

**WOMEN'S AND MEN'S VIEWS AND KNOWLEDGE ON  
MALE PARTICIPATION IN REPRODUCTIVE HEALTH  
IN IRAQ**

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PARTICIPATION IN REPRODUCTIVE HEALTH IN IRAQ**

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## **ETHICS STATEMENT**

The thesis entitled “Women’s and men’s views and knowledge on male participation in reproductive health in Iraq” 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.

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## ABSTRACT

### WOMEN'S AND MEN'S VIEWS AND KNOWLEDGE ON MALE PARTICIPATION IN REPRODUCTIVE HEALTH IN IRAQ

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Master of Science in Nursing

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Reproductive health for women is essential to mothers, babies, families, and the community as a whole. The study was planned in a descriptive cross-sectional design to describe and compare women's and men's views on male participation in reproductive health in Iraq. The study was conducted in Iraq in a women's ward on the third floor of a private nursing home hospital. The women of the sample were in the consulting clinic in Baghdad teaching hospital / Medical City in Baghdad between 1 February 2022 and 10 July 2022. Samples for this study were collected through individual interviews. The sample sizes consisted of 100 Iraqi married men and 100 women. Data analysis in this study was conducted by using SPSS version (22.0). The study used frequency, percentage, t-tests, and Chi-square to investigate the comparative study. This study concluded that the female participants had more knowledge and information about the justifications for abortion and family planning (FP) methods than the males. Most participating men know 73% but do not participate in reproductive health 60%. In this work, the violence in Iraq was also studied, and it was found that it is high. 47% of females strongly agree that violence against women is high in Iraqi society, and 37% of males agree that violence against women is high. Moreover, the most common type of violence in Iraq is verbal (65%), followed by physical violence (55%), as investigated in the views of the study. However, there is no significant difference between the reproductive health issue and the mean score of females and males ( $t=1.011$ ,  $p=0.313$ ). The study concluded that most of the participating men have the knowledge, but they do not participate in reproductive health, and the study also concluded that violence is high in Iraqi society, and the females and males agreed that determining the number of children in the family

is the responsibility of both sexes and that the role and patterns of the family for both sexes similar. The study concluded that men are often able to use family planning methods, and participants stressed the need to take measures to protect against STDs. It is recommended to spread awareness about reproductive rights and reproductive health for males and females and to increase male participation in reproductive health in Iraq.

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**Keywords:** Reproductive health, Reproductive rights, the role of men, male participation, views and knowledge on reproductive health.



## ÖZET

# IRAK'TA ÜREME SAĞLIĞINA ERKEK KATILIMI KONUSUNDA KADINLARIN VE ERKEKLERİN GÖRÜŞLERİ VE BİLGİLERİ

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Irak toplumunda kadınlar üreme sağlığında eşitsizlikten ve erkeklerin katılımının az olması veya olmamasından muzdariptirler. Kadınlar erkeklere göre üreme sağlığı sorunlarına daha fazla maruz kalmaktadırlar: Kadınlar aile planlamasını daha fazla kullanmakta, cinsel yolla bulaşan hastalıklara karşı daha duyarlı olmakta ve doğum-düşük-doğum sonrası dönemde birçok sorun yaşamaktadırlar. Erkekler genellikle bu konuların farkına varma, sorumluluk alma ve maddi yöntemi paylaşma konusunda yeterince etkili değillerdir. Bu çalışma, Irak'ta erkeklerin üreme sağlığına katılımı konusunda, erkeklerin ve kadınların görüşlerini ve bilgilerini tanımlamak ve karşılaştırmak amacıyla tanımlayıcı ve kesitsel olarak yapılmıştır. Çalışma, 1 Şubat 2022-10 Temmuz 2022 tarihleri arasında Irak'ta Bağdat'ta bulunan Bağdat Eğitim Hastanesi/Tıp Şehri'ndeki özel huzurevi hastanesinin üçüncü katındaki kadın servislerinde ve kadın konsültasyon kliniğinde yürütülmüştür. Araştırma kapsamını, Irak toplumundan, 20-69 yaşları arasında, evli kadın ve erkekler, henüz çocuk sahibi olmayan evli çiftler, yeni doğum yapmış ve menopoza girmiş kadınlar olmak üzere, 100 erkek ve 100 kadın oluşturmaktadır. Araştırmada veri toplamak amacıyla araştırmacı tarafından ilgili literatür doğrultusunda biri kadınlara, diğeri erkeklere yönelik olmak üzere iki soru formu hazırlanmıştır. Bu soru formları yaş, meslek, eğitim düzeyi, aylık gelir, kız veya genç erkeğin evlenmeye uygun yaşı gibi sorular ve üreme sağlığı konularında bilgi ve görüşleri değerlendiren sorulardan oluşmaktadır. Kadınlara yönelik ankette, kadınların şiddete, kocaları tarafından şiddete maruz kalıp kalmadıklarına ve kocanın üreme sağlığına katılma olasılığına ilişkin sorular yer almıştır. Bazı üreme sağlığı konularında

kadın ve erkeklerin görüş ve bilgileri değerlendirilerek karşılaştırılmıştır. Soru formlarında ayrıca kadınlarda ergenlik belirtileri ile ilgili bilgiler ve bu bilgilerin kaynağı hakkında sorular da yer almıştır. Veriler, araştırmacı tarafından bireysel yüzyüze görüşme yoluyla toplanmıştır.

Bu çalışmada veri analizi “Statistic Package for Social Science” (SPSS) versiyonu (22.0) kullanılarak yapılmıştır. Karşılaştırmalı çalışmayı incelemek için bu çalışmada frekans, yüzde, ortalama, standart sapma, t-testi ve Ki kare testi kullanılmıştır.

Araştırmada, kadınların %40'ının 20-29 yaş grubunda, erkeklerin %35'inin 30-39 yaş grubunda, kadınların %30'unun ve erkeklerin %52'sinin üniversite mezunu olduğu saptanmıştır (Table 4.1). Araştırmaya katılan kadınların %48'i kadınlarında evlilik için uygun yaş aralığının 24-28 yaşlar olduğunu, erkeklerin %47'si ise 19-23 yaşlar olduğunu düşünmektedir (Table 4.2,  $X^2=5.46$ ;  $p=0.036$ ). Erkeklerin evlenmesi için uygun yaş aralıkları ise her iki cinsiyet tarafından aynı yaş aralığı; 24-28 yaşlar olarak (sırasıyla %50 ve %52) ifade edilmiştir (Table 4.2,  $X^2=5.58$ ;  $p=0.232$ ). Bu çalışmaya katılan erkeklerin de kadınlarında aynı yüzdede olmak üzere (%73) çoğunluğunun üreme sağlığı konusunda bilgi sahibi olduğu, her iki cinsiyetten katılımcıların yarısından fazlasının evlilik öncesi muayeneleri bildiği (kadınların %55'i, erkeklerin %54'ü;  $X^2=0.02$ ;  $p=0.88$ ), kadınların %64'ünün erkeklerin %39'unun gebelik, doğum ve çocuk bakımı konularında ( $X^2=12.51$ ,  $p=0.000$ ), kadınların %43'ünün erkeklerin %34'ünün küretaj konusunda ( $X^2=1.71$ ,  $p=0.19$ ) bilgi sahibi olduklarını belirttikleri, bununla birlikte bilgi sahibi olma durumlarının istatistiksel olarak anlamlı farklılık göstermediği ( $p>0.05$ ), cinsel yolla bulaşan hastalıklar ile aile içi şiddet ve şiddet türleri konusunda ise erkeklerin ve kadınların aynı yüzdede (sırasıyla %49 ve %45) bilgili olduklarını ifade ettikleri ortaya konmuştur. Kadınların %52'sinin eşleriyle üreme sağlığı konularını konuştuklarını, %48'inin ise konuşmadıklarını belirtmesi araştırmanın bir diğer çarpıcı bulgusu olmuştur (Table 4.2).

Gençlerin üreme sağlığı sorunlarına katılımı konusunda eğitimler verilmesinin teşvik edilmesi gerekip gerekmediği konusunda kadınların %90'ı, erkeklerin %87'si teşvik edilmesi yönünde görüş bildirmişlerdir (Table 4.2;  $X^2=0.44$ ,  $p=0.506$ ). Araştırmaya katılanların (kadınların %80'i, erkeklerin %78'i) erkeklerin üreme sağlığına katılım konusunda motive olmadıklarını düşündükleri saptanmıştır.

Araştırma kapsamındaki kadınların üreme sağlığı konularında bilgi kaynağı olarak okul kaynağını kadınların %15'inin, erkeklerin %29'unun ( $X^2=5.71$ ,  $p=0.016$ ), arkadaş ve komşu kaynağını sırasıyla %34 ve %11'inin gösterdiği ( $X^2=15.16$ ,  $p=0.000$ ) ve istatistiksel olarak gruplararası farkın anlamlı olduğu bulunmuştur (Table 4.2).

Katılımcıların eşlerinin sosyodemografik özellikleri istatistiksel olarak karşılaştırılmış, eğitim düzeyi, eşleriyle yaş farkının 10 yaştan daha az olması, çocuk sahibi olma durumları gruplarda benzerlik göstermekle birlikte ( $p>0.05$ ), meslek ve erken evlenmeye teşvik edilme durumlarının istatistiksel olarak anlamlı olarak farklılık gösterdiği saptanmıştır (Table 4.3). Erkeklerin %56'sının eşlerinin çalışmadığı/ ev hanımı olduğu kadınların %44'ünün eşinin serbest meslek sahibi olduğu ( $X^2=77.36$ ,  $p=0.000$ ), erkeklerin %31'ini kadınların %17'sinin erken evliliğe özendirildiği, elde edilen diğer bulgulardır ( $X^2=5.37$ ,  $p=0.020$ ).

Çalışmaya katılan kadınların %68'i, erkeklerin ise %11'i bir aile planlaması yöntemi kullandığını belirtmektedir ve gruplararası fark istatistiksel olarak anlamlı bulunmuştur ( $X^2=67.97$ ,  $p=0.000$ ). Kadın katılımcılara eşlerinin herhangi bir aile planlaması yöntemi kullanıp kullanıp kullanmadığı sorulmuş, erkek katılımcılarla benzer yüzde de (%13'ünün) bir yöntem kullandığı saptanmıştır.

Bu çalışmada şiddet incelenmiş ve Irak toplumunda kadına yönelik aile içi şiddetin yüksek olduğu (kadınların %42'si) tespit edilmiştir. Irak'ta en yaygın şiddet türü sözlü şiddet (%65) ardından fiziksel şiddet (%55) olarak belirtilmiş, kadınların %28'i psikolojik şiddete ve %7'si cinsel şiddete maruz kaldığını ifade etmiştir (Tablo 4.3). Irak toplumunda kadına yönelik şiddetin yüksek olduğuna kadınların %47'si “kesinlikle katılıyorum”, erkeklerin %37'si de “katılıyorum” yanıtını vermiştir (Table 4.4,  $X^2=21.77$ ;  $p=0.000$ ).

Kadınların (%45'i) ve erkeklerin (%61'i) görüşleri çoğunlukla kadınların erkeklere göre daha fazla üreme sağlığı sorunu yaşadığı yönündedir ve gruplar arasında istatistiksel anlamlı fark bulunmuştur. Kadınların %34'ü bu konuda “kesinlikle katılıyorum” görüşünü erkeklere göre (%12) daha fazla belirtmişlerdir (Table 4.4,  $X^2=17.08$ ;  $p=0.001$ ).

Kadınlar ve erkekler, üreme sağlığı sorunlarına çözüm bulmaları gerektiğine ve erkeklerin üreme sağlığı sorunlarının kadınlara göre daha kolay çözülebildiğine benzer

yüzdelerle; sırasıyla %46 ve %59'u "katılıyorum", %41 ve %27'si "kesinlikle katılıyorum" ve %34 ve %35'i "katılıyorum" yanıtlarını vermişlerdir (Table 4.4,  $p>0.05$ )

Ailedeki çocuk sayısını belirlemenin sadece erkeğin sorumluluğunda olduğuna kadınların ve erkeklerin %47'si" katılmıyorum yanıtını, aynı zamanda kadınların %30'u "kesinlikle katılmıyorum" yanıtını vermişken erkelerde bu yanıt %17'de kalmış, gruplararası farkın istatistiksel olarak anlamlı olduğu görülmüştür (Table 4.4;  $X^2=9.49$ ,  $p=0.09$ ).

Kadınların %46'sı, erkeklerin %59'u, erkeklerin aile planlaması yöntemlerini kullanabilecekleri konusunda hemfikirdir. Bununla birlikte kadınların %15'i "katılmıyorum" erkeklerin %20'si "kararsızım" yanıtını vermiş olup yanıtlar gruplararası istatistiksel anlamlı farklılık göstermiştir (Table 4.4;  $X^2=10.12$ ,  $p=0.038$ ). Benzer biçimde, erkeklerin cinsel davranışlarının sorumluluğunu almak için aile planlamasına kullanılmasına katılımını teşvik etmek gerektiği görüşüne kadınların %24.0'u erkeklerin %10.0 u "kesinlikle katılıyorum" yanıtını vermiş olup gruplararası fark istatistiksel olarak anlamlı bulunmuştur ( $X^2=16.7$ ,  $p=0.002$ ).

Cinsel yolla bulaşan enfeksiyonların kadınlarda erkeklerden daha fazla görüldüğü konusunda, kadınlar "kararsızım" (%24) ve "katılıyorum" (%24); erkekler "kararsızım" (%35), katılmıyorum (%27) ve katılıyorum (%27) yanıtlarını vermiştir ( $X^2=6.26$ ,  $p=0.18$ ). Kadınların %45'i, erkeklerin de %50'si, CYBElara karşı korunmak için önlem almanın gerektiği görüşüne, "katılıyorum" yanıtını vererek bildirmişlerdir ( $X^2=1.56$ ;  $p=0.815$ , Table 4.4). Kadınların üreme sağlığını erkeklerden daha fazla önemseydiği görüşüne kadınların %49'u erkelerin %17'si kesinlikle katılıyorum yanıtını vermiş ve gruplararası fark istatistiksel olarak anlamlı bulunmuştur ( $X^2=25.07$ ,  $p=0.000$ ).

"Kadınlar üreme sağlığını erkeklerden daha fazla önemsiyor" görüşüne kadınların %49'u erkeklerin %17'si kesinlikle katılıyorum ( $X^2=25.07$ ,  $p=0.000$ ); "Her durum ve koşulda çocukların bakımı kadının sorumluluğunda olmalıdır." görüşüne kadınların %13'ü erkeklerin %22 si "kararsızım" ( $X^2=14.55$ ,  $p=0.005$ ); "Hamilelik, doğum, düşük, doğum sonrası vb. durumlarda eşler birlikte sorumludur." görüşüne kadınların %34ü erkeklerin %22 si "kesinlikle katılıyorum" ( $X^2=9.519$ ,  $p=0.049$ ), "Bir kadın doğum sonrası depresyondan muzdarip olduğunda, bir erkek ona tedavide yardım etmelidir." görüşüne "kadınların %51'i erkeklerin %27'si "kesinlikle katılıyorum" yanıtını

vermişlerdir ( $X^2=17.62$ ,  $p=0.001$ ). Bu bulgularda gruplararası istatistiksel farkın anlamlı olduğu görülmektedir.

Kadınların ve erkeklerin üreme sağlığı sorunu puan ortalamaları (sırasıyla 66.49 ve 65.58) arasında istatistiksel olarak anlamlı fark yoktur (Table 4.5;  $t=1,011$ ,  $p=0,313$ ).

Araştırmaya katılan erkeklerin çoğunun üreme sağlığı konusunda bilgi sahibi olduğu ancak üreme sağlığına katılmadığı sonucuna varılan araştırmada ayrıca Irak toplumunda şiddetin yüksek olduğu sonucuna varıldı ve kadın ve erkekler ailedeki çocuk sayısını belirlemenin önemli olduğu konusunda hemfikir oldular. her iki cinsiyetin sorumluluğu ve ailenin rolü ve kalıpları her iki cinsiyet için de benzerdir. Çalışma, erkeklerin sıklıkla aile planlaması yöntemlerini kullanabildiği sonucuna varmış ve katılımcılar cinsel yolla bulaşan hastalıklara karşı korunmak için önlem alınması gerektiğini vurgulamıştır. Irak'ta üreme hakları ve kadın ve erkekler için üreme sağlığı konusunda farkındalığın yaygınlaştırılması ve üreme sağlığına erkek katılımının artırılması önerilmektedir.

