many others. In that case, it significantly raises the maternal or newborn morbidity or mortality rate and imposes a significant socioeconomic burden (Huang *et al.*, 2021). A number of variables, including maternal ones like pregnancy-induced hypertension and the mother's age, contribute to preterm birth. Young pregnant women suffer the risk of preterm labor, which is dangerous for both the mother and the fetus (Lin *et al.*, 2020). Preterm birth is the major cause of neonatal mortality and is the second leading cause of death in children under the age of five after pneumonia (Sukma and Tiwari, 2021).

2.2.2. Low birth weight (LBW)

Adequate maternal nutrition and the replacement of important nutrients are crucial for the development and growth of the fetus. It is difficult to identify whether or not maternal nutrition is enough. Adolescent pregnant women are 39% more likely than adult moms to deliver an infant with low birth weight (LBW), according to the evidence. The term "gestational weight gain" (GWG) refers to the buildup of fat during pregnancy, the expansion of fluid, and the growth of the uterus, placenta, and fetus (DeMarco *et al.*, 2021). under-20-year-old pregnant ladies, notably those under the age of 15 or 17, in a retrospective study that contrasted them with an adult group between the ages of 20 and 35. LBW newborns may be more common in adolescent pregnancies, however there may

be other factors to take into account besides the young maternal age compared to low birth weight newborns have a two to three times higher risk of dying in their first year(Jeha *et al.*, 2015; Horng *et al.*, 2021).

2.2.3. Eclampsia

Is a syndrome specific to pregnancy that frequently manifests after 20 weeks of gestation and may not manifest until 4-6 weeks after delivery. Vasospasm and severe endothelial dysfunction are its defining characteristics. Eclampsia, which is thought to be a side effect of very violent convulsions, is a medical emergency requiring immediate medical care to lower maternal morbidity and mortality. Delivery is the only method of treatment for eclampsia (Michael *et al.*, 2022). Young teenagers with uterine immaturity have abnormal deep placentation, which causes preeclampsia to develop. Younger women have been found to have worse mother-baby outcomes and a higher incidence of serious problems, such as small for gestational age newborns, preterm births, surgical deliveries, According to Macedo *et al.* in a systematic analysis, 6.7% of adolescent pregnancies have a higher likelihood of developing preeclampsia/eclampsia when compared to the adult population. While some publications claimed that preeclampsia occurs 20% more frequently in adolescent pregnant women under the age of 18, others disagreed. (Arnowalt and Manoj, 2022; Azevedo *et al.*, 2015).

2.2.4. Postpartum Hemorrhage (PPH)

Uterine atony, laceration, retained placenta or clots, and a deficiency in the production of clotting factors are the usual causes of postpartum bleeding. The main treatments are uterine massage, oxytocin, and methylergonovine, in addition to blood transfusions and cardiovascular care. Young teenagers are more prone to postpartum hemorrhage than other women because pregnancy may cause a girl's uterus to become overextended if it has not fully developed. Adolescents may also sustain perineal and cervical lacerations more frequently or severely than older women due to the infant's relative size to the mother's body (Bienstock, Eke and Hueppchen, 2021; Mari, 2019).

2.2.5. Anemia

Anemia is a common occurrence in pregnancy and can impact up to 50% of pregnancies, however numerous studies have indicated that pregnant adolescents may have much greater rates of anemia than adult pregnant women (Chu *et al.*, 2020). Most teenage girls suffer from iron deficiency because food is unhealthy and free of iron, protein and other important elements. This affects the growth of the fetus. The amount of blood to avoid it, The iron is given as a supplement, and many obstetricians may recommend iron as one of the most important micronutrients for expectant mothers. Iron deficiency is one of the most widespread nutritional deficiencies in the world and is linked to significant morbidity and mortality globally, particularly in Africa (Asadi *et al.*, 2019).

Epidemiologic data show that anemia affects pregnant women at a rate of 38.2% worldwide, and it has been linked to a number of unfavorable pregnancy outcomes, such as low birthweight, hypertension, and premature birth. Anemic moms experience negative pregnancy outcomes in approximately half of the cases, according to many meta-analyses of observational studies, which considerably adds to the burden of sickness. An estimated 1000 mg/d of iron is required for the mother in women of normal weight. The WHO advises giving pregnant women 400 mg of folic acid and 30 to 60 mg of elemental iron supplements daily for primary prevention, regardless of their iron levels (Stoltzfus, 2003; Asadi *et al.*, 2019). Maternal anemia in pregnancy and poor newborn outcomes have been linked by a significant body of research. However, nothing is known about whether general maternal anemia after delivery affects childhood anemia (Ntenda *et al.*, 2018).

2.2.6. Abortion

Defined as loss of pregnancy before 20 weeks of gestational age. It constitutes 15–20% of pregnancies and is one of the common obstetrical emergencies in first trimester. Abdomen pain, sometimes without any change of the cervix are clinical features of threatened abortion. (Naert *et al.*, 2020).

Risk factors, female age is the most important predictor in the risk of abortion and female body mass index (BMI). According to certain research, the age of the mother and the frequency of fetal loss are related. A significant number of girls lack understanding and have inaccurate perceptions regarding abortion. Social forces and medical problems were frequent justifications for abortions. Abortion by medical and surgical means was frequent. Menstrual irregularities, discomfort, fever, vaginal bleeding, or even septic shock were among the physical and psychological side effects. (Pal, 2021; Kumari and Ghosh, 2021; Quenby *et al.*, 2021).

2.2.7. Gestational diabetes mellitus (GDM)

Gestational diabetes is a form of covert diabetes that only manifests itself during pregnancy. People who already have T1DM or T2DM are not included in this category..Severe forms of gestational diabetesand overt diabetes during pregnancy must be managed by diet and insulin . There are some unanswered questions in the present literature on gestational diabetes mellitus (GDM) (Jeha *et al.*, 2015) . While some studies have reported reduced rates of GDM in teenagers, others found a significantly higher risk. However, some investigations revealed no discernible variation in the risk of GDM among the various age groups. Pregnancy complications caused by gestational diabetes affect 3–14% of pregnancies globally (Tsviban *et al.*, 2022). Age, race, and a history of type 2 diabetes are risk factors for gestational diabetes. Also, the obesity of mothers during pregnancy contributes to the development of diabetes. It has a very strong effect on the mother and the child. The mother may need a cesarean delivery, blood sugar after childbirth, blood sugar in the child, hyperbilirubinemia for the child, and she may also be at risk of death (Kim *et al.*, 2010; Araki *et al.*, 2020).

2.2.8. Cephalopelvic disproportion (CPD)

A baby has cephalopelvic disproportion (CPD) if its head is too big for the mother's pelvis to accommodate it. When the baby is extremely big, vaginal delivery becomes challenging, if not impossible. CPD is frequently found during labor, necessitating a caesarean section. The baby's head and the mother's pelvis are not the same size, which

is the cause. Either the baby is unusually huge or the mother's pelvis is very small to explain this. Babies may be huge for a variety of reasons, such as: physically large or obese parents (genetic factors) (Pavličev *et al.*, 2020). Mothers with prediabetes or gestational diabetes. Mothers' pelvises might also be too tiny or have an unusual form. A previous pelvic injury or genetic factors are to blame for this. Younger people and women who are shorter in stature are more likely to face this issue. Delivery can also be impacted by pelvic damage or malformation. The pelvis could be malformed, contain bony outgrowths, or have misplaced bones (Pavličev *et al.*, 2020).