Araştırmada elde edilen bulgular doğrultusunda; erkeklerin üreme sağlığı ile ilgili programlar oluşturulması, erkeklerin üreme sağlığına katılımına yönelik bilinçlendirme ve teşvik uygulamalarının yapılması, sağlık kurumlarında erkeklerin üreme sağlığına katılımının yararları konusunda kurslar düzenlenmesi, aynı zamanda kadına yönelik şiddeti durdurma konusunda farkındalık yaratılması önerilir.

Bu tez İngilizce gramer ve imla açısından uzman tarafından gözden geçirilmiş, ilgili belge tezde sunulmuştur.

**2023, 102 Sayfa**

**Anahtar Kelimeler:** Üreme Sağlığı, Üreme Hakları, Erkeklerin Rolü, Erkeklerin Katılımı, Üreme Sağlığı İle İlgili Bilgi ve Görüşler.

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**Muna Abdulwahid Omar AL-GBURI**

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## LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
AYFHS	Adolescent and Youth-Friendly Health Services
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
FGM	Female genital mutilation
FP	Family planning
HBV	Honour-based violence
HIV	Human immunodeficiency virus
HRC	Human Rights Committee's
HRW	Human Rights Watch
ICCPR	International Covenant on Civil and Political Rights
ICPD	International Conference on Population and Development
IPV	Intimate partner violence
IUD	Intra Uterine Devices
IWISH	Iraqi Women Integrated Social and Health Survey
LMICs	Low- and Middle-Income Countries
MOH	Iraqi Ministry of Health
PHC	Primary Health Care
RH	Reproductive health
Rh <sup>-</sup>	Rhesus factor in blood
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
STDs	Sexually transmitted diseases
STIs	Sexually transmitted infections
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
UNIraq	United Nations Iraq
WHO	World Health Organization

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# 1 INTRODUCTION

## 1.1 Preface

Men's personal participation in sex and procreation has been largely ignored throughout history while societies have concentrated nearly entirely on women's fertility behavior. Therefore, fundamental family planning (FP) initiatives directed at women have played a pivotal role in carrying out population policy. Men participated minimally, usually to secure the continuation and acceptance of contraceptives or to improve the diagnosis and treatment of sexually transmitted diseases (Greene *et al.*, 2006). Individuals, partners, and families, as well as the social and economic progress of nations, all depend on the availability of reproductive health (RH) and sexual health services. To achieve international development goals in the area of sexual health during the previous decade, a recommitment on the part of international actors is essential. To hasten the fulfillment of health-related international development goals, the World Health Organization (WHO) has chosen a new strategy (WHO, 2021). The resolution recognized the programs and action plans established by nations at the Fourth United Nations (UN) World Conference on Women in Beijing in 1995 and the International Conference on Population and Development (ICPD) in Cairo in 1994. Upgrade and expand its RH-related initiatives (WHO, 2004). New, more comprehensive RH plans are being adopted as the importance of male participation in RH and RH rights has become more widely acknowledged in recent years. Concurrent shifts have seen family planning (FP) programs broaden their scope beyond the provision of just contraceptives to include other areas such as STI prevention and treatment, maternal mortality reduction, and sexual health counseling and treatment. Second, programs are now required to serve the needs of married women, pre-teens and teenagers, and single men and women of all ages. The third major change was the official acknowledgment that lower fertility rates and more stable populations can be achieved in large part through better relations between men and women and the protection of reproductive rights (Greene *et al.*, 2006).

The World Health Organization defines reproductive health as "a state of total physical, mental, and social wellbeing in all aspects of reproductive health and its related processes and procedures" (WHO, 2021). Reproductive independence, including the ability to determine when, if ever, and how often to have children, is a central tenet of RH (Beji, 2015). Because sexual activity contributes to an individual's health, well-being, and quality of life, RH is relevant to people of all ages (Taskin, 2016).

The women are half of society, and she is the one who gives birth and takes care of the other half of the community. Any society must take care of the health and safety of women at all stages of their lives. We can say that interest in RH is a priority of the world. RH must be made a world priority, and it pays attention to what humans take care of from pregnancy to birth, postpartum, adolescence, puberty, and aging. RH is also affected by several factors in Iraqi society, such as economic, cultural, and religious situations, literacy, and unemployment. Iraqi society has suffered wars and crises for several years, negatively affecting RH in Iraq (Hadi, 2020).

### **1.1.1 Components of Reproductive Health**

- ✓ Providing counseling, information, education, communication and services in the field of FP.
- ✓ Education and services for prenatal care, safe delivery, and post-natal care, especially breast-feeding, infant and women's health care.
- ✓ Prevention and appropriate treatment of infertility; abortion, STDs ; and reproductive tract infections.
- ✓ Information,, education and counselling, as appropriate, on human sexuality, RH and responsible parenthood (Keita & Moussa, 2015).

### **1.1.2 Women's Rights to Reproductive Health**

Several conferences have been held at the UN and other countries' commitment to human rights in general and reproductive and sexual rights and health in particular, Such as:

- ❖ World Conference on Human Rights (Vienna 1993),
- ❖ International Population and Development Conference (Cairo 1994)
- ❖ Social Development World Summit (Kopanhag 1995)
- ❖ Fourth World Conference on Women (Beijing 1995)

Reproductive and sexual health is the right of every individual, man or woman, old or young, to reach the highest level of luxury and ensure equality between men and women. It is worth noting that most people worldwide are not fully aware of sexual and reproductive rights (Taskin, 2016). This is due to the lack of information, unavailable services, incorrect sexual behaviors, and discrimination against women (Cook & Fathalla, 1996). Reproductive rights are among the most controversial worldwide issues, regardless of the socio-economic level of the population, religion, or culture. Reproductive rights are often presented as vital in discussions and articles by population organizations (Beji, 2015).

### **1.1.3 Reproductive Health Rights**

RH Rights can be concluded as follow (Cook & Fathalla, 1996; Freedman & Isaacs, 1993; Zavales, 1996).

1. Right to life.
2. Right to freedom.
3. Right to equality.
4. Right to privacy.
5. Right to freedom of thought.
6. Right to knowledge and education.
7. Right to choose whether to marry or start a family.
8. Right to decide whether to have children or not.
9. Right to health care and health protection.
10. Right to benefit from scientific developments.
11. Right to freedom of assembly and the right to participate in politics.
12. Right to be free from torture and ill-treatment.

#### 1.1.4 Reproductive Health

The general health of the population in Iraq has suffered, especially Iraqi women, has suffered significant setbacks due to decades of war and economic sanctions. As a result, public spending on health has led to deteriorating service quality, drug shortages, and supplies (Hilfi *et al.*, 2013). Moreover, the ongoing conflict and precarious security situation have weakened the health infrastructure and impaired Iraqis' access to primary health care. Thus, it has affected the quality of service provided to women in terms of health and other aspects (MOH-Iraq, 2009). Women in Iraq suffer from poor access to health services.

This reflects negatively on the quality of reproductive services due to the circumstances of the war and the crises that have occurred in Iraq. The Iraqi Ministry of Health (MOH) is working in cooperation with the UN Population Fund (UNFPA) Iraq and the UN International Children's Emergency Fund (UNICEF) on improving services for women in the aspect of RH (UNFPAIraq, 2018). In 2018, the (UNFPA) launched its Strategic Plan 2018-2021. Which focused on three transformational outcomes:

1. End preventable maternal deaths.
2. Meet unmet FP needs.
3. End gender-based violence and all harmful practices (UNICEF, 2019).

Maintaining the safety of the mother and children and educating both genders about the importance of RH and its benefits should be among the necessary tasks of the state to build an integrated, healthy society (Al-Jassem, 2018). Due to the conditions of wars and sectarian conflicts, Iraq was affected by the deterioration of the social, economic, cultural, and religious situation and the decline of health services, which led to a severe weakening of public health in general and RH in particular (Hilfi *et al.*, 2013). Also, women in Iraqi society suffer from discrimination between males and females at all levels and restrictions on the customs and traditions of society that negatively affect women, which increased the spread of illiteracy and the lack of access to opportunities to complete their studies (IWISH2, 2022). The addition of the family environment in which she is raised and raised

has a significant impact, as the culture and treatment of women in the village and areas far from the city differ. These factors negatively affect a woman's RH (Al-Jassem, 2018).

### **1.1.5 Reproductive Health Rights of Women in Iraq**

Iraqi women suffer from neglect in health care, especially RH and reproductive rights. Noting that fertility rates in Iraq are considered very high, as it is considered the second highest fertility rate in the Arab world. However, there is a lack of RH care, follow-up, and FP, and the spread of poverty is an obstacle that affects women's health in general in Iraq (MOH-Iraq, 2022). Ignorance by Iraqi women and men of women's rights, the spread of illiteracy, male violence, and poverty limit women's capabilities in Iraqi society. Even though the Iraqi parliament allocates 25% of seats for women, there is still little representation for women, whether in the private or government sectors, which leads to weak women (Service, 2018). Early marriage is widespread in Iraqi society. It constitutes a risk factor for the female segment of Iraqi society because it is exposed to reproductive and public health risks (Al-Jassem, 2018). Where girls at an early age are exposed to the danger of wrong health behaviors, and early marriage is an obstacle to completing school stages for Iraqi girls. Poverty also leads to poor nutritional status for women, negatively affecting the public and RH; these factors make it vulnerable to disease, disability, and death (UNFPA Iraq, 2016).

## **1.2 The Aim of the Study**

The study aims to describe reproductive health in Iraq, comparing men and women in knowledge and information about reproductive health, and evaluate men's participation in reproductive health in Iraq.

## **1.3 The Statement of The Problem**

By highlighting RH in the community of Iraq, we have noticed a weakness in the proportion of women and men concerning the knowledge surrounding this matter.

In a way that is based on the lack of limitation on men and men participation in RH, through this work in nursing in the women's hospitals in Baghdad / Iraq.

#### **1.4 The Study Questions**

What are women's and men's knowledge about male participation in RH in Baghdad / Iraq?

What are women's and men's views about RH in Baghdad / Iraq?

Is there any difference between women's and men's views about male participation in RH in Baghdad / Iraq?

Is there any difference between women's and men's knowledge about male participation in RH in Baghdad / Iraq?

## **2 REVIEW OF LITERATURE**

### **2.1 The First Part**

#### **2.1.1 Overview of Reproductive Health**

Women's RH stage begins at puberty and continues after menopause; at this stage, women need to maintain themselves in addition to health care by health care providers in any country and identify problems early if they exist (Ricci, 2013). RH affects and is affected by society's social, economic, and cultural situation. It is negatively affected by the spread of illiteracy and unemployment, the society's traditions, customs, beliefs, and values. It is also affected by the family environment, the interlocking relationships between its members, the mother-father relationship, the relationship between sons and daughters, and the male and female brotherhood (WHO, 2017). Social position has an effect on RH; in many regions of the world, women face discrimination. Access to high-quality health services that are tailored to the requirements of various population subsets has been shown to have a positive effect on RH (K. S. Hall *et al.*, 2016). There is more to RH than just reproductive age. Cultural, social, and economic considerations, as well as a dedication to human rights, have a role in this phenomenon before and during the reproductive years (Beji, 2015). In terms of the reproductive system, it's a condition of whole mental, physical, and social well. Being healthy means more than just being physically fit. Freedom to decide one's own procreation and the ability to have children are essential components of RH. Health services and excellent health care for women to ensure a healthy pregnancy and delivery are a human right (MOH-Iraq, 2021). Reproductive health may be defined as the prevalence of normal reproductive organs and behaviors throughout the entire sex spectrum in a given culture (NCERT, 2020). Three goals connected to RH—improving maternal health, combatting HIV/AIDS and viral infections, and lowering mother and child mortality—are part of the UN Millennium Declaration's larger effort to achieve sustainable development and eradicate poverty, which was signed by 189 nations in 2000. (WHO, 2004). Nonetheless, in many communities, women's standing does not grant them the ability to make decisions relating to many aspects of their lives. This is especially true in Iraq and SSA (Acharya *et al.*,

2010). Women's autonomy in RH decisions is hampered by a variety of cultural and socioeconomic reasons in LMICs (UN, 2016). Women often face obstacles while deciding on RH since cultural norms and beliefs in the area support men's superiority in sexual interactions, particularly marriage (Ahinkorah *et al.*, 2018).

### **2.1.2 Reproductive Health in Iraq**

The 2003 US-led occupation of Iraq destroyed an estimated 12% of hospitals and public health laboratories. Numerous indicators confirm that the quality of Iraqi health services has been impaired over the past several years despite substantial increases in the national health budget (Devi, 2015). Health in Iraq has been affected since 2003, just like the rest of the vital facilities in Iraq; the negative impact of the health reality in Iraq in 2013 increased from the terrorist group ISIS. Due to the battles with the terrorist organization and the increased number of Syrian refugees. All these negative affects the quality of health services, including RH (Balinska *et al.*, 2019, pp. 2014–2015). Early marriage is associated with early childbearing and fertility in women, potentially leading to health risks to the mother and child (Fetohy, 2007).

Health care in Iraq needs to have the required level, especially PHC centers; despite its achievements in the health sector, it faces many challenges. It is crucial to continue raising the spending percentage on the health services provided to the citizen. The statistical estimates of the population until 2033 indicate that the population increase in Iraq will continue at a high rate of growth due to the high fertility rate and lower death rates; in turn, there will be an additional increase in service requirements (Abboud, 2016). Figure 2.1. shows indicator Proportion of women of reproductive age (15-49 years) per 1,000 women in that age group, with the total fertility rate of women in all governorates of Iraq. According to the Iraqi MOH statistics for 2020 (MOH-Iraq, 2020b).

Governorate	معدل خصوبة المراهقات للفترة سنة (19-15) (ولادة لكل 1000 مراهقة) Female adolescent fertility rate (15-19) years (birth for 1000 adolescent)	معدل الخصوبة الكلي (لكل امرأة) Total fertility rate (for each woman)	المحافظة
Baghdad	62.3	3.4	بغداد
Basrah	70.2	3.9	البصرة
Nineveh	38.3	5.4	نينوى
Maysan	66.1	4.2	ميسان
Al-Dewaniya	35.4	3.5	الديوانية
Diala	51.9	3.4	ديالى
Al-Anbar	55.1	3.4	الأنبار
Babylon	65.8	3.4	بابل
Kerbela	49.5	4.5	كربلاء
Kirkuk	42.3	3.1	كركوك
Wasit	54.2	3.8	واسط
Thi-Qar	53.1	3.9	ذي قار
Al-Muthanna	49.1	4.2	المتن
Salah Al-Deen	52.6	3.0	صلاح الدين
Al-Najaf	68.1	4.1	النجف
Iraq	54.1	3.9	العراق

**Figure 2.1.** Indicator Proportion of women of reproductive age (aged 15-49 years).

In more than one study on RH in Iraq, their work showed a relationship between the RH of Iraqi women and the community's economic, social, and religious status and that RH is affected by health services. The easy access to these services, the spread of illiteracy and unemployment, the imitation of society and society, and their customs, and suffering from discrimination between men and women (Hadi, 2020). A study was conducted in the Hawija region of Kirkuk Governorate in 2013-2017, which showed that women who suffer from deprivation of education after primary school and early marriage, exploitation of workers in agriculture and animal husbandry, and deprivation of girls from education are that these women are deprived of employment because of the prohibition of their families, and deprivation of women From ownership and inheritance, the imposition of male dominance in those regions, and the extremist religious discourse in that region that contributed to the denial of many women's rights in that region (Nasreddine, 2018).

In addition, despite the quality of RH services compared to the central and southern governorates, it was found that the governorates of northern Iraq mainly focus on stillbirth

and low birth weight due to the lack of health awareness among community members, which prevents this access to the rest of the health services (Jasim, 2020). Indeed, illiteracy and the low educational level of women lead to poor health and lack of knowledge of RH, as women are still less educated than men in Iraq; the illiteracy rate for females is 17%, while for males, 7.6 (IWISH2, 2022). A survey was conducted in the city of Basra to assess and know the satisfaction with RH and FP services in the city of Basra. The study's results showed that only 27% of women were delighted with the service they received (Jasim, 2020). Overcrowding inside the health center was the main reason for their dissatisfaction. Most women aged 15-49 in Basra are unaware of some RH services such as breast and uterine cancer screening, postpartum care, STDs and AIDS, infertility treatment, and violence Against women and youth health services (Mahmoud & AH Ajeel, 2015).

### **2.1.3 Programs and services provided to women in Iraq in the field of RH**

- A. Programs pregnant care
- B. Programs family planning (FP)
- C. Programs for those wishing married
- D. Programs Adolescent health
- E. Statistics maternal mortality
- F. Violence against women (MOH-Iraq, 2022).

#### **A. Program Pregnant Care**

The primary health care system for pregnant women in Iraq is sound, as health professionals address maternal and child health and RH issues in the community. Services are provided to women comprehensively and comprehensively, covering aspects of preventive, stimulating, and curative care, including prenatal care. obstetric care, postpartum care, family planning (birth control and birth spacing), and neonatal care (Ministry of Health - Iraq, 2009).

Caring for pregnant women in primary health care centers throughout pregnancy is a critical issue to ensure the health of the mother and child; Frequent visits to health centers allow for monitoring the development of the child's growth, ensuring the safety of the mother's health, and following up on the progress of the pregnancy. These visits also allow the mother, father, and concerned family members to talk to the parents before the birth. There will be a follow-up by a doctor for any questions or concerns related to pregnancy or childbirth, and the primary health care guide issued by the Iraqi Ministry of Health specifies a schedule of visits for pregnant women distributed as follows in Figure 2.2. (Ministry of Health - Iraq, 2021).

Visit number	pregnancy weeks	Tests to be performed
1	Early pregnancy diagnosis	Medical check-up - Height measurement - Dental care - Blood group check - Haemoglobin test - Urine test.
2	20 weeks	Medical check-up - Urine test - First dose of tetanus vaccine for previously unimmunized or booster if required previously for vaccinators.
3	24 weeks	Medical check-up - Urine test - Second dose of vaccine Tetanus vaccine if necessary.
4	28 weeks	Medical examination - haemoglobin test - second blood group determination.
5	32 weeks	medical examination - dental care - urine examination.
6	36 weeks	medical examination - fetus positioning.
7	38 weeks	medical examination - preparing the mother for breastfeeding.
8	40 weeks	Medical examination for women primary pregnancy.
9	After birth for 6 weeks	Medical check-up- Providing family planning services.

**Figure 2.2.** The dates of visits of the pregnant women and the regular services.

**High-risk factors during pregnancy are the most critical factors:**

1. Ages that are less than 15 years and over 35 years old.
2. The weight that is less than 45 kg and more than 85 kg if the height is less than 145 cm.

3. Medical history of chronic diseases such as kidney disease, heart disease, arterial hypertension, and diabetes.
4. Medical history of pregnancies of more than four previous delivery, pregnancy in less than two years between, cesarean section or other surgery on the uterus, abortion, bleeding during pregnancy, secondary infertility, deformity birth, premature baby, dystocia, rapid delivery.
5. Data Pregnancy current, deformity delivery, twin pregnancy, bleeding, ruptured membrane, anemia less than 9 mg, preterm labor as shown in figure 2.3. Percentage of the most common causes of risky pregnancy according to the annual report issued by the Iraqi MOH for the year 2020 (MOH-Iraq, 2021).

Causes of risky pregnancy	النسبة Percentage	العدد Number	عوامل الخطورة للحامل	Sq.
Aneamia of pregnancy	34.3%	183069	فقر الدم	1
Previous abortions	15.7%	84042	حالات الاجهاض السابقة	2
Previous caesarean section	14.5%	77449	عملية قيصرية سابقة	3
Last delivery less than 2 years	11.4%	60906	الفترة من اخر ولادة (اقل من 2سنة)	4
pregnant age less than 18 years	7.9%	42039	حامل بعمر اقل من 18 سنة	5
four briths and more	7.7%	40826	اربع ولادات فاكثر	6
Previous stillbirth	3.1%	16515	ولادة ميتة سابقة	7
Blood group incompatibility	2.7%	14509	عدم تطابق الدم	8
Hypertension	1.8%	9340	ارتفاع ضغط الدم	9
diabetes in pregnancy	0.9%	4925	داء السكر	10
<b>Grand total of causes</b>	<b>100</b>	<b>533620</b>	<b>المجموع الكلي للعوامل</b>	

**Figure 2.3.** Most common causes of risky pregnancy.

## B. Programs Family Planning

FP means the civilized behavior that provides the spouses with the appropriate option to control when to start having children, their number, the interval between one child and the other, and when to stop childbearing, each according to his circumstances and ability, with the consent of both spouses within the health framework that focuses on the of both RH (MOH-Iraq, 2021). Many women of reproductive age have unmet needs for family

planning services (that is to say, they wish to avoid pregnancy for at least two years but are not using any family planning method). These women are at a significant risk of having unplanned pregnancies, which puts them at risk of ill health for themselves, their families, and the community (Darroch *et al.*, 2011).

Married women using modern contraceptives were estimated at 43%. Around 75% of couples believe that using modern contraceptives is a joint decision between the husband and the wife, while 13% is the wife's decision, 9% of husbands, 2% do not know, and 1% of others (IWISH2, 2022). Several factors contribute to a woman's choice of the FP method. The man's participation with her in choosing the type of method is one of these factors; agreement with the partner to choose the type of contraceptive method contributes to women's psychological and emotional stability, which positively affects women's RH (Blackstock *et al.*, 2010). This is a positive indicator that Household planning is a mutual agreement between the couples; married women also consent to their husband using contraceptives; from men, 55.5% agree, 15.6% do not agree, and another 9.8% conditionally agree (IWISH2, 2022).

### **The Benefits of Family Planning for Society and The Family**

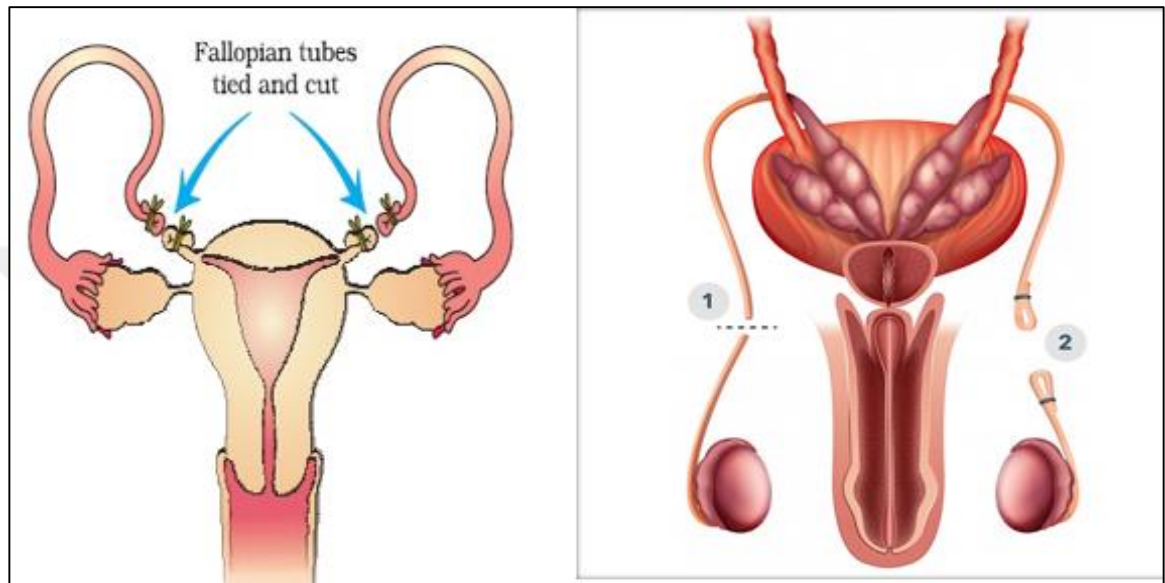
Some family planning methods help prevent the transmission of HIV and other sexually transmitted diseases. Family planning reduces the need for unsafe abortions, and family planning contributes to strengthening the right of people to determine the number of children, and family planning enables people to determine the number of children they want to conceive and the spacing between births; this can be achieved by using contraception. To secure the well-being and independence of women while at the same time supporting the health of societies (WHO, 2022; Gee *et al.*, 2011). Controlled contraceptives can help reduce symptoms of endometriosis, polycystic ovarian syndrome, dysmenorrhea, and menorrhagia/anemia. They are common conditions affecting millions of women (Gee *et al.*, 2011).

### **Family planning methods are divided into the following:**

1. Natural methods.

2. Hormonal means.
3. Insulating means.
4. Surgical methods.

As shown in figure 2.4. FP methods the tubal ligation for women (Tubectomy) and Tubal cut for men (Vasectomy) (NCERT, 2020).



**Figure 2.4.** FP methods the tube ligation for women (Tubectomy) & Tube cut for men (Vasectomy).

### C. Programs for those wishing married in Iraq

It is a set of comprehensive medical examinations to determine whether the individuals want to marry genetic diseases, blood diseases, or infectious diseases. The medical examination reveals the presence of any genetic or infectious diseases (MOH-Iraq, 2021). WHO statistics indicate that genetic diseases cause 25% of deaths in children under one year worldwide (WHO, 2005). The premarital medical examination is an established practice and a legal requirement for the official marriage contract in Iraq (IWISH2, 2022). The purpose of the medical examination before marriage may reveal genetic diseases that contribute to reducing the percentage of diseases and damages resulting from marriage, especially consanguineous marriage. The purpose of the premarital examination is genetic counseling to research and find the family's genetic diseases if there are genetic

diseases, such as fetal deaths, repeated miscarriages, or newborns with some disabilities or defects in hearing vision, or speech (T.C. SAĞLIK BAKANLIĞI, 2013).

#### **Divide Medical Examination Before Marriage in Iraq:**

**Men:** Tests include blood type, rhesus factor (Rh- negative), hemoglobin level, estrogen and progesterone test, blood sugar level, hepatitis B virus, AIDS, syphilis and semen investigation.

**Women:** Tests include blood type, rhesus factor (Rh- negative), hemoglobin level, the rubella virus and the hormones, the above tests for non-relatives, as for the pre-marital medical examination for relatives, it includes women and men, the same tests also for relatives, in addition to thalassemia and chromosomal examination (MOH-Iraq, 2021).

#### **D. Programs Adolescent health**

WHO defines adolescents as persons belonging to the age group “10-19 years”. Young people are defined as persons belonging to the age group “15-24 years” “Young people” includes the age group “10-24 years,” given that this group represents young people and adolescents of both sexes (WHO, 2015). Adolescence is a stage in a person’s life where he is no longer a child but has not become an adult. It is the stage during which the adolescent experiences major physical and psychological transformations, thus changing his view of himself and society (WHO, 2012). Married teenage girls are more often exposed to diseases and deaths than unmarried teenage girls due to frequent childbearing (Dangat & Njau, 2013; Hunshal *et al.*, 2010). Protection can be diseases and deaths through developing a plan to determine the number and timing of births (Albezrah, 2015). Teenagers need to be educated about hygiene, especially teenage girls, during menstruation; this protects them from infection with STDs. Many adolescents are ignorant of information and knowledge about RH, and then comes the role of parents in educating their children. Therefore, it is necessary to develop a programming methodology for teaching and educating adolescents regarding reproductive and sexual

health, whether in school curricula or educating parents or youth centers (Gaferi *et al.*, 2018). Improper reproductive and sexual health behavior is one of the factors that cause death, disease, and disability in adolescents. Young adults are among the groups most vulnerable to STI and HIV; therefore, it has become necessary to increase their knowledge of reproductive and sexual health (WHO, 2006).

The health problems physical and psychological adolescents throughout Iraq have, they are not satisfied with the health services provided to them by the state, school services are insufficient for this segment of society, lack of support for young people and adolescents by the state. This was a study on youth health services in Baghdad city (Belwali *et al.*, 2011). According to the Multiple Indicator Cluster Survey on Adolescent Health in Iraq for 2018, The teenage birth or fertility rate was 70 per 1,000 girls aged 15-19 years, early marriage before 18 years was 28 %, early pregnancy before 18 years 14 %, use of modern contraceptives by adolescent girls 15-19 years old 15.5%, the comprehensive knowledge of ways to prevent HIV by 5 % (MICS Iraq, 2018a), smoking among adolescents 13-15 years old by 15.7 % (GYTS Iraq, 2019), and decrease in physical activity among adolescents 11-17 years by 85%, increase the weight between adolescents 15-13 years 23% (GLOBAL STATUS REPORT, 2014).

Adolescent pregnancy is defined as a pregnancy under 20 years of age; pregnancy can occur at any time after puberty. In both developed and growing countries, this problem has raised many human rights issues around the world. Teenage pregnancy is forced to leave school and deprived of their right to education.

Many adolescent girls are not physically or psychologically prepared for pregnancy or childbirth. This makes them more vulnerable to complications that lead to devastating health consequences for their preoccupation with school and leaving, it financially weakens their ability and consequently the teen's dependence on their dependents, and this negatively affects the social, psychological and health status of adolescence (Ghose & John, 2017).

According to stats, IWISH. Marriage rates for adolescent girls under 18 showed 25.5%, and those married before 15 showed 5.2%. The Household that decides to marry a girl goes further up to 70.8 rural areas & 68.8% in urban (IWISH2, 2022).

## **E. Maternal Mortality**

WHO defines maternal mortality as the death of a woman during pregnancy or 42 days after the end of pregnancy from any cause related to pregnancy or its control, regardless of the duration of the pregnancy, and not for incidental reasons (WHO, 2019).

A country's low maternal mortality ratio is an indicator of the quality of health care (MacDorman *et al.*, 2016). Significant differences exist in maternal mortality rates, especially in countries with low income, education, and health care. Women living in rural areas suffer from a higher maternal mortality rate than those in cities and districts (Khalil *et al.*, 2018). Maternal deaths are strongly associated with the absence of good healthcare services that the woman receives during her pregnancy, labor, or postpartum. 50% of all maternal deaths worldwide occur within 24 hours after labor, mainly because of postpartum hemorrhage (Li *et al.*, 1996). Statistics show that Iraq is among the 68 countries that suffer from maternal and child deaths. The main reasons behind this high percentage are: unhealthy practices at birth, insufficient sources of health care or midwifery, and the high incidence of anemia among women pregnant women, as their percentage reached (35%), and this situation is especially prevalent among women in rural areas and central and southern regions (UNFPA Iraq, 2016). In a study for Obeid. The study aimed to assess the reviewing of the records of mothers who passed away in a hospital in Iraq from 2011 to 2018. Data included the patients' causes of death each year. The total live births numbered 95 800, while 52 mothers died for a maternal mortality ratio of 58.12 per 105—most deceased mothers were between 30 and 39 years old. Most died in the postpartum period, and the primary cause was often obstetrical hemorrhage (Obeid *et al.*, 2020).

The UN launched the 2030 Agenda for the Sustainable Development Goals (SDGs) (B. X. Lee *et al.*, 2016). By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births (MOH-Iraq, 2020b). this highlights the need to reduce maternal mortality and improve RH (Correia *et al.*, 2018). Unsafe abortion is a critical issue that needs to be addressed to achieve SDG Three by 2030 (Manandhar *et al.*, 2018). As figure shows 2.9. The number of maternal mortality and its ratio per 100000 live births, according to the annual report issued by the Iraqi MOH for the year 2020 (MOH-Iraq, 2020b). The Iraqi MOH has taken several steps to reduce maternal mortality and identify the most important causes of death, which include:

1. Postpartum hemorrhage.
2. Pulmonary embolism or amniotic fluid embolism.
3. High blood pressure diseases during pregnancy.
4. Difficult childbirth.
5. Complications of a previous pregnancy (miscarriage and ectopic pregnancy).
6. Blood poisoning (USAID-Iraq, 2013).

As shown in figure 2.5. & 2.6. Direct Causes of Maternal mortality & Indirect Causes of Maternal mortality, according to the annual report issued by the Iraqi MOH for the year 2020 (MOH-Iraq, 2020b).