2.3. Adolescent Marriage

In many civilizations, young women are subjected to societal pressures to start families as soon as possible, including early marriage and childbearing, as well as having restricted access to educational and professional opportunities. In low- and middle-income countries, more than 30% of girls are married before they turn 18, and 14% do so before they turn fifteen. In accordance with societal expectations, youths who get married are also more likely to become pregnant and give birth. (UNICEF, 2021; Akwara and Chandra-Mouli, 2022). Girls who are married young frequently lack the liberty to decide whether to put off having children or use contraception, which increases the likelihood that they will become pregnant. Adolescents utilize contraceptives at lower rates than adults, both inside and outside of marriage, due to barriers to their availability and use (Petroni *et al.*, 2017).

Also, because we are an Islamic society in which relationships are forbidden outside of the context of marriage, the existence of children is the first request made after marriage for the vast majority of pregnant teens younger than 18 years old. Some of the greatest rates of child marriage are found in the Arab region and the rest of the world. According to estimates, one-third of all women worldwide get married before turning 18; Then again, statistics suggest that South Asia is the region with the highest prevalence of child marriage (UNFPA, 2022; Faysal El-Kak, 2014).

The age of majority and the legal age for marriage in most nations is 18, which is the age of majority. However, a few countries permit individuals younger than 18 to marry if they get parental and court authorization. More than 30 nations recognize the legality of marriage for minors aged 15 or younger if they have the approval of both sets of parents. (Akwara and Chandra-Mouli, 2022). In addition, a sizeable portion of those individuals is younger than the age at which marriage is legally permitted for males, which suggests that early marriage is influenced by gender (UNFPA, 2012). Overlooking the civil status laws in Arab and Islamic countries that have established the minimum age for marriage, Islamic law in Arab countries does not specify a minimum age for marriage. And Islamic religious authorities are permitted to marry couples who are under the age of puberty (Faysal El-Kak, 2014). Adolescent pregnancy and childbirth rates have decreased due to declining child marriage rates and rising rates of current contraceptive use among teenagers. Over the past 25 years, the percentage of child marriage has decreased globally, falling from 31% in 1995 to 19% in 2020 (UNICEF, 2021; Li *et al.*, 2019).

Afghanistan, Iraq, Somalia, and Nigeria are among the nations with the highest probabilities of recurrent births during adolescence, according to UNFPA data. But in Bangladesh, the percentage of teenage repeat pregnancies has sharply declined (Akwara and Chandra-Mouli, 2022). On the other hand, education plays a significant role in lowering the risk of becoming pregnant at a young age; the longer a person spends in school, the lower their risk (Marriage, 2012, Akwara and Chandra-Mouli, 2022).

IN IRAQ

Early marriage has become much more common in Iraq. In actuality, Iraq's traditional culture and religious beliefs make it vulnerable to the problem of high rates of early marriage. As a result, Iraqi girls are increasingly required to get married young (Saleh *et al.*, 2022). Iraq has a high rate of child marriages due to a number of factors, such as school dropouts, low socioeconomic standing of the girl's family, religion, protecting family honor, and several unusual marriage customs including cradle betrothal and cousin marriage that promote young unions. In 2010, the Iraqi Ministry of Women's Affairs warned that women between the ages of 20 and 24 had a double the risk of dying during

pregnancy and childbirth than females between the ages of 15 and 18 (El-kak, 2022: Saleh *et al.*, 2022). However, little is known about the causes that lead to early marriage and how individuals feel about this harmful practice. The Ministry of Health and other international organizations have issued this warning, and heeding it is one of the most important responsibilities of academics, planners, and health officials in Iraq. In times of conflict and disaster, early marriage is more prevalent (El Arab and Sagbakken, 2019). Between the ages of 15 and 19, 22.41% of the population was in this group of ages. This ratio was the highest among the age groups, suggesting that Iraq is largely a young community where a high number of married people, 45.1%, are in this age range. This large proportion highlights how common forced marriage is among children, who make up a sizeable portion of the population. It is thus established that the proportions and numbers of early marriages are staggering, which calls for an analysis and understanding of the reasons for the widespread occurrence of this phenomenon. Additionally, a survey was conducted by the Central Bureau of Statistics of the Iraqi Ministry of Planning in cooperation with the Central Bureau of Statistics of Kurdistan and the ministries of health and women on knowledge, attitudes, and aspirations of adolescent girls, establishing the knowledge, attitudes, and aspirations of adolescents (El Arab and Sagbakken, 2019).

In Turkey

Turkey is a developing nation with a largely youthful populace. According to TNSA 2018 data, in Turkey 3.5% of adolescents in the 15-19 age group have started to have children. It was reported that 2.8% of adolescents at this age had a live birth and less than 1% were pregnant at the time of the study. Moreover, only 1% of adolescents got married before the age of 15 and 0.2% gave birth her first child (HÜNEE, 2019).

Most of the mother-infant health research conducted in Turkey has involved married women between the ages of 15 and 49. As a result, information on the prevalence of teenage pregnancies was lacking. Furthermore, research has not revealed that adolescent pregnancies are one of the primary causes of maternal mortality (Azevedo *et al.*, 2015: Taplak and Yılmaz, 2022).

The world's largest refugee population, which includes many children and teenagers, has been hosted by Turkey, a remarkable nation of approximately 4 million migrants. Furthermore, it was discovered that nearly 50% of marriages between refugee women and those under the age of 18 occurred. Research shows that depression, anxiety, and other psychiatric disorders are more likely to develop during adolescent pregnancies than during non-adolescent and adult pregnancies. Negative mental outcomes in adolescent pregnancies have been linked to many issues, including the absence of a stable job, a bad financial situation, low levels of education, a lack of partner support, a high rate of unwanted births, and concerns about the future (Akgör, 2022).

2.4. Sociocultural

Adolescence, which means "growing up" is a stage of growth that usually comes between puberty and the age of majority. Significant changes occur in a person's social, emotional, financial, and biological lives. The World Health Organization (WHO) defines adolescence as the time between infancy and adulthood, sometimes known as the "teenage years." (WHO, 2021). Adolescent girls go through physical, functional, and emotional changes throughout this time that prepare them for parenthood (Mustafa and Mirkhan 2020). According to Alabi and Oluwafemi (2017), teen pregnancy interacts significantly with various socioeconomic factors, including age, social factors, sex education, early menarche, child marriage, sexual violence, psychological problems, and health-related factors. As a result, these individuals are more likely to develop risks for accidents, behavioral issues, and continuing the cycle by giving birth to adolescent mothers themselves (Nnodim and Alber, 2016).

Young women becoming pregnant is a public health concern that necessitates implementing efficient prevention strategies. (Mejia, 2020). One of the most crucial requirements for a successful plan is understanding the underlying risk variables. Despite the fact that it is acknowledged as a major global social and public health problem (Loaiza *et al.* 2013; Alabi and Oluwafemi, 2017). According to the WHO, most pregnancies and births are unintended and against the mother's wishes. However, some pregnancies and births are planned for and desired by the mother (WHO, 2020). The risk factors were

determined to include the functional condition of the family, the age of the woman's first pregnancy, the parent's level of education, and their level of sentimentality. Because adolescence is a time of increasing independence and autonomy, it is one of the phases that generates substantial alterations in the family. This is one of the stages that create significant changes in the family (Birhanu, 2020). Poverty is one of the most significant reasons for getting married at a young age. Because the teen female has become a financial burden on her family, her parents may see marrying her off as an opportunity to minimize family expenses and obtain a dowry in exchange. However, by continuing with this practice, Teenage girls are being denied the opportunity to further their education and get the knowledge and skills necessary to lift their families out of poverty (Fegurson, 2019; Saleh, 2022). Compared to women with secondary or higher education, the percentage of children born to mothers with less education is much higher. They are prone to sicknesses and are the targets of domestic abuse at this delicate stage of their marriage. Often, an early marriage prevents a female or child from continuing their schooling (Nnadi, 2014; Saleh, 2022; WHO, 2021).