Causes	النسبة	الاسباب
Postpartum haemorrhage	29.6	نزف بعد الولادة
Unspecified maternal hypertension	14.5	مضاعفات ارتفاع ضغط الدم
covid -19	9.9	كورونا
pulmonary embolism	9.6	خثرة رئوية
Rupture uterus	3.2	انفجار الرحم
Obstetric embolism	2.1	انصمام توليدي
sepsis	1.5	خمج
Abortion	1.6	اسقاط
Eclampsia	0.02	تسمم الحمل
Complication of anaesthesia	0.003	مضاعفات التخدير
<b>Total</b>	<b>72</b>	<b>المجموع</b>

**Figure 2.5.** Direct Causes of Maternal mortality.

Causes	النسبة	الاسباب
Cardiac disease	8.5	امراض القلب
Renal& Respiratory disorder	7.4	عجز كلوي وتنفسي
Diabetes mellitus	3.9	السكري
hepatic disorder	3.9	التهاب الكبد
Hematological disorder	2.4	امراض الدم
Tuberculosis	1.9	تدرن
Brain cancer	0.003	سرطان الدماغ
Respiratory diseases	0.002	امراض تنفسيه
Psychiatric diseases	0.002	امراض نفسيه
Urological diseases	0.001	امراض الجهاز البولي
<b>Total</b>	<b>28</b>	<b>المجموع</b>

**Figure 2.6.** Indirect causes of maternal mortality.

## F. Violence Against Women

Violence is defined as any abuse, whether physical, psychological, sexual, or even neglect. Reprimand is one of the types of violence (Svevo-Cianci *et al.*, 2011). Violence is a significant public health and human rights problem and one that often goes unrecognized and unreported. It occurs in all countries, irrespective of a social, economic, religious, or cultural group (Brownridge *et al.*, 2011). More than one in three women experience violence in the course of their lives. The risk of becoming the victim of violence is much higher in conflicts, natural disasters, and other crises (UNFPA, 2022b).

The statistics of the IWISH2-Integrated Social and Health Survey of Iraqi Women indicate that the percentage of divorce cases due to violence is about 23% (IWISH2, 2022). Is necessary education for girls of secondary school age, economic empowerment of women, changing social norms, and home visiting programs to reduce women and child maltreatment are all important complementary intervention points outside the health sector (WHO, 2017). 52% of women believe that this is related to education and Household upbringing or the social system 40% of women believe that this is related to the lack of awareness of men and the weak awareness of women believe that they are responsible for the causes of violence on aspects of women's lack of awareness or acceptance of reality (IWISH2, 2022).

Intimate partner violence (IPV) refers to any type of physical, sexual, or psychological/emotional abuse that is either committed or threatened. According to studies, physical violence in relationships is frequently accompanied by psychological abuse, and anywhere from one-third to more than half of these cases also involve sexual abuse (Dicola & Spaar, 2016). In Iraq, a husband's use of economic violence against his wife is second only to his use of verbal violence (12%). Less common forms of violence include physical violence (at 5.7%) and sexual violence (2.1%), with an overall rate of 29.5% of women experiencing some form of violence (IWISH2, 2022). Many studies show that girls who are married off at a young age are more likely to be victims of sexual and physical abuse, which in turn can have lasting effects on their reproductive and sexual health (Jejeebhoy et al., 2010). At 63%, jealousy is the most common motive for husband-on-wife violence. Next in line is social isolation, at 35%, then having someone help you pick out an outfit, at 32%. (IWISH2, 2022).

Figure 2.7 depicts the incidence and nature of violence in Iraq in 2020 as documented by patient visits to primary care clinics. Prevalence Indicator of Intimate Partner Violence (IPV), Prevalence Indicator of Sexual Violence Against Individuals Other Than Partners, Prevalence Indicator of Sexual Violence Against Individuals Younger Than Eighteen (18), and Prevalence Indicator of Sexual Violence (MOH-Iraq, 2020b).

Type of Violence	المجموع Total		60 سنة وأكثر 60 and more		50-59 سنة 50-59 year		36-49 سنة 36-49 year		19-35 سنة 19-35 year		11-18 سنة 11-18 year		10 سنة فما دون Under 10 years		نوع العنف	
	الذكور Male	الإناث Female	الذكور Male	الإناث Female	الذكور Male	الإناث Female	الذكور Male	الإناث Female	الذكور Male	الإناث Female	الذكور Male	الإناث Female	الذكور Male			
Physical	3320	2323	997	77	91	225	95	550	160	874	233	457	267	140	151	الاجسدي
Psychological	7943	5203	2740	250	258	638	461	1559	767	1913	763	697	356	146	135	النفسي
Economical	5143	2892	2251	116	173	435	346	851	680	1031	672	424	354	35	26	الاقتصادي
Sexual	469	339	130	14	13	19	17	69	30	107	35	119	17	11	18	الجنسي
Total	16875	10757	6118	457	535	1317	919	3029	1637	3925	1703	1697	994	332	330	المجموع

**Figure 2.7.** The prevalence and types of violence in Iraq.

There is a serious public health problem with sexual assault in the United States and other nations when consent is not sought or freely provided; sexual violence affects every community and people of all genders, sexual orientations, and ages (Wiggins et al., 2017). Depression, anxiety, and low self-esteem are all more common among women who were abused as children, whether physically or sexually (Freeman & Temple, 2010). Domestic violence and sexual abuse against women include rape that occurs during a marriage. Even if physical force is not used, having sexual relations outside of marriage without one partner's permission is still considered a kind of rape. It has come to our attention that women in Iraq are not afforded the protection of the law when they are victims of violence. The majority of abused wives (57%) choose to ignore their husbands and have no contact with them, while 52% choose to keep quiet and not tell anybody. The percentage of time they spend communicating with their parents is 23% lower (IWISH2, 2022).

Human rights violations against women and girls in Iraq are mentioned in the report; the Iraqi government is criticized for not acting on the UN Human Rights Committee's recommendations to end these abuses of women's and girls' civil and political rights. Persistent gender-based violence is a major problem that is enabled by widespread acceptance of those responsible for such acts. Despite the prevalence of domestic abuse, harassment, and rape, there are no laws in place that serve as a deterrent (UN- HRC, 2020). Many women in Iraq are victims of so-called "honor crimes," which are widespread in the country due in part to the absence of legislation to deter and punish perpetrators and sections of the penal code that encourage them all by providing reduced terms for murder in some situations (Refugees, 2017).

To defend the societal construction of honour as a value system, rule or tradition, the major motivation for perpetrating violence against women falls under the category of 'honour-based' violence (HBV). 'Honor-based' violence (HBV) occurs when male family members react violently to a female member's disgraceful transgression of culturally established norms of sexual purity (A. Hall, 2014). It is conceivable that the published figures underestimate "honor" crimes due to underreporting, as only 272 cases of "honor

killings" were reported to the police and referred to the courts in 2017. "Honor" crimes are routinely disguised as accidents or suicides to avoid prosecution (UN-HRC, 2020).

A common reluctance on the part of law enforcement to investigate and prosecute cases of domestic violence, especially against women, stems from the widespread perception that such crimes are merely personal matters (UNHCR-Iraq, 2019). Multiple studies have shown that maternal and fetal health are at risk when a woman is abused while pregnant. Physical violence during pregnancy can result in serious injuries to the mother's head, face, neck, chest, breasts, and belly. The link between abuse and low psychological well-being is also important, as are the effects on mental health (Suleiman, 2021).

Exposing a pregnant woman increases the risk of miscarriage and premature birth, as well as being more likely to have a cesarean section. The psychological impact she is exposed to negatively affects her psychological state and the fetus's condition before and after birth. Also, other risks that can be exposed as a result of violence include high blood pressure, placental problems, and rupture of the amniotic membrane (Shah & Shah, 2010; Morland *et al.*, 2008).

## **2.2 The Second Part**

### **2.2.1 Reproductive Health Rights & Women's Rights:**

No of the population size, income level, religious affiliation, or cultural background, reproductive rights remain one of the most divisive topics in the realm of human rights. In conversations and writings about population groups, reproductive rights are frequently emphasized as crucial (Taskin, 2016). Certain human rights previously recognized by national laws, international human rights declarations, and other consensus instruments are included in reproductive rights.

All people should have the right to the best attainable level of sexual and reproductive health, and this right is predicated on the acknowledgement of the fundamental right of

all couples and individuals to make informed, autonomous decisions about the number, spacing, and timing of their children (UNFPA, 2022a). The freedom to make decisions about their own reproduction without fear of prejudice, coercion, or violence is also included in this. Program of Action, Section 7.4, International Conference on Population and Development, Cairo, 1994 (SRHR, 2019). In order to make accessible and informed reproductive choices, women should have access to quality RH care, including legal and safe abortion, birth control, freedom from compulsory sterilization and contraception, and health education (Cook & Fathalla, 1996). Protection from harmful practices like female genital mutilation (FGM) and access to STD and other sexuality education may fall under the umbrella of reproductive rights (Zavales, 1996). Human rights violations include marriage before the age of 18, however this is nonetheless a reality for many minors (MICS Iraq, 2018b).

Although girls are more likely to be married off as minors than boys are in Iraq, both sexes are affected by child marriage globally. When boys get married, they take on adult roles and obligations for which they may not be emotionally or mentally prepared. When girls are married off at a young age, it often results in an untimely pregnancy, social isolation, and a lack of opportunities to learn useful skills or earn an income (Bajracharya & Amin, 2012). When compared to other Middle Eastern countries, Iraqi women had more freedom to pursue their own interests and have fun before the 1991 Gulf War. The United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) was signed by Iraqi representatives in 1986.

CEDAW is one of many international conventions that Iraq has signed in support of women's rights (Service, 2018). Both the form and content of RH Rights are inextricably intertwined with women's rights issues and the political, economic, and educational challenges facing today's society. Any improvement that helps women is good for society as a whole and will have repercussions for everyone. And hence, changes and reforms need to be far-reaching (Al-Omrani, 2022).

Universal access to health care was a central call in the original ICPD Program of Action. This included access to RHcare, FP, and sexual health services. Eventually, goals grew

to include ending FGM and increasing women's agency in politics and culture (Glasier et al., 2006). Many women accept the notion that they face systematic discrimination and marginalization because of their gender. Three-fifths of all women feel excluded from society. Keeping girls at home is cited as the primary factor for gender inequality (53%), while cultural norms and traditions account for the remaining 39%. Approximately 38% of women feel they are fully equal to men in rights, 25% feel they are mostly equal, and 37% feel they are not fully equal (IWISH2, 2022). Due to men's suppression of women's rights, the world is plagued by widespread problems like poverty, male aggression, and illiteracy. Women are still underrepresented in politics, despite Iraq's constitutional victory in ensuring that 25% of parliament seats are reserved for them. Specifically, reproductive health rights are not guaranteed to Iraqi women, which is a major issue for Iraqi women (UNFPA Iraq, 2016).

A woman who loses her virginity by rape or other means faces persecution from her family and community as well as humiliation, abuse, and even violence. This is a widespread problem in many Eastern civilizations, including Iraq. As a result of the lack of a comprehensive legal framework protecting young women, they are frequently directed towards women who have lost their virginity (Bennett, 2005). Female genital mutilation (FGM) is often seen as a severe assault on the reproductive and human rights of women. Health and even fatal hazards are posed to girls and women who participate. According to the Multiple Indicator Cluster Survey conducted in Iraq, female circumcision is extremely common in the Kurdistan region of the country.

This practice appears to be on the decline in Kurdistan, according to the results of the latest survey. Sulaymaniyah and Erbil had the greatest prevalence of FGM among girls and women aged 15 to 49, with 46.5 and 46.6 percent, respectively (MICS Iraq, 2018b). United Nations Human Rights Committee (HRC) report on List of Special Issues in Iraq's Compliance with the International Covenant on Civil and Political Rights details continued human rights violations against women and girls and its impact on reproductive rights in Iraq (Geneva, 2019).

Women's rights are guaranteed by the Constitution of the Republic of Iraq (2005). Title 14: Nondiscrimination and equal treatment Everyone in Iraq is protected under the law regardless of their gender, ethnicity, nationality, skin color, religious affiliation, political affiliation, economic status, or any other factor. To paraphrase Article 29 Paragraph 4: "All forms of violence and abuse are outlawed in the family, school, and community." Forcible labor, slavery, the slave trade, trafficking in women or children, and the sex trade are all illegal under Article 37 (1) (Service, 2018).

Specifically, the Iraqi Law on the Status of Individuals. There is a separate personal status legislation in Iraq that is based on Sharia, although it does not preempt religious law (Sharia) in cases of marriage, divorce, and child custody. Although marriage at age 15 is possible under certain circumstances, the law (No. 188) sets the minimum age at which one may legally marry at 18. (Articles 7 and 8). Under some circumstances, marriage is legal for those under the age of 18 in Iraqi Kurdistan. Chapter 1, Section 3(4) of the law also permits men to engage in polygamy. All forms of forced marriage are illegal, even those involving family members and strangers (MOH-Iraq, 2020a; Hayawi, 2005).

## **2.3 The Third Part**

### **2.3.1 Role and Participation of Men in RH**

The involvement of men in the RH system has a significant impact on women's and children's health. However, so far, there is no actual participation at the local level in Iraq and at the global level, despite the highlighting in several international conferences of the importance of men's participation in RH programs, and this is what promotes health in general for both men and women (Davis *et al.*, 2016). Over time, there has been no equality between men and women as women suffer from discrimination, and the negative consequences of this inequality affect women more than men. Women could not benefit from human rights in all fields, especially health, so it is necessary to obtain some equality between men and women to ensure their rights, welfare, and peace for them (Şimşek, 2011). We can say that the role and participation of men in RH are through his interest and participation in FP and birth control issues, encouraging men to engage in a range of

positive RH behaviors, as well as his interest and participation in limiting the spread of HIV and STDs (Robey & Drennan, 1998).

Convention on the Population and Development (ICPD) refers to the 1994 summit in Cairo where 179 states approved a revolutionary Programme of Action and demanded that women's reproductive health and rights be prioritized at the national and international levels of development (UNFPA, 2019). The ICPD Program of Action highlights the gender inequities that exist in many traditional gender roles, seeks to expand men's access to sexual RH information and services, and encourages men to share in the responsibilities of childbearing and household (Naik, 2016).

Couples' sexual and RH care needs must be met, and males must be encouraged to take more responsibility for their sexual behavior, communicate with their partners, and participate in making contraceptive decisions. RH program designers, policy-makers, and researchers in the community have come to recognize male participation in RH as an important area for the general reproductive health of the couple (Wentzell & Inhorn, 2014). By endorsing RH services that are inclusive of men, the Fourth World Conference on Women in Beijing in 1995 mandated that men's positive roles be integrated into the broader RH agenda. Actually, it can be detrimental to women's health if information and services are not also made available to men. Men who are well-informed about reproductive health are more inclined to back their spouses' choices concerning birth control and family planning (Wilkinson, 1997).

When men are educated about reproductive health (RH) issues and communicate with their partners, they are more likely to be supportive during pregnancy and may make better health care decisions, which is especially important for women who want to have safe sex or avoid unwanted pregnancies (Wegner et al., 1998). In India and Iraq, many men shy away from seeking RH services in public health settings. At the same time, male participation is vital in empowering them with RH knowledge and services for themselves, providing support to women, and changing their negative attitudes toward sex and power (Naik, 2016). Recognizing the importance of male participation, awareness and active participation of men in FP and support for contraceptive use, helping pregnant

women to stay healthy, arranging skilled care during childbirth, avoiding delays in seeking care, and helping after the birth of the child become a responsible father are needed (Sahu *et al.*, 2016). One area in which men and women suffer from inequality is RH. Women suffer from more RH problems than men. Because they use contraceptives more, are more susceptible to STDs, and have many problems during childbirth, miscarriage, and postpartum. Men are often ineffective in recognizing these issues, taking responsibility, and sharing them (Şimşek, 2011). Some studies in Iraq highlighted the lack of widespread awareness for men of the negative effects of early marriage in order to increase awareness of RH through the media, enhance the education of the curriculum related to RH, increase awareness and share men's and women's access to health, social and educational levels, especially among adolescents and youth, and society in general. The study results concluded that Iraq still suffers from a noticeable deterioration in RH (Al-Jassem, 2018).

The ICPD Program brought the global community together and reflected a new consensus on the response to population growth. It has firmly established that the rights and dignity of individuals, rather than numerical population targets, are the best way for individuals to achieve their fertility goals. In addition, governments have recognized that these rights are essential to global development. The ICPD represented a resounding affirmation that it was the responsibility of every country and community to ensure RH, individual rights, and the empowerment of women (UNFPA, 2019). Men have a great role in preventing the spread of HIV and preventing the spread of diseases transmitted through sexual contact. They also have a role in preventing the transmission of HIV from mother to child because HIV is transmitted from men to women more easily than from women to men, so it is necessary to educate educating men about the need to participate in RH programs (Kura *et al.*, 2013). It is noted that there are no awareness and education programs for men regarding RH in Iraq, which puts women in Iraq at risk of contracting HIV and STDs. Furthermore, the risk of transmitting these diseases to children through the mother, and since the wife cannot refuse sexual contact, she has sexual intercourse with her husband and cannot insist that her partner use condoms (Ditekemena *et al.*, 2012).

It is well known that pregnancy, childbirth, childrearing, and housework are women's responsibilities. However, husbands play an important role in decision-making within the home, and obtaining their participation and support for interventions to improve their and their wives sexual and RH is critical (Byamugisha *et al.*, 2011; Ditekemena *et al.*, 2012). It is, therefore, necessary to develop approaches in Iraqi society to engage and support men as equal partners, and this promotes better outcomes in sexual and RH indicators, such as contraceptive acceptance, safer sexual behaviors, use of RH services, and reduced morbidity and mortality (Kura *et al.*, 2013). The development of awareness programs regarding RH and taking the necessary measures to implement and develop them on a large scale encourages the participation of men in RH by health and social service providers. It can be considered one of the most important practical steps that must be implemented, starting with the development of the application guide practical. Health awareness and communication programs must involve men in practice and encourage health facilities to develop more men-friendly services. Health providers need appropriate guidance on the role of men's participation. Pre-service training programs need to emphasize the need for men's participation and demonstrate the implementation of appropriate services for men in their training facilities so that trainees can gain theoretical understanding as well as practical skills in enhancing men's participation (Berhane, 2006). Research conducted in various developing countries has shown that men's participation in RH services can improve women's quality of life. A study in Iran on a group of women tips for postpartum depression and anxiety showed a significant improvement after lifestyle counseling and found a difference in sessions for women whose husbands participated in the course compared to women whose husbands did not participate (Sanaati *et al.*, 2018). Similar positive results were obtained in a study conducted in rural areas of Vietnam, where fathers who received education and counseling about breastfeeding and its benefits had higher levels of knowledge and more positive attitudes toward early breastfeeding initiation. A greater likelihood of breastfeeding support during the postpartum periods compared with the men who did not share education and counseling on this topic (Bich & Cuong, 2017).

Mahider Yeshaw, a gender-equality advisor at ADRA Canada, has witnessed firsthand the toll that caring for others takes on women's physical and mental health. Yeshaw

identifies three traditional responsibilities for women. There is the role of breadwinner, where women work outside the home to earn money for their families; the role of mother, where they provide unpaid care for their children; and the role of community member, where they make unpaid contributions to their local neighborhoods. Communities benefit both mentally and physically when women receive in-home assistance. They can focus on "self-development," "expand their education," and "go out and work," she says. Healthy, happy families are more common in homes where women and men have equal roles. (OCHA, 2022).

The CEDAW, which was founded in 1979, constantly highlights the connections between women's reproductive functions and discrimination. Its primary purpose is to urge nations "to incorporate the idea of equality of men and women in their legal system, abolish all discriminatory laws, and enact appropriate ones forbidding discrimination against women." It explains that "a shift in the traditional role of men as well as the role of women in society and the family is essential to attain true equality of men and women," noting that stereotypes, customs, and norms limit women's growth (Meyer, 2015). Cultural traditions that separate women's and men's roles at home and in society are what the CEDAW seeks to change.

The government is obligated to take all necessary steps in order to protect its citizens in Article 5. To ensure that maternity is properly understood as a social function and that the joint responsibility of men and women is recognized in the upbringing of children through family education; To eliminate prejudices, customs, and all other practices based on the idea of the inferiority or the superiority of either sex or stereotypical roles for men and women (Greene et al., 2006).

As reported by the Iraq I-WISH, the household survey was conducted on 10,620 households. It was implemented in cooperation with the UN Population Fund. The survey was implemented in the field in July 2011. It is the first survey of its kind in Iraq. It deals with the study of the life cycle of Iraqi women. From several axes, such as public health, RH, violence against women, and women's empowerment. The interview was conducted

with 9536 men aged 18 years and over, and the men's response rate was 94.3% on the following issues:

Firstly - knowledge

Less than half (49.6%) of married men had detailed knowledge about RH before marriage.

There are many sources of men's knowledge about RH, where the first source was "friends" with a percentage of 67.3%, the second was "books and magazines" (43.2%), and the third was "TV and radio programs" (40.8%).

There is a consensus that FGM is a bad habit, with differences between regions and urban and rural interpretations.

Secondly - behaviors

- 42.9% of married men do not share housework with their wives under any circumstances.
- A man's refusal to help his wife with housework is inversely related to his level of education.
- 60.1% always discuss household expenses and economic management with their wives.
- 57.5% discuss family issues such as family values, the number of children, and their upbringing.
- 23.2% discuss issues of RH and sexual behavior.

- 10.2% discuss political issues such as government formation and party affairs.
- 49.3% discuss religious issues
- 9.7% in general and philosophical issues such as societal issues, communications, climate change, etc.

### Third - the positions

Most men see women as partners and support men in building a family and society. A significant percentage believes that women's primary role is to bear children and raise them. Most men see women as inferior to their male counterparts in public and political fields and issues that require critical decisions. In contrast, they see women as more capable than men in the traditional aspects of women's management of domestic affairs and raising children. A significant percentage of men believe that the husband has the right to carry out some practices classified as violence against women by international norms and standards, including beating or preventing her from going out on her own, even to a health center, or controlling the clothes she wears. This also applies to some practices towards women's daughters, such as beating for inappropriate behavior, marrying her before the legal age, and controlling what she wears, clothes, and other matters (MICS Iraq, 2011).

### **3 MATERIAL METHOD**

#### **3.1 Research Design**

This study was aimed to describe, compare and know women's and men's views on male participation in RH in Iraq. The study was conducted in Iraq in each women's ward on the third floor of a private nursing home hospital. Study used between women and men to know the opinions of men and their participation in RH in Iraq. The sources for this study were searched by google scholar, Pubmed, and other sites and also used sources from WHO, MOH-Iraq, UNICEF, and UNFPA Iraq. Arabic, English, and Turkish sources were used for this study. Resources on the RH programs provided to women were collected by the Iraqi MOH/ Department of Public Health/RH and School Health. This thesis has been reviewed in terms of stylistics linguistics (grammar and spelling) (Appendix 6).

#### **3.2 Research Setting**

A study was conducted in Iraq in each of the women's wards on the third floor of the Private Nursing Home Hospital and clinic consulting women in Baghdad Teaching Hospital / Medical City in Baghdad. Both of these hospitals belong to the state (Public hospital). Admission to the Private Nursing Home Hospital is done via a referral system. It receives cases of childbirth, whether normal delivery or cesarean section, as well as cases of, cases of other gynecological diseases. The third floor of the Private Nursing Home Hospital consists of private rooms for each patient. It also consists of a maternity hall, an operating room, and a reception hall. Where women lie on this floor postpartum, whether normal delivery or cesarean section, as well as cases of pregnancy under observation and other gynecological diseases. She is provided with special nursing care for postpartum and after the operation, following up with the patient and providing treatment with the necessary nursing and medical care, and in the case of pregnant under observation, following up with the patient as well as taking care of the child. The floor also contains a childcare lounge (Newborn baby). The responsibilities and tasks of the nurses in the Private Nursing Home Hospital on the 3rd floor begin with receiving the

patient, filling out the entry form, giving a room for the patient, preparing her for the operation if she needs an operation, also giving treatment, providing the necessary nursing care for each case, arranging the patient's bed, measuring the vital signs, also managing the hospital's issues in terms of nursing administration. The third floor has 9 nurses from the morning and evening staff, 3 nurses for each day. The Normal delivery room includes two midwives from the morning staff and one nurse from the evening staff. The operating room includes 10 nurses for the morning staff and one nurse for the evening staff. The neonatal unit includes 3 nurses for the morning staff and 2 nurses for the evening staff. The neonatal intensive care unit (NICU) includes 5-morning staff nurses and 3 evening staff. Baghdad Teaching Hospital includes a consulting clinic on the second floor the following departments are a primary health care clinic for pregnant women, a gynecological advisory clinic, and the infertility clinic. This floor is visited by pregnant women, women who have other gynecological diseases, and men and women who have infertility of all kinds. The duties of the nurses on this floor include receiving patients, registering them, and assisting the doctor. The number of nurses in the consulting clinic is two nurses. The study was held between 1 February 2022 to 10 July 2022

### **3.3 Sample Size**

No calculation method was used to determine the sample size. The total sample of the study is 200 samples. The sample size was 100 married men and 100 married women. Where the annual rate of reviews at the Nursing Home Hospital is about 1364 patients. As for the Baghdad Teaching Hospital, where the rate of patients' visits to the consulting clinic is about 26,500 annually, including pregnant women who have had a normal or cesarean delivery, and various cases of gynecological diseases and infertility diseases in women and men.

### **3.4 Sample Criteria**

The study included random samples of married men and women who attended The Nursing Home Private Hospital and The Baghdad Teaching Hospital in Baghdad / Iraq. Excluded from the study were all those who refused to participate in the questionnaire:

unmarried people, widows, and divorced women, Because some questions concern married women only, for example, family planning methods.

Samples for this study were collected through individual interviews with married men and women whose ages ranged from 20-69. The sample included educated and uneducated men and women. It also included homemakers and those who had no work of men and employees. The sample was collected from married women and men, as well as from married couples who do not have a child currently, women who have recently given birth, and women who have reached the age of menopause.

### **3.5 Limitations**

The sample was collected from women who visited the hospital. The sample included women wishing to become pregnant, women postpartum and women who have reached menopause.

It also included a sample the questionnaire largest number of learners and employees. Therefore, the results of some questions may be inaccurate compared to the Iraqi society in Baghdad /Iraq.

### **3.6 Difficulties with data collection**

1. Some employees did not cooperate with the researcher during the interview to obtain some resources on reproductive health or academic research on reproductive health resources or know the services provided to Iraqi women.
2. The researcher had to explain to the illiterate participants who heard or did not know.
3. The subject for the first time, so it took much longer than planned to fill out the questionnaires.
4. The lack of cooperation of some men and women in data collection delayed the time to complete the sample size.
5. Some details had to be explained by the researcher because some questions needed to be fully understood.

6. Iraqi society is known as a conservative society. When the researcher is trying to explain more details, the researcher feels embarrassed, and the Iraqi men and women are embarrassed to give an accurate answer.
7. During the research, it was some women observed that they needed help to answer some questions like question number 7,21 in the female questionnaire that related to the sexual violence and sexually transmitted diseases because some of them don't know the meaning of these words (Appendix 2), questions 7 in the male questionnaire that related to the family planning methods so I had to explain the methods and the definition (Appendix 3). When similar studies are to be conducted, it is recommended that women and their spouses be invited for separate interviews.

### **3.7 The Tools of Data Collection**

The The data collection tools in the study included two sections:

The **Demographic Data Questionnaire** included 15 questions such as age, level of education, employment status, income, place of residence, the appropriate age for marriage, and the presence of children.

**Male participation in the reproductive health Questionnaire** included two parts one for women and one other for men as titled Women's questionnaire (Appendix 2) and Men's questionnaire (Appendix 3) according to the related literature developed by researchers (Mbizvo & Bassett,1996; Korra & Haile, 1999; Singh et al 1999; Rahimi-Naghani et al 2016; Sharma et al 2018; Maqbool 2019).

The women's questionnaire (Appendix 2) included 21 questions related to the questionnaire for women, and among these questions are implicit questions if answered with the word yes, also 19 questions from the five-point Likert scale. The men questionnaire (Men's questionnaire (Appendix 3), included 18 questions, in addition to 19 questions from the five-point Likert scale.

The questionnaire for women included some questions that concerned women about violence and whether they were subjected to violence by their husbands, as well as the possibility of the husband's participation in RH. Furthermore, evaluate the opinions and

knowledge of men and women on some RH issues. The questionnaire also included questions about knowledge and information, about the signs of female puberty and the source of this knowledge. Furthermore, is there encouragement to raise awareness of RH and the participation of Iraqi men concerning RH. The Likert quintuple scale was used to express an opinion on some issues related to RH.

The questionnaires (Appendix 2 and Appendix 3) were evaluated by experts, including family doctors, nursing professors, and statisticians, for the credibility of the content, and experts took observations and made the necessary adjustments (Appendix 7). The data collection process took about 15-20 minutes.

### **3.8 The Pilot Study**

The questionnaire was evaluated to assess the clarity, feasibility, and applicability of the tools used in this study to collect data. According to the study criteria, a pilot study was conducted on 10% of the pre-determined sample size (10 women and 10 men).

The results of the pilot study helped to make the necessary adjustments to the tools according to the content's reliability and the pilot study's results. The sample used in the pilot study was excluded from participating in the main study. The questionnaire was evaluated by experts, including family doctors, nursing professors, and statisticians, for the credibility of the content, and experts took observations and made the necessary adjustments (Appendix 7).

### **3.9 Reliability and Validity of the Instrument**

Male participation in the reproductive health Questionner's parts was tested related to the reliability and validity, as for the validity of the Women's questionnaire (Appendix 2) and Men's questionnaire (Appendix 3) content, was reviewed by Fourteen experts inside and outside Iraq. Among them were the Family medicine specialty, doctors of the obstetrics and gynecology department, professors of the Nursing College of the Community Health Nursing Branch and the Maternal and Neonatal Nursing Branch, and

statistics professors. The experts were reviewed separately, and the experts' identities were not disclosed to each other except for the researcher (Appendix 7).

The experts' observations indicated that they impacted the evaluation of some questions and drew the researcher's attention to them. Therefore, some changes were applied based on the recommendations of some experts on the questionnaire form after obtaining the approval of the supervisor to change some questions in the questionnaire. The questionnaire was in the form of questions, the answer of yes or no, as it was given to the sign Yes two and the sign No to 1. Also, there are some implicit questions that contain more than one question when answering (yes), where the respondent (yes) gets more points according to the number of knowledge points for that point, in addition to the questions that contain a five-point Likert scale.

### **3.10 Ethical Consideration**

The research title and proposal submitted by the Research Ethics Committee of Çankırı Karatekin University in Turkey were approved on December 29, 2021 (Appendix 1). Then the approval of the Research Ethics Committee was obtained by the Medical City Department / Training and Human Development Center of the MOH in Iraq, entitled (Facilitating a task) to collect data because the research is taking place in Iraq on 19/1/2022 (Appendix 4 and 5).

A second approval entitled (Facilitating a task) was obtained from the Iraqi MOH / Public Health Department / Training and Research Division to enter the RH and School Health Department in Baghdad to obtain resources, information, programs, and services RH in Iraq on 9/6/2022. The participants were provided with a questionnaire and filled out through a face-to-face interview after taking the consent of the participants with an explanation of the study and its purpose while maintaining the confidentiality of the participants. The participants were entitled to withdraw from participating in the survey at any time without affecting them.

### **3.11 Data Analysis**

Data analysis by using the "Statistical Package for Social Science" (SPSS) version (22.0), we use frequency, percentage, mean & standard deviation, t-test and Chi square. The significant level of p-value is equal to and less than 0.05.