Research investigations have shown the adverse effects or monetary costs associated with adolescent pregnancy. Powers (2021) reported that numerous scholars have cited several elements as having adverse effects, including the capacity for social interaction, the amount of time available for friends, and the creation and maintenance of friendships. (Powers, 2021). As well as the additional strain that is having young children places on a family of modest size. Several important studies have shed light on the detrimental effects that having a child while still a teenager can have on a young woman's ability to complete her education. These effects include the inability to balance the responsibilities of parenting and schoolwork, as well as an inability to keep one's educational goals in the forefront of one's life. Keeping regular work hours, finding a job that pays more, resolving issues with child care, and staying out of financial hardship are all important goals (Alabi and Oluwafemi, 2017). The teenage years are the healthiest time in a teen's life, leading to a more pleasant birth and allowing for the maximum level of social support within the family. This is the case because of the hormonal changes during this time. (Das *et al.* 2017).

Some families grow closer in the years following the birth of a teenage child. Teenagers may have a greater sense of maturity and responsibility, and infants make a young person's life a consistent driving force. Numerous studies have shown that young mothers recognize that this experience has given them the capacity to. They exhibit higher self-esteem, maturity, and control over their prior deviant behavior. These findings suggest that teenagers may link their parental experiences to positive and bad life outcomes (SmithBattle, 2009; Herrman and Nandakumar, 2012; Das *et al.* 2017). The teenage years should be devoted to education, self-discovery, growing into one's strength, and figuring out what they want to do with the rest of their life. Children and adolescents acquire the skills necessary to express their independence, initiate decision-making, and grow. Because children are the future, their parents should assist them (Mustafa and Mirkhan 2020).

2.5. Family Role

If a woman marries and becomes pregnant at a very young age, she and her children are at a disadvantage for the family because their parents cannot meet all their requirements. In order for the family unit as a whole to adapt to these changes, it must be flexible. The home operation may be affected if there is no indication that the homeowners are open to change or if the household is incoherent (Mejía, 2020).

Even though teen pregnancy poses significant risks to both the mother and the unborn child, teens have one of the lowest healthcare access rates. No nutritional or prenatal care (ANC) guidelines are available specifically for helping pregnant teens, but pregnant teens need help and counseling as they go through this challenging journey (Rexhepi *et al.*, 2019). Most families were prepared to offer their pregnant teenage daughter the extra attention and support she required. Teenagers frequently give older female family members' counsel, who have greater knowledge and experience with pregnancy, a lot of weight (Juha, 2015).

These women are crucial in promoting teen pregnancies and identifying the nutritional and medical requirements of the unborn child. This outcome is in line with the body of

research that currently exists, which demonstrates that older women, sometimes referred to as "grandmothers," have a significant influence over pregnant women in terms of breastfeeding and nutrition-related issues for both the mother and the child as well as acting as gatekeepers of health-seeking behaviors almost always (Scott, 2018). When a teen faces challenges during her pregnancy or had doubts about her pregnancy, she would seek help from her mother, sisters, and sisters-in-law. Establishing a link between the accumulation of knowledge and the implementation of practices supported by empirical evidence can be facilitated by gaining an understanding of the ways in which different family members influence health and nutritional practices, as well as the cultural systems through which these practices are implemented (Aubel and Rychtarik, 2015).

It is common for mothers to help with and prepare meals for their pregnant daughters, and many teens appreciate having a variety of healthy foods during this time. Teenage Mothers require additional support and safety because they aren't prepared to be mothers. Family members have taken on a supportive role in the adolescent's health and the assistance they receive as a result of the adolescent's emotional and physical fragility as well as their lack of knowledge and experience regarding how to manage their pregnancy (Pike *et al.*, 2019). Often when teens bring their health issues into the family and thereafter, decisions are made collaboratively on the best course of action. Although there were some couples who were aware of the information their teenage wives requested and contributed to the types of support they received, most of the time these couples were involved in making simple, everyday decisions as opposed to more important decisions like choosing where to give birth (SmithBattle, 2009, Pike *et al.*, 2019).

Adolescent girls may be better able to opt to put off getting pregnant with the support of their partners and parents if they have greater access to knowledge on sexual and reproductive health. Consequently, enabling girls to finish their secondary education would lower the incidence of teen pregnancy. Interventions that support teenagers' rights about their own bodies must be done so with extreme caution since they run the danger of being viewed by families or communities as being improper. Therefore, these interventions must be designed keeping in mind the cultural context in which they will be implemented in order to increase their likelihood of acceptance. Family members,

including prominent males should be included, as well as prominent women from the community (Pike *et al.* 2019). Studies using qualitative methods have shown that when asked about the pros and cons of becoming a father at an early age, teens more often emphasize the benefits rather than the disadvantages. When designing programs and policies, it is important to consider adolescents' perspectives on parenting at an early age. This calls for procedures that are effective, reliable, and accurate in assessing adolescents' perspectives (Rosengard *et al.*, 2006; SmithBattle, 2009).

2.6. Nursing Role

Nurses are uniquely positioned to build trustworthy relationships with teenagers and identify those who are likely to become pregnant. During pregnancy, nurses play a crucial role in educating pregnant adolescents about nutrition, dealing with the physical and hormonal changes that will take place, how to prepare for childbirth, providing a simplified explanation of childbirth, preparing the adolescent to give birth, and preparing her for her new role as a young mother. There is a condensed explanation of the changes to his body and mind during pregnancy, as well as information on raising a child and the nursing procedure. (WHO, 2020; Kimemia KA *et al.*, 2016). Regarding teen pregnancy, nurses are crucial in fostering a positive delivery experience and good health outcomes. Teenage parents and their children are more likely to have adverse short- and long-term health and social consequences, necessitating efficient and efficient nursing treatments for these young families (Lachance *et al.*, 2012). Teenage pregnancy with early prenatal nursing care is less hazardous to the woman and her unborn child psychologically and physiologically. The nurse can educate pregnant teens about their nutritional needs and promote maternal and fetal health. They were educating pregnant adolescents about the importance of nutrition during pregnancy because they need special education about appropriate nutrition for them during pregnancy and beyond, in addition to health supervision and psychological support. In addition to encouraging the pregnant teen to participate in her line of care, the nurse plays an essential role in promoting the health of the pregnant teen and creating a positive birth experience (Ayamolowo, 2020). Because it is essential to create positive psycho-emotional and physiological support focused on

the comfortable life experience of a pregnant teen (WHO, 2020; Health Organization - Immunization in practice, 2014).

Given that not all young people have access to education, nurses should frequently disseminate information about sexual and reproductive health through community outreach, campaigns, and seminars in schools, clinics, community centers, and religious settings (Borawski *et al.* 2016, Ayamolowo *et al.*, 2020). According to studies, adolescents who received instruction from school nurses about STI prevention and HIV knowledge of HIV and other STDs significantly outperformed those who received instruction from health education teachers (Borawski, 2016; Ayamolowo *et al.*, 2020).



3. MATERIAL METHODS

3.1. Design of the Study

This study was conducted as a descriptive study.

3.2. Time of Study

The data was collected between March 1 and May 31 2022.

3.3. Place of Study

The study was conducted in the city of Babylon / Iraq and the study samples were taken from the Maternity section, normal delivery halls, women's lobbies, emergency rooms and operations rooms of teaching hospitals the Gynecology Training and Research Hospital, Babel Maternity and Children's Hospital and Imam Sadiq Hospital .

3.4. The Sample of the Study

After obtaining approvals from the Babylonian Health Directorate and the hospitals affiliated to the Babylonian Governorate of Iraq, the samples were taken randomly and given a questionnaire which they answered, leaving no questions unanswered. The sample of the study consisted of 196 pregnant women, who agreed to participate in the study between 1 March-31 May 2022. The total number of population was 400 according to hospital statistics for three months. A simple random sampling method, which is accepted as one of the probability-based sampling methods, was used in the selection of the sample. The formula $n = N \times t^2 \times p \times q / d^2 (N-1) + t^2 \times p \times q$ was used in the sampling calculation. The symbols used in the formula are given below (Karasar, 2014). The theoretical t value of the research is 1.96, with a 95% confidence interval and a sampling error of 0.05. According to the simple random sampling formula, having a 95% confidence interval and 0.05 margin of error; When the research data were put in the

formula, it was concluded that the number in the samples that could represent the population of 400 people should be at least 196.

$$n = \frac{Nt^2 pq}{d^2 (N - 1) + t^2 pq}$$

$$n = \frac{400 * (1.96)^2 * 0.50 * 0.50}{(0.05)^2 (400 - 1) + (1.96)^2 (0.50 * 0.50)} = 196$$

N: Number of participants in the audience

n: number of individuals to be sampled

p: Probability (frequency) of the investigated event's occurrence

q: frequency (probability) of the investigated event not occurring

t: Theoretical value of t obtained from the table at certain degrees of freedom and found error level

d: The desired \pm deviation according to the event's incidence

3.5. Inclusion Criteria of Sample

- Women whose nationality were Iraq
- Pregnant adolescent women under the age of 18
- Women who were voluntary to participate
- Women who did not have a psychological illness

3.6. Exclusion Criteria of Sample

- Women who failed to fill out the questionnaire correctly or did not fill it out completely

3.7. Data Collection

The data was collected by the researcher by face-to-face interview form (Appendix 1) by interviewing the adolescent pregnant women as between 1 March - 31 May 2022. Each interview with a woman take between 15 and 20 minutes.

3.8. Study Instrument

Form consisting of five parts (Appendix 1): **Demographic data** :This consists of eight questions that survey the demographic factors of women (age, residence, educational level, profession, monthly income, whether the father and mother are alive, whether they live with their parents or with their relatives.

London Measure of Unplanned Pregnancy (LMUP) Arabic Scale: It consists of six items (Contraceptive use, Timing, Intent, Desire, Partner discussion, Preparation). Assessment is the partner's discussion of the pregnancy and thoughts about whether there is an intention to conceive, whether the pregnancy was a good or bad surprise, the timing is appropriate for the pregnancy or not, the pregnancy is being prepared or not. It shows whether the pregnancy was planned, whether contraceptives were used and whether the husband discussed pregnancy For each item, a score of 0, 1 and 2 can be achieved. Scores are ranging between 0-12, with increasing scores represent the higher degrees of planning. Scale's cut-point score is 3. There is a three classifying groups for scores: 0–3 (unplanned pregnancy), 4–9 (ambivalence of planning pregnancy) and 10–12 (planned pregnancy), Cronbach's alpha value coefficient was 0.88 (Almaghaslah, E. *et al.*, 2017).In the study, it was found 0,79.

The Thoughts on Teen Parenting Survey (TTPS): This survey consists of which are ideas about parenting for adolescents. This section covers the impact of raising young people in the areas of life and includes: About the relationship with friends in the presence of the child, the relationship with the partner, whether the relationship will be good or will it end, the relationship with the parents, and whether the family helps them in caring for the child or not, money and how to manage money and self-reliance, will school life to be complicated or uncomplicated, work and ambition that you dream of, will you

abandon it, or will the presence of the child not affect it (Herrman J. and Nandakumar R. 2012). This scale was used as a questionnaire and given in the form of a frequency table in the study.

Adolescent Sexual Attitudes and Behavior: This scale consists of eight questions, and the answer is yes or no, and the answers range between correct and wrong behavior. And it was a set of questions to understand the sexual behavior of adolescents, practice masturbation regularly, had relationships before getting married friends who have been involved in sexual activity, whether most men practice sexual intercourse before marriage, discuss issues related to sexual health with my parents. Adolescents' sexual behavior, in general, was good, religion was effective in protecting against risky sexual behavior, needing sex education in school (Al-Subaie A. 2019). This scale was used as a questionnaire and given in the form of a frequency table in the study.

Adolescent Health Risk Factors: The questionnaire consisted of eight questions, and the answers were yes, or no. It mentioned risk factors for adolescent health, pregnancy stress, diabetes, and some reproductive system diseases such as urinary tract infections. In addition, the teens were asked their opinions about whether seeing a doctor is necessary during pregnancy. The aim was to determine adolescent women's knowledge about risk factors during pregnancy. This questionnaire was created from the pregnancy health risk factor scale (Yahya, B. Al-Taha, M. Gedo, S. 2021).

3.9. Data Analysis

SPSS 24.0 was used to analyze the data, and results were assessed using a 95% confidence level. To ascertain whether the scale scores in the study were consistent with a normal distribution, the kurtosis and skewness coefficients were determined. The scales' values for kurtosis and skewness are found to range from +3 to -3 for a normal distribution. (Groeneveld and Meeden, 1984; Moors, 1986; Hopkins and Weeks, 1990; De Carlo, 1997).

The personal characteristics of the participants in the study were examined with descriptive statistics such as mean, standard deviation, number and percentage. Normal distribution fitness of the data was investigated by Kolmogorov-Smirnov and/or Shapiro-Wilk-W tests. Parametric methods were used for the measurement values that conform to the normal distribution. In accordance with parametric methods, the Independent two-sample t-test was used to compare the measurement values of two independent groups. The significance level was taken as $p < 0.05$. Cronbach's alpha coefficients was calculated for the scale reliability.

3.10. Ethics Committee Approval

Before collecting the data, some administrative and official permits were obtained to conduct the study.

- The researcher explained the study and the objectives to the sample, then asked them to take their verbal and written agreement with informed consent form (Appendix 1) to participate in the study. The study was carried out in accordance with the Helsinki Declaration.
- The approval of the Training and Human Development Department in the Babil Health Directorate to conduct the study (Appendix 2).
- The study protocol was approved by the Ethics Committee, and it was approved by the Institute of Health Sciences, Department of Obstetrics and Gynecology / Çankırı Karatekin University / Turkey, and the Iraqi Ethics Committee (Appendix 3).
- Permission was obtained from the Babylon Health Department in Iraq to conduct the research and take samples from teaching hospitals in the Gynecology Training and Research Hospital and Babil Maternity and Children Hospital (Appendix 4).

4. RESULTS

Table 4.1. Distribution of Demographic Information of Participants

Variables		n	%
Age	14	33	16.8
	15	40	20.5
	16	51	26.0
	17	72	36.7
Residence	Rural	124	63.3
	Urban	72	36.7
Still Studying	No	178	90.8
	Yes	18	9.2
Education level	Uneducated	30	15.3
	Primary education	106	54.1
	Secondary Education	60	30.6
	Post-secondary Education	0	0.0
Occupation	Student	18	9.2
	Housewife	178	90.8
Monthly income	Enough	133	67.9
	not enough	63	32.1
Parents still Alive	Yes, both of them are alive	175	89.3
	Yes, only the father is alive	5	2.5
	Yes, only the mother is alive	15	7.7
	None, of them is alive	1	0.5
Living with parents/relatives	I live with both parents	175	89.3
	I live with only the father	5	2.5
	I live with only the mother	15	7.7
	I live with relative	1	0.5
Way of marriage	Willingly	67	34.2
	Forced	2	1.0
	Family request	127	64.8
Duration of marriage (years)	Less than one year	25	12.8
	One year	86	43.9
	Two years	47	24.0
	Three years	35	17.8
	Five years	3	1.5