## 4 RESULTS AND DISCUSSION

### 4.1 Results

**Table 4.1** Distribution of sample demographic characteristics.

Variables	Female		Male		Chi square
	Frequency	Percent	Frequency	Percent	
<b>Age</b>					
20-29	40	40	22	22	$X^2=9.17$ $p=0.056$
30-39	28	28	35	35	
40-49	20	20	24	24	
50-59	8	8	16	16	
60-69	4	4	3	3	
<b>Educational level</b>					
Illiterate	6	6.0	2	2.0	$X^2=15.4$ $p=0.008$
Read and Write	15	15.0	7	7.0	
Primary School	16	16.0	13	13.0	
Intermediate School	22	22.0	11	11.0	
Highschool	11	11.0	15	15.0	
Diploma or Bachelor's or higher	30	30.0	52	52.0	
<b>Occupation</b>					
Housewife/ don't work	63	63.0	5	5.0	$X^2=87.98$ $p=0.000$
Governmental work	28	28.0	47	47.0	
Private job	6	6.0	12	12.0	
Retired	1	1.0	6	6.0	
Freelance work	1	1.0	30	30.0	
Others	1	1.0	-	-	
<b>Monthly Income</b>					
Income less than expenses	51	51.0	38	38.0	$X^2=5.17$ $p=0.075$
Income equals expenses	37	37.0	53	53.0	
Income more than expenses	12	12.0	9	9.0	
<b>Resident</b>					
Village	3	3.0	2	2.0	$X^2=1.018$ $p=0.601$
Town or district	24	24.0	19	19.0	
City	73	73.0	79	79.0	
<b>Total</b>	100	100.0	100	100.0	

Table 4.1 shows the sociodemographic characteristics, including the proportion of male and female respondents in each age group. 40% of the female respondents were between the ages of 20 and 29, and 35% of the male respondents were in same age group, It is seen that the p value is more than 0.05 ( $X^2=9.17$ ,  $p=0.056$ ). Only 30% of women were

university graduated, while 52% of men had diploma or bachelor's or higher, it is seen that the p value is less than 0.05 ( $X^2=15.4$ ,  $p=0.008$ ). It's estimated that 63% of women stay at home to care their children while 47% of men work in government, it is seen that the p value is less than 0.05 ( $X^2=87.98$ ,  $p=0.000$ ). 51% of females have income less than expenses, and 53% of males have income equal to expenses, it is seen that the p value is more than 0.05 ( $X^2=5.17$ ,  $p=0.075$ ). 73% of female city residents and 79% of male city residents, it is seen that the p value is more than 0.05 ( $X^2=1.018$ ,  $p=0.601$ ).

**Table 4.2.** Distribution of general knowledge about reproductive health.

Variables	Female		Male		Chi square
	Frequency	Percent	Frequency	Percent	
<b>Appropriate age for a girl to marry</b>					
Less than 14	-	-	1	1.0	$X^2=5.46$ $p=0.036$
14-18	8	8.0	11	11.0	
19-23	36	36.0	47	47.0	
24-28	48	48.0	36	36.0	
29-33	7	7.0	4	4.0	
34 or more	1	1.0	1	1.0	
<b>Appropriate age for a man to marry</b>					
14-18	1	1.0	2	2.0	$X^2=5.58$ $p=0.232$
19-23	15	15.0	23	23.0	
24-28	50	50.0	52	52.0	
29-33	27	27.0	21	21.0	
34 or more	7	7.0	2	2.0	
<b>Do you have information and knowledge about reproductive health?</b>					
No	27	27.0	27	27.0	
Yes	73	73.0	73	73.0	
<b>Knowledge and information about pre-marital examinations</b>					
No	45	45.0	46	46	$X^2=0.02$ $p=0.88$
Yes	55	55.0	54	54.0	
<b>Knowledge and information about the care of pregnant women and the services and programs provided for maternal and child care</b>					
No	36	36.0	61	61	$X^2=12.51$ $p=0.000$
Yes	64	64.0	39	39.0	
<b>Knowledge and information about the justifications for abortion</b>					
No	57	57.0	66	66	$X^2=1.71$ $p=0.19$
Yes	43	43.0	34	34.0	
<b>Men's and women's knowledge and information about Family Plan methods</b>					
No	51	51.0	63	63	$X^2=2.93$ $p=0.086$
Yes	49	49.0	37	37.0	
<b>Knowledge and information about sexually transmitted diseases and HIV (AIDS)</b>					
No	51	51.0	51	51	
Yes	49	49.0	49	49.0	

Knowledge and information about domestic violence of all kinds (verbal, psychological, physical, sexual)					
No	55	55.0	55	55.0	
Yes	45	45.0	45	45.0	
<b>Have you ever talked to your husband about reproductive health?</b>					
No	48	48.0			
Yes	52	52.0			
<b>Are you encouraged to hold courses to educate young people's involvement in reproductive health issues?</b>					
No	10	10.0	13	13.0	$X^2=0.44$ $p=0.506$
Yes	90	90.0	87	87.0	

Cont. Table

Variables	Female		Male		Chi square
	Frequency	Percent	Frequency	Percent	
<b>Do you think that Iraqi society motivates men to join reproductive health issues?</b>					
No	80	80.0	78	78.0	$X^2=0.12$ $p=0.72$
Yes	20	20.0	22	22.0	
<b>Does your husband know the signs of female puberty?</b>					
No	20	20.0	12	12.0	$X^2=2.38$ $p=0.122$
Yes	80	80.0	88	88.0	
<b>What is the source of your information?</b>					
The school					
No	85	85	71	71	$X^2=5.71$ $p=0.016$
Yes	15	15.0	29	29.0	
Internet					
No	55	55.0	59	59	$X^2=0.32$ $p=0.567$
Yes	45	45.0	41	41.0	
Books, newspapers and magazines					
No	78	78	76	76	$X^2=0.69$ $p=0.404$
Yes	32	32.0	24	24.0	
Friends and neighbors					
No	66	66	89	89	$X^2=15.16$ $p=0.000$
Yes	34	34.0	11	11.0	
Family					
No	60	60.0	69	69	$X^2=1.76$ $p=0.18$
Yes	40	40.0	31	31.0	
TV and radio					
No	91	91.0	90	90	$X^2=0.058$ $p=0.809$
Yes	9	9.0	10	10.0	
Total	100	100.0	100	100.0	

Table 4.2 shows general knowledge about reproductive health. The finding indicated that 48% of females think 24-28 age is the appropriate age for marriage and 47% of males think 19-23 is the appropriate age for girl marriage it is seen that the p value is less than 0.05 ( $X^2=5.46$  ,  $p=0.036$ ). 50% of females think 24-28 is the appropriate age for men marriage, and 52% of males think 24-28 is the appropriate age for men marriage, it is seen that the p value is more than 0.05 ( $X^2=5.58$  ,  $p=0.232$ ). 73% of females and males have information and knowledge about RH. 55% of females and 54% of males have knowledge and information about pre-marital examinations, it is seen that the p value is more than 0.05 ( $X^2=0.02$  ,  $p=0.88$ ). 64% of females and 39% of males have knowledge and information about the care of pregnant women and the services and programs provided for maternal and child care, it is seen that the p value is less than 0.05 ( $X^2=12.51$  ,  $p=0.000$ ). 43% of females and 34% of males have knowledge and information about the justifications for abortion, it is seen that the p value is more than 0.05 ( $X^2=1.71$  ,  $p=0.19$ ). 49% of females and 37% of males have knowledge and information about family plan methods, it is seen that the p value is more than 0.05 ( $X^2=2.93$  ,  $p=0.086$ ). 49% of females and males know and know about STDs and HIV (AIDS). 45% of females and males have knowledge and information about domestic violence (verbal, psychological, physical, and sexual. 52% of females talked to their husbands about RH. 90% of females and 87% of males were encouraged to hold courses to educate young people's involvement in RH issues, it is seen that the p value is more than 0.05 ( $X^2=0.44$  ,  $p=0.506$ ). 20% of females and 22% of males think Iraqi society motivates men to join RH issues, it is seen that the p value is more than 0.05 ( $X^2=0.12$  ,  $p=0.72$ ). 80% of females said their husbands know the signs of female puberty, and 88% of males know the signs of female puberty, it is seen that the p value is more than 0.05 ( $X^2=2.38$  ,  $p=0.122$ ). 15% of females and 29% of males know signs of female puberty from school , it is seen that the p value is less than 0.05 ( $X^2=5.71$  ,  $p=0.016$ ). 45% of females and 41% of males know signs of female puberty from the internet, it is seen that the p value is more than 0.05 ( $X^2=0.32$  ,  $p=0.567$ ). 32% of females and 24% of males know signs of female puberty from books, newspapers, and magazines, it is seen that the p value is more than 0.05 ( $X^2=0.69$  ,  $p=0.404$ ). 34% of females and 11% of males know signs of female puberty from friends and neighbors, it is seen that the p value is less than 0.05 ( $X^2=15.16$  ,  $p=0.000$ ). 40% of females and 31% of males know signs of female puberty from family, it is seen that the p value is more

than 0.05 ( $X^2=1.76$ ,  $p=0.18$ ). 9% of females and 10% of males know signs of female puberty from TV and radio, it is seen that the p value is more than 0.05 ( $X^2=0.058$ ,  $p=0.809$ ).

**Table 4.3.** Distribution of spouse's demographic characteristics.

Variables	Female		Male		Chi square
	Frequency	Percent	Frequency	Percent	
<b>Educational level</b>					
Illiterate	9	9.0	5	5.0	$X^2=4.77$ $p=0.44$
Read and write	5	5.0	10	10.0	
Primary School	17	17.0	16	16.0	
Intermediate School	17	17.0	14	14.0	
Highschool	18	18.0	13	13.0	
Diploma or Bachelor's or higher	34	34.0	42	42.0	
<b>Occupation</b>					
Housewife/ Do not work	6	6.0	56	56.0	$X^2=77.36$ $p=0.000$
Governmental work	38	38.0	31	31.0	
Private job	8	8.0	8	8.0	
Retired	3	3.0	-	-	
Freelance work	44	44.0	4	4.0	
Others	1	1.0	1	1.0	
<b>Do you encourage early marriage?</b>					
No	83	83.0	69	69.0	$X^2=5.37$ $p=0.020$
Yes	17	17.0	31	31.0	
<b>The age difference between you and your wife is less than ten years</b>					
No	33	33.0	29	29.0	$X^2=0.37$ $p=0.54$
Yes	67	67.0	71	71.0	
<b>Do you have children</b>					
No	21	21.0	16	16.0	$X^2=0.82$ $P=0.36$
Yes	79	79.0	84	84.0	

Variables	Female		Male		Chi square
	Frequency	Percent	Frequency	Percent	
<b>Do you currently use any family planning ways</b>					
No	32	32	89	89.0	$X^2=67.97$ $p=0.000$
Yes	68	68	11	11.0	
<b>Does your husband currently use any family planning ways</b>					
No	87	87.0			
Yes	13	13.0			
<b>Does your husband help you in house work/ Do you help your wife in house work</b>					

No	60	60	51	51.0	$X^2=1.63$ $p=0.20$
Yes	40	40	49	49.0	
<b>Does your husband go with you for periodic reviews during pregnancy and after giving birth? / Do you go with your wife for periodic reviews during pregnancy and after giving birth?</b>					
No	38	38.0	31	31.0	$X^2=1.08$ $p=0.29$
Yes	62	62.0	69	69.0	
<b>Do you exposure to violence?</b>					
No	58	58.0			
Yes	42	42.0			
Psychological					
No	72	72			
Yes	28	28.0			
Verbal					
No	35	35			
Yes	65	65			
Physical					
No	45	45			
Yes	55	55			
Sexual					
No	93	93			
Yes	7	7.0			
Total	100	100			

Table 4.3 shows regarding the educational level, 34% of females husband and 42% of males wives are university graduates, it is seen that the p value is more than 0.05 ( $X^2=4.77$ ,  $p=0.44$ ). 44% of female husbands freelance work and 56% of male wives are housewife, it is seen that the p value is less than 0.05 ( $X^2=77.36$ ,  $p=0.000$ ). 17% of females and 31% of males encourage early marriage, it is seen that the p value is less than 0.05 ( $X^2=5.37$ ,  $p=0.020$ ). 67% of females and 71% of males have less than ten years difference between the couple, it is seen that the p value is more than 0.05 ( $X^2=0.37$ ,  $p=0.54$ ). 79% of females and 84% of males have children, it is seen that the p value is more than 0.05 ( $X^2=0.82$ ,  $p=0.36$ ). 68% of females and 11% of males use any family planning ways, it is seen that the p value is more than 0.05 ( $X^2=57.97$ ,  $p=0.000$ ). 13% of females' husbands currently use any family planning ways. 40% of females' husbands help with the housework, and 49% of males help their wives with housework, it is seen that the p value is more than 0.05 ( $X^2=1.63$ ,  $p=0.20$ ). 62% of females' husbands go with them for periodic reviews during pregnancy and after giving birth, and 69% of males go with their wives for periodic reviews during pregnancy and after giving birth, it is seen

that the p value is more than 0.05 ( $X^2=1.08$ ,  $p=0.29$ ). 42% of females are exposed to violence, 28% are exposed to psychological violence, 65% are exposed to verbal violence, 55% are exposed to physical violence, and 7% are exposed to sexual violence.

**Table 4.4.** Comparison between female and male about RH issues.

Items	Response	Female n:100		Male n:100		Chi square
		f	%	f	%	
Women suffer from problem reproductive health more than men	Strongly disagree	4	4.0	1	1.0	$X^2=17.08$ $p=0.001$
	Disagree	7	7.0	8	8.0	
	I cannot decide	10	10.0	18	18.0	
	Agree	45	45.0	61	61.0	
	Strongly agree	34	34.0	12	12.0	
Men and women must find solutions to reproductive health problems	Strongly disagree	-	-	-	-	$X^2=6.57$ $p=0.086$
	Disagree	5	5.0	2	2.0	
	I cannot decide	8	8.0	12	12.0	
	Agree	46	46.0	59	59.0	
	Strongly agree	41	41.0	27	27.0	
It is easier to treat reproductive health problems for men than for woman	Strongly disagree	4	4.0	4	4.0	$X^2=1.98$ $p=0.73$
	Disagree	29	29.0	26	26.0	
	I cannot decide	24	24.0	30	30.0	
	Agree	34	34.0	35	35.0	
	Strongly agree	9	9.0	5	5.0	
Only a man has the right to determine the number of children in a family	Strongly disagree	30	30.0	17	17.0	$X^2=9.49$ $p=0.049$
	Disagree	47	47.0	47	47.0	
	I cannot decide	16	16.0	17	17.0	
	Agree	6	6.0	14	14.0	
	Strongly agree	1	1.0	5	5.0	
Men are able to use family planning ways	Strongly disagree	8	8.0	5	5.0	$X^2=10.12$ $p=0.038$
	Disagree	15	15.0	9	9.0	
	I cannot decide	13	13.0	20	20.0	
	Agree	46	46.0	59	59.0	
	Strongly agree	18	18.0	7	7.0	
Encouraging men's participation in the using of family planning ways to take	Strongly disagree	13	13.0	4	4.0	$X^2=16.7$ $p=0.002$
	Disagree	13	13.0	11	11.0	
	I cannot decide	13	13.0	26	26.0	
	Agree	37	37.0	49	49.0	

responsibility for their sexual behavior	Strongly agree	24	24.0	10	10.0	
Sexually transmitted diseases and AIDS are more common among women than men	Strongly disagree	12	12.0	5	5.0	$X^2=6.26$ $p=0.18$
	Disagree	30	30.0	27	27.0	
	I cannot decide	24	24.0	35	35.0	
	Agree	24	24.0	27	27.0	
	Strongly agree	10	10.0	6	6.0	
It is necessary to take the necessary precautions to protect against sexually transmitted infectious agents	Strongly disagree	1	1.0	1	1.0	$X^2=1.56$ $p=0.815$
	Disagree	5	5.0	5	5.0	
	I cannot decide	17	17.0	11	11.0	
	Agree	45	45.0	50	50.0	
	Strongly agree	32	32.0	33	33.0	