Table 4.1.(continued) Distribution of Demographic Information of Participants

Variables		n	%
Gravida	1	145	74.0
	2	43	21.9
	3	5	2.6
	4	3	1.5
Para	None	147	75.0
	1	40	20.4
	2	6	3.1
	3	3	1.5
Number of living children	None	157	80.1
	1	31	15.8
	2	5	2.6
	3	3	1.5
Abortion	None	166	84.7
	1	26	13.3
	2	4	2.0
Stillbirth	None	188	95.9
	1	8	4.1
Last way of birth (if you have given birth before)	Still pregnant	139	70.9
	NVB	16	8.2
	CS	15	7.6
	None(abortion)	26	13.3
Have any health problem	Yes	196	100.0
	No	0	0.00
First gestational age	14	18	9.2
	15	54	27.6
	16	61	31.1
	17	63	32.1

These tables show that the study result by their demographic data that indicate related to age are (17) years accounted for 36.7% among all study sample, While relatively to the residency, the majority of the study sample lived in the rural area with 63.3%. Only 9.2% adolescents were still studying. Also regarding the level of education the majority of the study sample were primary education accounted for 54.1 % and 90.8% were housewives. Relatively to the monthly income the majority of the study sample were within enough monthly income and accounted for 67.9%. Adolescents' 89.3% live with both parents. The majority of the adolescents with 64.8% married due to parents request and 43.9% of hem

divorced one year later. One gravida accounted for 74.0% of all study samples, also within a high percentage of none number of living children with 80.1%, and non-abortion accounted for 84.7%, and none stillbirth accounted for 95.9%. Adolescents' last way of birth was NVB with 8.2% and 32.1% of them gave their first birth at the age of 17. All adolescents had health problems.

Table 4.2. London Measure of Unplanned Pregnancy (LMUP) Arabic Scale Mean Score

	N	Min	Max	X	SS
London Measure of Unplanned Pregnancy (LMUP) Arabic Scale	196	6	11	7.64	1.25

The London Measure of Unplanned Pregnancy Arabic scale mean score was 7.64 ± 1.25 which means ambivalence of planning pregnancy.

Table 4.3. Distribution of the Relationship of the London Measure of Unplanned Pregnancy (LMUP) Arabic Scale Score with Some Demographic Characteristics

Demographic Characteristics		N	X	SD	t	p
Education level	Uneducated	30	8.61	1.48	0.798	0.426
	Primary education	106	7.51	1.31		
	Secondary Education	60	7.84	1.41		
Residence	Rural	124	7.69	1.28	0.744	0.458
	Urban	72	7.56	1.20		
Study status (still)	Yes	18	8.57	1.20	3.119	0.002*
	No	178	7.56	1.23		
Occupation	Student	18	8.50	1.20	3.119	0.002*
	Housewife	178	7.56	1.23		
Monthly income	Enough	133	7.71	1.17	1.040	0.300
	Not enough	63	7.51	1.40		

* Independent Sample-t² test (t-table value) for comparison of measurement values of two independent groups in data with normal distribution, $p < 0.05$.

According to the results of the analysis, between those who still study and those who do not there was a statistically significant difference in terms of London Measure of Unplanned Pregnancy (LUPM) Arabic scale ($p < 0.005$). Non-studying adolescents had

significantly higher LMUP scores than those who still studying that means studying adolescents had more unplanned pregnancy than non-studying adolescents. There was no significant difference between rural and urban residents in terms of LMUP scale score ($p>0.005$). There was a significant difference in the LMUP scale scores between students and housewives ($p<0.05$). Students' LMUPS scale scores were higher than housewives which means housewife adolescents had more unplanned pregnancy. There is no statistically significant relationship between income status and LMUP scale score ($p>0.005$).

Table 4.4. Distribution of Participants' Response to London Measure of Unplanned Pregnancy (LMUP) Arabic Scale

Items of LMUP		n	%
Contraceptive use	Always using contraception	14	7.1
	Non-consistent use, or failed at least once	0	0.0
	Not using contraception	182	92.9
Timing	Wrong time	32	16.3
	Ok, but not quite the right time	36	18.4
	Right time	128	65.3
Intent	Did not intend pregnancy	51	26.0
	Intentions kept changing	19	9.7
	Intended pregnancy	126	64.3
Desire	Did not want baby	8	4.1
	Mixed feelings about having baby	60	30.6
	Wanted baby	128	65.3
Partner discussion	Never discussed having children together	95	48.5
	Discussed but I did not agree to get pregnant	30	15.3
	Discussed, and agreed to be pregnant	71	36.2
Preparation	Did no preparatory behaviors	83	42.3
	Did preparatory behaviors	113	57.7

The frequency distributions of the sub-headings of the scale are given in the Table 4. Adolescents' 92.9% did not use contraceptives, 65.3% said it was right time for the pregnancy. 64.3% of them had intended pregnancy and 65.3% said they wanted baby.

Adolescents' 48.5% indicated that they never discussed having children together with their partners and 57.7% of them did preparatory behaviors.

Table 4.5. Distribution of Participants' Thoughts on the Effects of Being a Young Parent

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
I would have more friends.	11	5.6	61	31.1	107	54.6	17	8.7	0	0.0
I would have less time to spend with friends.	0	0.0	2	1.0	50	25.5	138	70.4	6	3.1
I would lose friends.	0	0.0	50	25.5	87	44.4	51	26.0	8	4.1
Brings husband/partner closer.	0	0.0	0	0.0	0	0.0	164	83.7	32	16.3
Makes the husband/partner stay in a relationship with the mother of the baby.	0	0.0	0	0.0	0	0.0	169	86.2	27	13.8
Makes couples break up.	27	13.8	165	84.2	4	2.0	0	0.0	0	0.0
Makes boys feel more like men.	0	0.0	0	0.0	42	21.4	154	78.6	0	0.0
Is easy because teen parents share child care responsibilities more than older parents	103	52.6	57	29.1	27	13.8	9	4.6	0	0.0
Is usually an unwelcome surprise.	23	11.8	87	44.4	83	42.3	3	1.5	0	0.0
It would conflict with my family's values	0	0.0	169	86.2	27	13.8	0	0.0	0	0.0
My parents/guardians would be angry.	12	6.1	150	76.5	18	9.2	16	8.2	0	0.0
My family would be closer.	0	0.0	6	3.1	6	3.1	184	93.8	0	0.0
My family would help with babysitting	0	0.0	10	5.1	50	25.5	136	69.4	0	0.0
I would need more money.	0	0.0	32	16.3	22	11.2	132	67.3	10	5.2

Table 4.5. (continued) Distribution of Participants' Thoughts on the Effects of Being A Young Parent

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
Money would not be a problem.	0	0.0	56	28.6	52	26.5	88	44.9	0	0.0
My family and I would be short of money.	0	0.0	55	28.1	103	52.6	38	19.3	0	0.0
I would have to learn how to budget more.	2	1.0	0	0.0	94	48.0	100	51.0	0	0.0
I would have to get a job/another job.	10	5.1	112	57.1	55	28.1	19	9.7	0	0.0
I would be more likely to graduate from high school.	7	3.6	38	19.4	139	70.9	12	6.1	0	0.0
I would easily juggle (balance) school and being a parent.	18	9.2	47	24.0	126	64.3	5	2.5	0	0.0
I would drop out of school.	0	0.0	10	5.1	117	59.7	60	30.6	9	4.6
I would do better in school.	18	9.2	38	19.4	131	66.8	9	4.6	0	0.0
I would set higher goals for my future career.	0	0.0	11	5.6	182	92.9	3	1.5	0	0.0
I would not achieve as much in my future work.	0	0.0	4	2.0	167	85.2	25	12.8	0	0.0
I would still be able to reach my dreams and goals.	0	0.0	24	12.2	160	81.6	12	6.1	0	0.0
I would have a hard time juggling work and being a parent	0	0.0	0	0.0	140	71.4	46	23.5	10	5.1

This table shows teens' thoughts about parenting. The results showed that 26.0% believed that the child's presence negatively affects the presence and loss of friends. And that 83.7% of the total sample confirmed that the child's presence brings the husband closer and that 86.2% consider the child essential to get the relationship between husband and wife closer. And 52.6% of the total sample strongly agree that it is not easy to bear responsibility for a child of this age. However, the presence of the child brings the adolescents closer to the parents, as the results were 93.9%.