Items	Response	Female n:100		Male n:100		Chi square
		F	%	f	%	
Young people feel responsible when they prevent their partner from getting pregnant in a certain way	Strongly disagree	4	4.0	4	4.0	$X^2=7.67$ $p=0.104$
	Disagree	18	18.0	12	12.0	
	I cannot decide	32	32.0	21	21.0	
	Agree	36	36.0	55	55.0	
	Strongly agree	10	10.0	8	8.0	
Both women and men need a counseling center on reproductive health issues	Strongly disagree	1	1.0	1	1.0	$X^2=6.56$ $p=0.16$
	Disagree	2	2.0	4	4.0	
	I cannot decide	10	10.0	9	9.0	
	Agree	44	44.0	59	59.0	
	Strongly agree	43	43.0	27	27.0	
Women care more about reproductive health than men	Strongly disagree	-	-	2	2.0	$X^2=25.07$ $p=0.000$
	Disagree	8	8.0	10	10.0	
	I cannot decide	13	13.0	26	26.0	
	Agree	30	30.0	45	45.0	
	Strongly agree	49	49.0	17	17.0	
The man must be with the woman in cases of childbirth and abortion	Strongly disagree	2	2.0	1	1.0	$X^2=9.107$ $p=0.058$
	Disagree	9	9.0	6	6.0	
	I cannot decide	8	8.0	15	15.0	
	Agree	29	29.0	43	43.0	
	Strongly agree	52	52.0	35	35.0	
Women should go without their husbands for periodic	Strongly disagree	15	15.0	15	15.0	$X^2=8.52$ $p=0.074$
	Disagree	30	30.0	40	40.0	
	I cannot decide	17	17.0	24	24.0	

examinations during pregnancy	Agree	20	20.0	14	14.0	
	Strongly agree	18	18.0	7	7.0	
Taking care of children in all situations and circumstances should be the responsibility of the woman	Strongly disagree	34	34.0	20	20.0	$X^2=14.55$ $p=0.005$
	Disagree	25	25.0	39	39.0	
	I cannot decide	13	13.0	22	22.0	
	Agree	20	20.0	18	18.0	
	Strongly agree	8	8.0	1	1.0	
The spouses bear responsibility in cases such as pregnancy, childbirth, miscarriage, postpartum, etc	Strongly disagree	5	5.0	1	1.0	$X^2=9.519$ $p=0.049$
	Disagree	6	6.0	3	3.0	
	I cannot decide	18	18.0	20	20.0	
	Agree	37	37.0	54	54.0	
	Strongly agree	34	34.0	22	22.0	
The position of women in society should be lower than that of men	Strongly disagree	53	53.0	29	29.0	$X^2=14.2$ $p=0.006$
	Disagree	33	33.0	40	40.0	
	I cannot decide	10	10.0	21	21.0	
	Agree	3	3.0	8	8.0	
	Strongly agree	1	1.0	2	2.0	
Violence against women is high in Iraqi society	Strongly disagree	1	1.0	-	-	$X^2=21.77$ $p=0.000$
	Disagree	5	5.0	15	15.0	
	I cannot decide	9	9.0	25	25.0	
	Agree	38	38.0	37	37.0	
	Strongly agree	47	47.0	23	23.0	

Items	Response	Female n:100		Male n:100		Chi square
		f	%	f	%	
It is the responsibility of men to protect women from violence	Strongly disagree	1	1.0	2	2.0	$X^2=5.52$ $p=0.237$
	Disagree	11	11.0	4	4.0	
	I cannot decide	17	17.0	14	14.0	
	Agree	43	43.0	55	55.0	
	Strongly agree	28	28.0	25	25.0	
When a woman suffers from postpartum depression, a man must help her in treatment	Strongly disagree	2	2.0	-	-	$X^2=17.62$ $p=0.001$
	Disagree	4	4.0	4	4.0	
	I cannot decide	15	15.0	15	15.0	
	Agree	28	28.0	54	54.0	
	Strongly agree	51	51.0	27	27.0	
	total	100	100	100	100	

Regarding the RH issue, the finding shows Table 4.4 that 45% of females and 61% of males agree that women suffer from RH more than men, it is seen that the p value is less than 0.05 ( $X^2=17.08$ ,  $p=0.001$ ). 46% of females and 59% of males agree that men and women must find solutions to RH problems, it is seen that the p value is more than 0.05 ( $X^2=6.57$ ,  $p=0.086$ ). 34% of females and 35% of males agree that it is easier to treat RH problems for men than for women, it is seen that the p value is more than 0.05 ( $X^2=1.98$ ,  $p=0.73$ ). 47% of females and males disagree that only a man has the right to determine the number of children in a family, it is seen that the p value is less than 0.05 ( $X^2=9.49$ ,  $p=0.049$ ). 46% of females and 59% of males agree that men can use FP ways, it is seen that the p value is less than 0.05 ( $X^2=10.12$ ,  $p=0.038$ ). 37% of females and 49% of males agree about encouraging men's participation in using FP ways to take responsibility for their sexual behavior, it is seen that the p value is less than 0.05 ( $X^2=16.7$ ,  $p=0.002$ ). 30% of females disagree that STDs and AIDS are more common among women than men, and 35% of males cannot decide about STDs and AIDS is more common among women than men, it is seen that the p value is more than 0.05 ( $X^2=6.26$ ,  $p=0.18$ ). 45% of females and 50% of males agree that it is necessary to take the necessary precautions to protect against sexually transmitted infectious agents, it is seen that the p value is more than 0.05 ( $X^2=1.56$ ,  $p=0.815$ ). 36% of females and 55% of males agree that young people feel responsible when they prevent their partner from getting pregnant in a certain way, it is seen that the p value is more than 0.05 ( $X^2=7.67$ ,  $p=0.104$ ). 44% of females and 59% of males agree that both women and men need a counseling center on RH issues, it is seen that the p value is more than 0.05 ( $X^2=6.56$ ,  $p=0.16$ ). 49% of females strongly agree that women care more about RH than men, and 45% of males agree that women care more about RH than men, it is seen that the p value is less than 0.05 ( $X^2=25.07$ ,  $p=0.000$ ). 52% of females strongly agree that the man must be with the woman in cases of childbirth and abortion, and 43% of males agree that the man must be with the woman in cases of childbirth and abortion, it is seen that the p value is more than 0.05 ( $X^2=9.107$ ,  $p=0.058$ ). 30% of females and 40% of males disagree that women should go without their husbands for periodic examinations during pregnancy, it is seen that the p value is more than 0.05 ( $X^2=8.52$ ,  $p=0.074$ ). 34% of females strongly disagree that taking care of children in all situations and circumstances should be the woman's responsibility, and 39% of males disagree that taking care of children in all situations and circumstances should be the

woman's responsibility, it is seen that the p value is less than 0.05 ( $X^2=14.55$ ,  $p=0.005$ ). 37% of females and 54% of males agree that the spouses bear responsibility in cases such as pregnancy, childbirth, miscarriage, postpartum, etc, it is seen that the p value is less than 0.05 ( $X^2=9.519$ ,  $p=0.049$ ). 53% of females strongly disagree about the position of women in society should be lower than that of men, it is seen that the p value is less than 0.05 ( $X^2=14.2$ ,  $p=0.006$ ). 40% of females disagree that the position of women in society should be lower than that of men. 47% of females strongly agree that violence against women is high in Iraqi society, and 37% of males agree that violence against women is high, it is seen that the p value is less than 0.05 ( $X^2=21.77$ ,  $p=0.000$ ). 43% of females and 55% of males agree that it is the responsibility of men to protect women from violence , it is seen that the p value is more than 0.05 ( $X^2=5.52$ ,  $p=0.237$ ). 51% of females strongly agree that when a woman suffers from postpartum depression, a man must help her with treatment, and 54% of males agree that when a woman suffers from postpartum depression, a man must help her , it is seen that the p value is less than 0.05 ( $X^2=17.62$ ,  $p=0.001$ )

**Table 4.5.** Comparison between female and male by reproductive health issue mean score.

Groups	Mean	SD	Minimum	Maximum	T test	P value
Female	66.49	6.959	40	81	1.011	0.313
Male	65.58	5.703	46	81		

As shown in the table 4.5, Female's mean 66.49 and it is more than the men's mean which is 65.58. So, as shown in the table 4.5 there is no significant difference between the RH issue mean score of females and males ( $t= 1.011$ ,  $p=0.313$ ).

## 4.2 Discussion

According to the researcher's point of view, it is the first study in Iraq. Among the obstacles covered by the research is the need for more published studies, especially Iraqi academic references related to this topic (DeLargy & Alakbarov, 2004; Hamamy& Al-Hakkak, 1989 ;Balinska *et al* 2019(. Programs offered to women in relation to reproductive health, and is there any participation of men in reproductive health in Iraq.

This chapter presents a systematically organized interpretation and a reasonably drawn discussion of the results with the support of the available literature and related studies. The study aims to compare the results in the field of RH, editorials, participation, and knowledge between Iraqi women and men. Females, whose ages ranged between 20-29 years, constituted 40% of the study sample, and the most significant number of males was 30%, whose ages ranged between 30-39 years. This result is similar to previous studies (Maryland, 2017; Shahjahan *et al.*, 2013). Who reported that the majority of the study sample were females and the rest were middle-aged males and study (Palmer, 1999). Who reported that the majority of the study sample was middle-aged.

In this study, it was found that the educational level of the study sample, 52% of males and 30% of females graduated with Diploma or Bachelor's or higher, this study is similar to previous studies (Ali *et al.*, 2004; Bishwajit *et al.*, 2017a; Hossain *et al.*, 2007; Kakaire *et al.*, 2011), who reported that the majority of the study sample were graduates of Secondary and above.

As for the Occupation variable, this study found that 63% of female homemakers and 47% of males in government work. This study is similar to the study of (Bishwajit *et al.*, 2017b; Shahjahan *et al.*, 2013), who reported that most males worked in the government, private, and business sectors and study (Kaddour *et al.*, 2005). Who reported that the majority of females in the study sample worked as housewives; when examining the income variable in this study, 51% of females had less income than expenses, and 53% of males had equal income. This study is similar to the study of (Kaddour *et al.*, 2005) (Harrison & Montgomery, 2001), who reported that the income of the study sample was limited and less than expenses.

Finally, in this study, 73% of the urban population was female, and 79% of the city's male residents. This result is similar to the study (Harrison & Montgomery, 2001; Kaddour *et al.*, 2005), which reported that most of the study sample lived in the city.

Regarding general knowledge about RH, 48% of females believed that (24-28) is the appropriate age for marriage for girls, and 47% of males believed that (19-23) is the appropriate age for girls. This result is similar to previous studies (Kabir & Jahan, 2001; Marphatia *et al.*, 2017; Nahar *et al.*, 2013). Which reported that the RH is higher in younger women and that the more a younger woman marries, the more children she has at the age of thirty; also, 50% of females believed that (24-28) is the appropriate age for marriage for men, and 52% of males (24-28) believe that this is the appropriate age for marriage. This result is similar to previous studies (Bhagat, 2016; MOHP Nepal, 2012; NIPORT/Bangladesh *et al.*, 2016; Calverton, 2012) who reported the tendency of females and males to marry between the ages of 25-29 years.

This study found that 73% of females and males have information and knowledge about RH (Santos *et al.*, 2016; Yip *et al.*, 2013), who found that knowledge and awareness related to sex and RH was high in the study sample.

Also, this study found that 55% of females and 54% of males have knowledge and information about premarital examinations. This result is consistent with previous studies like Al Sulaiman *et al* (2008), Al-Farsi *et al* (2014) and Farkındalığı (2010), which reported that the majority of the study sample has knowledge and information about premarital examinations, and 64% of females and 39% of males have knowledge and information about pregnant women's care and the services and programs provided for mother and child care. This finding is similar to a study Galle *et al* (2019) and Mohammed *et al* (2019), which reported that the majority of the study sample have knowledge and information about the care of pregnant women.

In addition, 43% of females and 34% of males have knowledge and information about the justification for abortion. 49% of females and 37% of males have knowledge and information about FP methods. This finding is similar to the study, which reported that most of the study sample had good knowledge about the justification for abortion, and 49% of both females and males had knowledge and information about STDs and HIV (AIDS). This finding is consistent with the Abera (2003), Amu & Adegun (2015), Jaiswal *et al* (2005), Lal *et al* (2000) and Sekirime *et al* (2001)'s studies. Most respondents had

good knowledge regarding STD prevention and transmission, and 45% of females and males had knowledge and information about domestic violence of all kinds (verbal, psychological, physical, and sexual). This finding is similar to that of (Campbell & Lewandowski, 1997; Rakovec-Felser, 2014), Who reported that most of the study sample had knowledge and information about domestic violence by collecting its types.

In addition, 52% of females talked to their husbands about RH, encourage 90% of females and 87% of males to hold courses to educate young people's involvement in RH issues to keep them. This result is similar to the study (Haffejee *et al.*, 2018; SADHS, 2016), which reported that male and female couples had conversations about RH (table 4.2).

On the issue of RH, the results of this study show that 45% of females and 61% of males agree that women suffer from RH problems more than men. This finding is consistent with Bertakis *et. al* (2000) and Burrell *et al.* (2019)'s studies. The study also revealed that 46% of females and 59% of males believe that men and women should find solutions to RH problems. These findings are also consistent with some other studies like Davis *et al.*, (2016) Falnes *et al* (2011), Mullany (2006) and Natoli *et al* (2012), which reported the need for male participation in finding solutions to problems that may affect females in RH. As 34% of females and 35% of males agreed that it is easier to treat RH problems for men compared to women, this finding is similar to a study (Adiga *et al.*, 2008; Kumar & Singh, 2015), who found that getting treatment for RH for men is easier for man.

47% of females and males disagree that only men have the right to determine the number of children in a family. This finding is consistent with previous studies (Marks *et al.*, 2009; Whiteman & Loken, 2006), which reported that the role and patterns of the family between the sexes are similar, and 46% of females and 59% of males agree that men can use FP methods. This finding is consistent with the study (Jewkes & Morrell, 2010; Joubert *et al.*, 2022; Kabagenyi *et al.*, 2014), which reported that men could plan families and use the means available to do so.

37% of females and 49% of males agree to encourage men's participation in FP methods to take responsibility for their sexual behavior. This finding is consistent with a study

(Croce-Galis *et al.*, 2014; Koffi *et al.*, 2018), which reported that males should be encouraged to promote RH and change behavior in their communities through FP methods. 45% of females and 50% of males agree on the need to take precautions to protect against sexually transmitted infectious agents. And this result is similar to other studies (Hocking & Fairley, 2006; Marrazzo & Cates, 2011; Niccolai *et al.*, 2005; Paz-Bailey *et al.*, 2005), who found that males and females should take precautions to prevent infectious diseases through sexual contact.

36% of females and 55% of males agree that young people feel responsible when they prevent their partner from getting pregnant in a certain way. This finding is consistent with a study (Borrero *et al.*, 2013; Ritter *et al.*, 2015; Vargas *et al.*, 2017), which reported that just over half of females and males had the information they needed to prevent pregnancy in a certain way. In addition, 44% of females and 59% of males agree that women and men need counseling status on RH issues. This finding is similar to previous studies (Kingsberg *et al.*, 2019; Nappi & Kokot-Kierepa, 2010), which reported that counseling is needed on RH issues. 49% of females strongly agree that women care more about RH than men, and 45% of males agree that women care more about RH than men. This finding is consistent with previous studies (Burrell *et al.*, 2019; McMurray *et al.*, 2018), which reported a greater interest in sexual health in females than in males.

52% of females strongly agree that a man should be with a woman in childbirth and miscarriage, and 43% of males agree that a man should be with a woman in childbirth and miscarriage. This finding is consistent with other studies (Coast *et al.*, 2018; Hirz *et al.*, 2017; Strong, 2022), which reported that most of the study sample agreed on the need for male and female participation in abortions and cases of childbirth. 30% of females and 40% of males disagree that women should go without their husbands for periodic check-ups during pregnancy; this finding is consistent with a study (Kadomoto *et al.*, 2011; Manda-Taylor *et al.*, 2017; Yaya *et al.*, 2019), who reported the need to conduct periodic examinations of pregnant women for both partners.

51% of females strongly agree that when a woman suffers from postpartum depression, a man should help her with treatment, and 54% of males agree that when a woman suffers

from postpartum depression, a man should help her with treatment. Similar to the previous studies (Kim & Swain, 2007; J. Y. Lee *et al.*, 2018; Scarff, 2019), who reported that the majority of the study sample stressed the need for male participation in helping the female in the treatment of postpartum depression.