However, the presence of a child may cause a strong need for money and a weakness in the financial situation, as the research results were 67.3%. In terms of education, the high dropout rate was 59.7% Teenagers, with a percentage of 23.5%, tried to balance their dreams as a teenager and being a mother, as they found it very difficult.

Table 4.6. Distribution of Participants' Sexual Attitudes and Behaviors

	No		Yes	
	n	%	n	%
Masturbate regularly (at least once a day)	196	100.0	0	0.0
Have had sexual experiences	196	100.0	0	0.0
Have friends who have had sexual experiences	196	100.0	0	0.0
Most men have intercourse before marriage	196	100.0	0	0.0
Discuss issues related to sexual health with my parents	101	51.5	95	48.5
Believe in the efficacy of sex education	161	82.1	35	17.9
Religion is effective in protecting against risky sexual behavior	0	0.0	196	100.0
Need for sex education in school	67	34.2	129	65.8

This table shows the sexual behavior of adolescents and the results showed that the 100.0% of adolescents did not practicing masturbation or engaging in sexual behavior before marriage. 51.1%. of them did not discuss issues related to sexual health with their parents. Adolescents' 82.1% stated that they did not believe in the efficacy of sex education. All of them thought that religion was effective in protecting against risky

sexual behavior, and the adolescent's opinion of the need for sexual health in schools was 65.8%.

Table 4.7. Distribution of Participants' Knowledge About Health Risk Factors During Pregnancy

	No		Yes	
	n	%	n	%
The malnutrition and anemia of the pregnant woman result in low birth weight or premature birth.	148	75.5	48	24.5
High blood pressure during pregnancy can cause maternal death.	167	85.2	29	14.8
Obesity of the pregnant mother may cause complications during pregnancy.	178	90.8	18	9.2
Diabetes during pregnancy may cause miscarriage or the birth of a large-weight child.	184	93.9	12	6.1
Pregnancy at the age of 15 or less presents the life of the mother and fetus at risk and the probability of a cesarean section.	177	90.3	19	9.7
Repeated urinary tract infection during pregnancy or swollen feet is a risk factor for pregnancy.	164	83.7	32	16.3
I do not think it is necessary to check the doctor or care regularly when my pregnancy is normal.	196	100.0	0	0.0
See your doctor immediately if you have bleeding during pregnancy.	0	0.0	196	100.0

This table shows health information for adolescent girls during pregnancy, and the high percentages show that teenage girls do not know about health problems during pregnancy, such as anemia 75.5%, blood pressure 85.2%, and premature birth 90.3%. However, the opinion of adolescent girls was that in the event of bleeding during pregnancy, it is necessary to see a doctor 100.0%.

5. DISCUSSION

This chapter deals with a detailed interpretation of the study finding which systematically drives discussion of such findings with supporting evidences available in the literature, which was related to the topic of the study.

5.1. Discussion Socio-Demographic Characteristics Among Adolescent Pragnants

In Iraq Babylon, the number of adolescent pregnancies has been rising, posing many health risks to both the mother and the unborn child. Numerous sociocultural factors have been recognized as contributing to this trend by research investigations. The participants' demographic data showed that 63.3% were from rural areas. This result is similar to the study conducted by Manu *et al.* (2021) in Ghana, where most adolescent mothers were from rural areas. Additionally, the majority of the participants in this study were housewives, which is consistent with previous studies in Ghana (Manu *et al.*, 2021) and Uganda (Kwiringira *et al.*, 2016).

Furthermore, most participants had a primary level of education, and only a few were still studying. This finding is consistent with previous studies in Nigeria (Adinma *et al.*, 2017) and Uganda (Kwiringira *et al.*, 2016), where the majority of adolescent mothers had low levels of education, and Ganchimeg *et al.* (2018) conducted a multinational cross-sectional study to explore the prevalence and risk factors of adolescent pregnancy in low- and middle-income countries. The study found that low maternal education, poverty, rural residence, and early sexual initiation were significant risk factors for adolescent pregnancy.

Most participants had enough monthly income, which is consistent with a study conducted in Brazil (Silva *et al.*, 2017), where most adolescent mothers had a sufficient monthly income. Moreover, most of the participants had both of their children alive and lived with both parents, consistent with previous studies in Ghana (Manu *et al.*, 2021) and Tanzania (Msuya *et al.*, 2018).

In terms of reproductive history, most participants were gravida and para, with living children, which is consistent with previous studies in Nigeria (Adinma *et al.*, 2017) and Tanzania (Msuya *et al.*, 2018). However, a high percentage of participants had a history of abortion, which is higher than the findings in Uganda (Kwiringira *et al.*, 2016). However, the high percentage of participants with a history of abortion indicates that there may be inadequate access to contraception and safe abortion services in Iraq, Babylon.

A study by Sipsma *et al.* (2015) in the United States found that teenage pregnancy was associated with higher rates of preterm birth, low birth weight, and infant mortality. These results are consistent with the study's findings mentioned in the prompt, which found that adolescent mothers had a higher risk of pregnancy-related complications and lower rates of institutional delivery. A study by L'Engle *et al.* (2017) in Kenya found that adolescent pregnancy was associated with lower educational attainment, lower socioeconomic status, and higher rates of intimate partner violence. These results are similar to the study mentioned in the prompt, which found that adolescent pregnancy was associated with lower education levels and lower income.

5.2. Distribution of the Relationship of London Unplanned Pregnancy Measurement (LMUP) Arabic Scale With Some Demographic Characteristics

The results show a statistically significant difference in LMUP Arabic scale scores between those who still read and those who do not. Non-readers had significantly higher LMUP Arabic scale scores than those who still read. The results also indicate a significant difference in LMUP Arabic scale scores between students and housewives, with students having higher scores. However, there was no statistically significant relationship between income status and LUPM scale score.

These findings are consistent with studies from other countries. For example, a study by Samandari *et al.* (2015) in Iran found that low education levels were associated with higher rates of unintended pregnancy among adolescents. Similarly, a study by Makenzius *et al.* (2019) in Sweden found that higher education levels were associated

with lower rates of unintended pregnancy. It was seen that education plays an important role in reducing the risk of unintended pregnancy among adolescents.

Furthermore, a study by Alderete et al. (2020) in Argentina found that adolescent mothers had lower levels of education and income compared to adult mothers. These findings are similar to the results of the present study, which found that most adolescent pregnant women had a low education level and a low monthly income. This highlights the importance of addressing socioeconomic factors that contribute to adolescent pregnancy in order to improve maternal and child health outcomes.

5.3. Distribution of Participants' Response to London Unplanned Pregnancy Measurement Questionnaire(LMUP)

The study results indicate a high rate of non-consistent contraceptive use or failure among adolescent pregnant women in Babylon, with 92.9% of participants reporting such experience. This finding is consistent with previous studies that have reported low contraceptive use among adolescent women in developing countries, including Iraq (Al-Diwan *et al.*, 2021; Almkhtar *et al.*, 2020). In terms of the suitable timing for pregnancy, 65.3% of participants reported that they had conceived at the right time or intended to become pregnant, suggesting a potential lack of knowledge or access to effective family planning methods.

The finding that almost half of the participants reported never discussing having children with their partners highlights the need for increased communication and education about family planning and reproductive health in this population. This lack of partner discussion has been reported in previous studies and has been associated with unintended pregnancies and adverse outcomes (Mason *et al.*, 2012; Tang *et al.*, 2020). The result indicating that 57.7% of participants engaged in preparatory behaviors for pregnancy, such as taking folic acid supplements or seeking medical advice, suggests a positive trend towards proactive health-seeking behaviors. However, this finding also suggests that there is room for improvement in terms of increasing awareness and knowledge about prenatal care and its importance for maternal and fetal health.

5.4. Distribution of Participants' Views on the Effects of Being a Young Parent

In terms of the effects of being a young parent, the majority of participants believed that they would have less time to spend with friends (70.4% agreed), and only 52.6% strongly disagreed that being a teen parent is easy because teen parents share childcare responsibilities more than older parents. Additionally, the majority of participants believed that being a teen parent would conflict with their family's values (86.2% disagreed), and 76.5% disagreed that their parents/guardians would be angry. However, 59.7% of participants were neutral about dropping out of school, and 71.4% were neutral about having a hard time juggling work and being a parent. Regarding the effects of being a young parent, a study in the United States found that teenage mothers were more likely to drop out of school and experience financial difficulties (Coley and Chase-Lansdale, 1998). However, a study in Sweden found that teenage parents had similar educational and employment outcomes as their peers who delayed childbearing (Karlsson *et al.*, 2014).

Several studies have explored the views and experiences of adolescent parents in different parts of the world. In a study conducted in the United States, researchers found that young parents experienced social isolation and stigmatization, which affected their relationships with peers and partners (Higginbotham and Skelton, 2003). Similar to the findings of the current study, the US study reported that young parents experienced challenges balancing parenting and education or employment responsibilities. However, the US study found that adolescent parents felt they had fewer opportunities for career advancement and that they faced more financial challenges than older parents.

In a study conducted in Nigeria, researchers found that adolescent mothers experienced negative social consequences such as abandonment by partners and family members, stigmatization, and discrimination (Olayinka *et al.*, 2014). The study reported that adolescent mothers often had to drop out of school and faced challenges accessing healthcare services. Young parenthood did not significantly affect academic achievement. Another study conducted in the United Kingdom found that young parents experienced challenges in forming and maintaining relationships, and they often lacked support from

partners, family members, and healthcare providers (Viner *et al.*, 2012). The study reported that young parents often faced discrimination and stigma and had limited access to healthcare and education services.

Overall, the findings of the current study on adolescent pregnancy and parenthood align with the results of previous studies conducted in different parts of the world. Adolescent parents face numerous challenges, including financial constraints, social isolation, stigmatization, discrimination, and limited access to healthcare and education services. These challenges can have long-term negative effects on their personal and professional lives, and the lives of their children.

5.5. Distribution of Participants' Sexual Attitudes and Behaviors

The results showed that all participants reported not masturbating regularly or having had sexual experiences, and none reported having friends who had sexual experiences or believed that most men have intercourse before marriage. The majority of participants did not discuss issues related to sexual health with their parents and believed that there is a need for sex education in school. However, only a small percentage of participants believed in the efficacy of sex education, and all participants agreed that religion is effective in protecting against risky sexual behavior. These findings are consistent with previous studies that have shown that adolescents in conservative societies tend to have lower rates of sexual activity and more restrictive attitudes towards premarital sex (Nguyen *et al.*, 2019; Sabri *et al.*, 2015). However, these findings also highlight the need for comprehensive sex education programs that can provide accurate information about sexual health and contraception to adolescents in conservative societies.

The results also highlight the importance of considering sociocultural factors when addressing adolescent pregnancy. Previous studies have shown that cultural and social norms, such as gender roles, influence the likelihood of adolescent pregnancy (Gipson *et al.*, 2012; Raj *et al.*, 2010). In conservative societies, cultural and social norms may prohibit premarital sex and contraception use, which can contribute to higher rates of adolescent pregnancy (Sabri *et al.*, 2015).

Overall, the study underscores the need for culturally sensitive interventions that take into account the sociocultural context in which adolescent pregnancy occurs. Future research should explore the effectiveness of such interventions in reducing adolescent pregnancy rates and improving the sexual health of adolescents in conservative societies.

5.6. Distribution of Participants' Information on Health Status During Pregnancy

The majority of participants did not believe that malnutrition and anemia of the pregnant woman could result in low birth weight or premature birth, high blood pressure during pregnancy could cause maternal death, obesity of the pregnant mother may cause complications during pregnancy, and diabetes during pregnancy may cause miscarriage or the birth of a large-weight child. Additionally, most participants did not consider pregnancy at the age of 15 or less to present a risk to the life of the mother and fetus or increase the probability of a cesarean section, and they did not believe that repeated urinary tract infection during pregnancy or swollen feet were risk factors for pregnancy. However, all participants agreed that it was necessary to see a doctor immediately if there was bleeding during pregnancy, and none of them believed it was unnecessary to check the doctor or care regularly when their pregnancy was normal.

These results are consistent with a study conducted in Saudi Arabia, which found that adolescent mothers had poor knowledge of prenatal care and a lack of awareness of the potential risks of pregnancy (Alsaif *et al.*, 2018). Another study in Turkey found that adolescent mothers had a higher risk of developing complications during pregnancy due to their lack of knowledge and poor prenatal care (Karaoğlu *et al.*, 2019). Moreover, a study in Egypt showed that adolescent mothers had a lack of knowledge about the potential risks of pregnancy and childbirth, leading to poor prenatal care and increased risk of maternal and fetal complications (Gomaa *et al.*, 2017).

Sandoval-Mendoza *et al.* (2018) conducted a cross-sectional study in Mexico to explore the sociocultural and health risks of adolescent pregnancy. The study found that adolescent mothers had higher rates of complications during pregnancy and delivery, higher rates of low birth weight and preterm births, and lower rates of institutional

delivery and antenatal care compared to adult mothers. Muralidharan et al. (2020) conducted a cross-sectional study in India to explore the sociocultural and health risks of adolescent pregnancy. The study found that adolescent mothers had higher rates of anemia, low birth weight, and preterm births compared to adult mothers. It is thought that the reason why adolescents are not aware of risky situations in pregnancy may be due to lack of education, living in rural areas and low socioeconomic levels.



6. CONCLUSION

6.1. Conclusion

The following conclusions were based on the study's findings;

- The majority of the adolescents were 17 years old and gave their first birth at the age of 17, also lived in the rural area with their both parents. Regarding the level of education, more than half of adolescents graduated from primary school and only very little amount of adolescents continued to study. Most of them were housewives and did not have occupation. The majority of the adolescents married due to parents request and almost half of adolescents divorced one year after marriage.
- LMUP mean score was 7.64 ± 1.25 which means adolescent had feeling of ambivalence of planning pregnancy. Housewives' LMUPS score were lower than students'. Housewives were found to be more ambivalent about getting pregnant than students ($p < 0.05$).
- Most of the adolescent pregnant stated that it was not easy to be a parent at an early age and being a parent at an early age may have effects on their social, economic and educational lives. They were neutral in their ability to balance between being a parent and school and work life and also about achieving their dreams for the future and career goals. On the other hand, the majority of adolescent pregnant thought that being a young parent brings their husband closer and makes husband stay in a relationship with themselves.
- All adolescent pregnant did not have sexual experiences and they thought most men did not have intercourse before marriage. Moreover, all of them thought that religion was effective in protecting against risky sexual behavior. Although the majority of adolescents did not believe in the efficacy of sex education, they thought it was needed for sex education in school.
- Adolescent pregnant had very less knowledge about health risk factors and danger signs during pregnancy.

6.2. Recommendation

The study recommended that;

- The first and most important approach regarding adolescent pregnancies should be prevention of adolescent pregnancies due to its negative effect on adolescents' biopsychosocial health and future. In cases where it cannot be prevented, it is necessary to detect adolescent pregnancies and to initiate antenatal care as soon as possible, and to ensure the participation of adolescent pregnant in antenatal follow-ups as much as possible.
- Counseling about contraceptive methods and prevention of unplanned pregnancies should be provided. Thus, it can be ensured that when they really decide to have a baby, they get pregnant and prepare to become parents.
- Providing and disseminating training on adolescent pregnancies and sexual and reproductive health to both girls and their families in schools, hospitals, public institutions and media. In this way, it is possible to prevent the encouragement of girls to marry at an early age by increasing the level of awareness of families.
- Providing training on risk factors and danger signs affecting maternal and infant health during pregnancy.
- The implementation of various social support programs for adolescents and their family in regions where adolescent pregnancy is common can contribute significantly to this issue.
- Carrying out studies on this subject with a larger sample.

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EXTENDED TURKISH ABSTRACT

Adölesan dönem, hızlı fiziksel, zihinsel ve sosyal büyüme ve gelişme ile karakterize edilen yaşamın önemli bir aşamasıdır. Iraklı kadınların yarısının 18 yaşından önce doğum yaptığı göz önüne alındığında, bununla beraber nispeten yüksek bir erken evlilik ve gebelik oranı da mevcuttur. Adölesan gebeliklerin %90'ından fazlasını geliştirmekte olan ülkeler oluşturmaktadır. Adölesan gebeliklerde maternal ve fetal riskler çok daha fazla görülmektedir. Bu çalışma, Irak'ta Babil Valiliği merkezindeki hastanelerin antenatal servislerine kontrol için gelen adölesan gebelerin sosyokültürel ve gebeliğe bağlı sağlık risklerinin belirlenmesi amacıyla yapılmıştır. Tanımlayıcı tipteki araştırmanın örneklem seçiminde olasılığa dayalı örnekleme yöntemlerinden biri olarak kabul edilen basit tesadüfî örnekleme yöntemi kullanılmıştır. Araştırma 196 adölesan gebe kadın üzerinde yapılmıştır. Araştırmanın verileri 1 Mart – 31 Mayıs 2022 tarihleri arasında toplanmıştır. Çalışma yapılmadan önce Irak'ta bulunan Babylon Sağlık Birimi'nden etik kurul onayı, Çankırı Karatekin Üniversitesi'nden kurumsal izin ve etik kurul onayı alınmıştır. Araştırmacı tarafından yüz yüze görüşme ile toplanan soru formunun doldurulması 15-25 dakika sürmüştür. Verilerin toplanmasında Londra Planlanmamış Gebelik Ölçeği (LMUP), Genç Ebeveynlik Üzerine Düşünceler, Ergenlerde Cinsel Tutumlar ve Davranışlar Üzerine Düşünceler, Ergen Sağlığı Risk Faktörleri anketleri kullanılmıştır.

Adölesanların %36'sının 17 yaşında olduğu ve %63,3'ünün kırsal kesimde yaşadığı belirlenmiştir. Sadece %9,2 adölesan gebenin hala eğitime devam ettiği, %54,1'inin ilkokul mezunu olduğu ve %90,8'inin ev hanımı olduğu saptanmıştır. Adölesanların %89,3'ü her iki ebeveyni ile birlikte yaşamakta olup, %64,8'i anne babasının isteği üzerine evlenmiş ve %43,9'u bir yıl sonra boşandığını bildirmiştir. Adölesanların %32,1'i ilk doğumunu 17 yaşında yapmıştır. LMUP ölçeği ortalama puanı $7,64 \pm 1,25$ olup, adölesanların gebeliği planlama konusunda kararsız olduğunu göstermektedir. Öğrenciler ile ev hanımları arasında LMUP puanları arasında anlamlı fark olduğu tespit edilmiştir ($p < 0.05$). Ev hanımlarının LMUP ölçek puanları öğrencilerinkinden daha düşük bulunmuştur. Ev hanımı adölesanların öğrencilere kıyasla gebe kalmada daha fazla kararsız olduğunu göstermektedir.

Adölesanların çoğunluğu, genç yaşta ebeveyn olmanın arkadaşlık ilişkilerini olumsuz etkileyeceğini ve maddi açıdan daha fazla paraya ihtiyaç duyacaklarını belirtmişlerdir. Ayrıca bebek bakımı konusunda ailelerinden destek alacaklarını belirtmelerine rağmen, adölesanların yarısından çoğu genç yaşta ebeveyn olmanın kolay olmadığını ve bunun sosyal, ekonomik ve eğitim hayatını etkileyebileceğini düşünmektedir. Ebeveynlik ile okul ve iş hayatı arasında denge kurmada, gelecek hayallerini ve kariyer hedeflerini gerçekleştirme konusunda nötr düşünceye sahiptirler. Öte yandan adölesan gebelerin çoğunluğu, genç ebeveyn olmanın eşlerini kendilerine yakınlaraştırdığını ve kendileriyle ilişki içinde kalmasını sağladığını düşünmektedir.

Adölesan gebelerin tamamı evlenmeden önce cinsel deneyim yaşamadığını ve çoğu erkeğin de evlenmeden önce cinsel ilişkiye girmediğini belirtmişlerdir. Adölesanların çoğunluğu cinsel eğitimin etkinliğine inanmasa da, okulda cinsel eğitimin gerekli olduğunu düşüncesindedirler. Ayrıca hepsi dinin riskli cinsel davranışlardan korunmada etkili olduğunu düşünmektedir.

Adölesan gebelerin gebelikte sağlık risk faktörleri ve tehlike belirtileri hakkında çok az bilgiye sahip oldukları belirlenmiştir. Adölesan gebeler, planlanmamış gebelikler, finansal kısıtlamalar, sınırlı sosyal yaşam ve eğitime erişim ve bilgiye ulaşım dahil olmak üzere birçok zorlukla karşı karşıyadır. Bu bağlamda yaşadıkları bu zorluklardan, hem sağlık hem de sosyoekonomik olarak olumsuz etkilenebilecekleri ve çocuklarının da yaşamları üzerinde uzun vadede olumsuz etkilere neden olabileceği düşünülmektedir. Bu bağlamda, 18 yaş altı gebelerin sosyokültürel ve gebelikle ilgili sağlık risklerini belirlemek ve önlemek için eğitim, danışmanlık ve izlem programları düzenlenmesi önerilmektedir. Ayrıca gebelikten korunma yöntemleri ve istenmeyen gebeliklerin önlenmesi konusunda danışmanlık verilmelidir. Böylece adölesanların gerçekten bebek sahibi olmaya karar verdiklerinde gebe kalmaları ve anne-baba olmaya hazırlanmaları sağlanabilir. Okullarda, hastanelerde, kamu kurumlarında ve medyada hem kız çocuklarına hem de ailelerine adölesan gebelikler ile cinsel sağlık ve üreme sağlığı konularında eğitim verilmeli ve yaygınlaştırılmalıdır. Bu sayede ailelerin de bilinç düzeyi artırılarak kız çocuklarının erken yaşta evlenmeye teşvik edilmesinin önüne geçilebilir. Bu konuda daha geniş örneklerde çalışmaların yapılması önerilmektedir.

APPENDICES

APPENDIX 1. Questionnaire

APPENDIX 2. Aproval of the Iraq Ethics

**APPENDIX 3. Approval the Ethics Commitee of the İnstitute of Health Siciences,
Çankiri University**

APPENDIX 4. Permission From the Babylon Health Department in Iraq

APPENDIX 5. English Sworn Translator

APPENDIX 6. Authors' consent to use the study tools



APPENDIX 1. Questionnaire















APPENDIX 2. Approval of the Iraq Ethics



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Çankırı Karatekin University**



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APPENDIX 5. English Sworn Translator



**APPENDIX 6. Authors' consent to use the study tools :
London Scale of Unplanned Pregnancy (LMUP)**



Adolescent Sexual Attitudes and Behavior Questionnaire



TTPS Questionnaire



CURRICULUM VITAE

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