## 5 CONCLUSION AND RECOMMENDATION

### 5.1 Conclusion

This study investigates the findings on RH, opinions, and knowledge between Iraqi women and men's participation in RH in Iraq. The obtained results can be summarised as:

1. The age groups for females 20-29 years and males in the age groups 30-39 years were higher, and the level of education they graduated from a diploma or bachelor's degree was higher.
2. Male employees were working in the government sector, while females were housewives.
3. The female participants in the study were from the urban population, and the males were from the city population with a higher altitude.
4. Most of the participants in this study had knowledge and information on RH, premarital examinations, and programs offered for mother and child care.
5. The female participants in the study had more knowledge and information about the justifications for abortion and FP methods than the males.
6. The study concluded that most participating men have the knowledge but do not participate in RH.
7. The female participants had more knowledge than the males about STDs, their transmission, and domestic violence of all kinds.
8. Both male and female participants agreed that males had an easier time treating RH than females
9. The study concluded that the most common type of violence in Iraq is verbal, followed by physical violence. The study also concluded that violence is high in Iraqi society.
10. The opinions of females and males were mostly that women suffer from RH more than men.

11. Females and males agreed that determining the number of children in the family is the responsibility of both sexes, that the role and patterns of the family for both sexes are similar, and that men are often able to use FP methods.
12. Participants stressed the need to take measures to protect against STIs.

## **5.2 Recommendations**

The recommendation of this study can be given as bellow:

- Spreading awareness of reproductive and women's rights and implementing them on the ground.
- Spreading awareness about stopping violence against women.
- Spreading awareness and encouraging men to cooperate with their wives in family life, family planning, maintaining men's sexual behavior, and raising children.
- Raising the awareness of women and men about reproductive health through communication through social networking sites reproductive health through advertisements and brochures.
- Implementing awareness and encouragement programs for male participation in these programs concerning reproductive health.
- Encouraging male participation in matters related to reproductive health. From male participation in this matter.
- Organizing courses in health centers, hospitals, and departments on reproductive health on the benefits of male participation in this field of this topic.
- Spreading awareness in schools and through school curricula about reproductive health and the importance of male participation in reproductive health appropriately and in accordance with state regulations.
- Encouraging the work of studies related to this subject because there are no such studies in Iraq, according to the researcher's point of view.
- During the research, it was observed that some questions about women could not be answered completely and correctly when their husbands were with them.

Therefore, it is recommended that women and their spouses be invited for separate interviews when similar studies are conducted.



## REFERENCES

- Abboud, A. A. A. (2016). التباين المكاني لمؤشرات التنمية الصحية وفاقها المستدامة في محافظة البصرة (دراسة في جغرافية التنمية)., <https://search.emarefa.net/detail/BIM-748560>
- Abera, Z. (2003). Knowledge, attitude and behavior (KAB) on HIV/AIDS/STDs among workers in the informal sector in Addis Ababa. *Ethiopian Journal of Health Development*, 17(1), 53–61.
- Acharya, D. R., Bell, J. S., Simkhada, P., Van Teijlingen, E. R., & Regmi, P. R. (2010). Women's autonomy in household decision-making: A demographic study in Nepal. *Reproductive Health*, 7(1), 1–12.
- Adiga, S. K., Jayaraman, V., Kalthur, G., Upadhy, D., & Kumar, P. (2008). Declining semen quality among south Indian infertile men: A retrospective study. *Journal of Human Reproductive Sciences*, 1(1), 15.
- Ahinkorah, B. O., Dickson, K. S., & Seidu, A.-A. (2018). Women decision-making capacity and intimate partner violence among women in sub-Saharan Africa. *Archives of Public Health*, 76(1), 5. <https://doi.org/10.1186/s13690-018-0253-9>
- Al Sulaiman, A., Suliman, A., Al Mishari, M., Al Sawadi, A., & Owaidah, T. M. (2008). Knowledge and Attitude Toward the Hemoglobinopathies Premarital Screening Program in Saudi Arabia: Population-Based Survey. *Hemoglobin*, 32(6), 531–538. <https://doi.org/10.1080/03630260802508384>
- Albezrah, N. A. (2015). Use of modern family planning methods among Saudi women in Taif, KSA. *Int J Reprod Contracept Obstet Gynecol*, 4(4), 990–994.
- Al-Farsi, O. A., Al-Farsi, Y. M., Gupta, I., Ouhtit, A., Al-Farsi, K. S., & Al-Adawi, S. (2014). A study on knowledge, attitude, and practice towards premarital carrier screening among adults attending primary healthcare centers in a region in Oman. *BMC Public Health*, 14(1), 380. <https://doi.org/10.1186/1471-2458-14-380>
- Ali, M., Rizwan, H., & Ushijima, H. (2004). Men and reproductive health in rural Pakistan: The case for increased male participation. *The European Journal of Contraception & Reproductive Health Care*, 9(4), 260–266. <https://doi.org/10.1080/13625180400017511>

- Al-Jassem, Z. Y. M. (2018). Reproductive Health in Iraq and its Development throughout School Curriculums. 15-1 ,((ب) 46 (أكتوبر-ديسمبر)), *حولييات أداب عين شمس*, <https://doi.org/10.21608/aafu.2018.47838>
- Al-Omrani, S. (2022). *Laws related to women between universality and privacy*. Zia Conference and Research Center. <https://www.diae.events/postid=129933>
- Amu, E. O., & Adegun, P. T. (2015). Awareness and knowledge of sexually transmitted infections among secondary school adolescents in Ado Ekiti, South Western Nigeria. *Journal of Sexually Transmitted Diseases*, 2015.
- Bajracharya, A., & Amin, S. (2012). Poverty, marriage timing, and transitions to adulthood in Nepal. *Studies in Family Planning*, 43(2), 79–92. <https://doi.org/10.1111/j.1728-4465.2012.00307>
- Balinska, M. A., Nesbitt, R., Ghantous, Z., Ciglenecki, I., & Staderini, N. (2019). Reproductive health in humanitarian settings in Lebanon and Iraq: Results from four cross-sectional studies, 2014–2015. *Conflict and Health*, 13(1), 1–10.
- Balinska, M. A., Nesbitt, R., Ghantous, Z., Ciglenecki, I., & Staderini, N. (2019). Reproductive health in humanitarian settings in Lebanon and Iraq: results from four cross-sectional studies, 2014–2015. *Conflict and health*, 13, 1-10.
- Beji, N. K. (2015). *Hemsire ve ebelere y??nelik kadin sagligi ve hastalıkları*.
- Belwali, R., Issa, S. A. H., Faisal, S. M., & Lafta, R. K. (2011). *IRAQI JOURNAL OF COMMUNITY MEDICINE*. <https://www.iasj.net/iasj/issue/3588>
- Bennett, L. R. (2005). *Women, Islam and Modernity: Single Women, Sexuality and Reproductive Health in Contemporary Indonesia* (0 ed.). Routledge. <https://doi.org/10.4324/9780203391389>
- Berhane, Y. (2006). Male involvement in reproductive health. *The Ethiopian Journal of Health Development*, 20(3).
- Bertakis, K. D., Azari, R., Helms, L. J., Callahan, E. J., & Robbins, J. A. (2000). Gender differences in the utilization of health care services. *Journal of Family Practice*, 49(2), 147–147.
- Bhagat, R. B. (2016). The practice of early marriages among females in India: Persistence and change. *Mumbai, India: IIPS*.
- Bich, T. H., & Cuong, N. M. (2017). Changes in knowledge, attitude and involvement of fathers in supporting exclusive breastfeeding: A community-based intervention

- study in a rural area of Vietnam. *International Journal of Public Health*, 62(S1), 17–26. <https://doi.org/10.1007/s00038-016-0882-0>
- Bishwajit, G., Tang, S., Yaya, S., Ide, S., Fu, H., Wang, M., He, Z., Da, F., & Feng, Z. (2017a). Factors associated with male involvement in reproductive care in Bangladesh. *BMC Public Health*, 17(1), 3. <https://doi.org/10.1186/s12889-016-3915>
- Blackstock, O. J., Mba-Jonas, A., & Sacajiu, G. M. (2010). Family Planning Knowledge: The Role of Social Networks and Primary Care Providers as KNOWLEDGE Sources for African American Women. *American Journal of Sexuality Education*, 5(2), 128–143. <https://doi.org/10.1080/10627197.2010.491060>
- Borrero, S., Farkas, A., Dehlendorf, C., & Rocca, C. H. (2013). Racial and ethnic differences in men’s knowledge and attitudes about contraception. *Contraception*, 88(4), 532–538.
- Brownridge, D. A., Taillieu, T. L., Tyler, K. A., Tiwari, A., Chan, K. L., & Santos, S. C. (2011). Pregnancy and intimate partner violence: Risk factors, severity, and health effects. *Violence against Women*, 17(7), 858–881.
- Burrell, C. N., Sharon, M. J., Bassler, J., & Davidov, D. M. (2019). Gender differences in sexual health knowledge among emerging adults in acute-care settings. *Journal of Osteopathic Medicine*, 119(5), 289–298.
- Byamugisha, R., Åström, A. N., Ndeezi, G., Karamagi, C. A., Tylleskär, T., & Tumwine, J. K. (2011). Male partner antenatal attendance and HIV testing in eastern Uganda: A randomized facility-based intervention trial. *Journal of the International AIDS Society*, 14(1), 43–43.
- Calverton, M. U. (2012). Demographic and health survey. *National Institute of Population Studies Islamabad, Pakistan, 2013*.
- Campbell, J. C., & Lewandowski, L. A. (1997). Mental and physical health effects of intimate partner violence on women and children. *Psychiatric Clinics of North America*, 20(2), 353–374.
- Coast, E., Norris, A. H., Moore, A. M., & Freeman, E. (2018). Trajectories of women’s abortion-related care: A conceptual framework. *Social Science & Medicine*, 200, 199–210. <https://doi.org/10.1016/j.socscimed.2018.01.035>

- Cook, R. J., & Fathalla, M. F. (1996). Advancing Reproductive Rights Beyond Cairo and Beijing. *International Family Planning Perspectives*, 22(3), 115–121. <https://doi.org/10.2307/2950752>
- Correia, L. L., Rocha, H. A. L., Leite, Á. J. M., Campos, J. S., Silva, A. C. e, Machado, M. M. T., Rocha, S. G. M. O., Gomes, T. N., & Cunha, A. J. L. A. da. (2018). Spontaneous and induced abortion trends and determinants in the Northeast semiarid region of Brazil: A transversal series. *Revista Brasileira de Saúde Materno Infantil*, 18(1), 123–132. <https://doi.org/10.1590/1806-93042018000100006>
- Croce-Galis, M., Salazar, E., & Lundgren, R. (2014). Male engagement in family planning: Reducing unmet need for family planning by addressing gender norms. *Washington, DC: Institute for Reproductive Health, Georgetown University.*
- Dangat, C. M., & Njau, B. (2013). Knowledge, attitudes and practices on family planning services among adolescents in secondary schools in Hai District, northern Tanzania. *Tanzania Journal of Health Research*, 15(1).
- Darroch, J. E., Sedgh, G., & Ball, H. (2011). Contraceptive technologies: Responding to women's needs. *New York: Guttmacher Institute*, 201(1), 1–51.
- Davis, J., Vyankandondera, J., Luchters, S., Simon, D., & Holmes, W. (2016). Male involvement in reproductive, maternal and child health: A qualitative study of policymaker and practitioner perspectives in the Pacific. *Reproductive Health*, 13(1), 81. <https://doi.org/10.1186/s12978-016-0184-2>
- DeLargy, P., & Alakbarov, R. (2004). Thinking ahead about reproductive health: contingency planning and emergency preparedness in crisis situations (Iraq and West Africa). *Disasters*, 28(3), 340-350.
- Devi, S. (2015). Iraq's health services curtailed by funding shortfall. *The Lancet*, 386(9996), 844. [https://doi.org/10.1016/S0140-6736\(15\)00005-7](https://doi.org/10.1016/S0140-6736(15)00005-7)
- Dicola, D., & Spaar, E. (2016). Intimate Partner Violence. *American Family Physician*, 94(8), 646–651.
- Ditekemena, J., Koole, O., Engmann, C., Matendo, R., Tshefu, A., Ryder, R., & Colebunders, R. (2012). Determinants of male involvement in maternal and child health services in sub-Saharan Africa: A review. *Reproductive Health*, 9(1), Article 1. <https://doi.org/10.1186/1742-4755-9-32>

- Falnes, E., Moland, K., Tylleskär, T., de Paoli, M., Msuya, S. E., & Engebretsen, I. M. (2011). "It is her responsibility": Partner involvement in prevention of mother to child transmission of HIV programmes, northern Tanzania. *Journal of the International AIDS Society*, 14(1), 21. <https://doi.org/10.1186/1758-2652-14-21>
- Farkındalığı, E. Ö. G. D. (2010). Awareness of premarital genetic counselling among youth Corpers in south-West Nigeria. *TAF Prev Med Bull*, 9(6), 575-578.
- Fetohy, E. M. (2007). Impact of a health education program for secondary school Saudi girls about menstruation at Riyadh city. *The Journal of the Egyptian Public Health Association*, 82(1-2), 105-126.
- Freedman, L. P., & Isaacs, S. L. (1993). Human rights and reproductive choice. *Studies in Family Planning*, 18-30.
- Freeman, D. H., & Temple, J. R. (2010). Social factors associated with history of sexual assault among ethnically diverse adolescents. *Journal of Family Violence*, 25(3), 349-356.
- Gaferi, S. M., Al-Harbi, M. F., Yakout, S. M., & Soliman, A. T. (2018). Knowledge, attitude and practice related to reproductive health among female adolescents. *Journal of Nursing Education and Practice*, 8(8), 53. <https://doi.org/10.5430/jnep.v8n8p53>
- Galle, A., Cossa, H., Griffin, S., Osman, N., Roelens, K., & Degomme, O. (2019). Policymaker, health provider and community perspectives on male involvement during pregnancy in southern Mozambique: A qualitative study. *BMC Pregnancy and Childbirth*, 19(1), 384. <https://doi.org/10.1186/s12884-019-2530-1>
- Gee, R. E., Brindis, C. D., Diaz, A., Garcia, F., Gregory, K., Peck, M. G., & Reece, E. A. (2011). Recommendations of the IOM Clinical Preventive Services for Women Committee: Implications for obstetricians and gynecologists. *Current Opinion in Obstetrics & Gynecology*, 23(6), 471-480. <https://doi.org/10.1097/GCO.0b013e32834cdcc6>
- Geneva, U. C. on the E. of D. against W. (74th sess : 2019 : (2019). *Concluding observations on the 4th periodic report of Andorra* : <https://digitallibrary.un.org/record/3840011>
- Ghose, S., & John, L. B. (2017). Adolescent pregnancy: An overview. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 6(10), 4197. <https://doi.org/10.18203/2320-1770.ijrcog20174393>
- Glasier, A., Gülmezoglu, A. M., Schmid, G. P., Moreno, C. G., & Van Look, P. F. A. (2006). Sexual and reproductive health: A matter of life and death. *Lancet*

- (London, England), 368(9547), 1595–1607. [https://doi.org/10.1016/S0140-6736\(06\)69478-6](https://doi.org/10.1016/S0140-6736(06)69478-6)
- GLOBAL STATUS REPORT. (2014). *Global Status Report on Noncommunicable Diseases 2014*.
- Greene, M. E., Mehta, M., Pulerwitz, J., Wulf, D., Bankole, A., & Singh, S. (2006). Involving men in reproductive health: Contributions to development. *Background Paper Prepared for the UN Millennium Project to Contribute to the Report Public Choices, Private Decisions: Sexual and Reproductive Health and The*.
- GYTS Iraq. (2019). *GLOBAL YOUTH TOBACCO SURVEY FACT SHEET IRAQ 2019*., [https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/iraq/iraq-gyts-2019-factsheet-\(ages-13-15\)-\(final\).pdf?sfvrsn=86025aea\\_1&download=true](https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/iraq/iraq-gyts-2019-factsheet-(ages-13-15)-(final).pdf?sfvrsn=86025aea_1&download=true)
- Hadi, I. A. (2020). الوعي المجتمعي بمفهوم الصحة الانجابية لدى عينة من فتيات المجتمع. *Psychological Science*, 31(04A).
- Haffejee, F., O'Connor, L., Govender, N., Reddy, P., Sibiyi, M. N., Ghuman, S., Ngxongo, T., & Borg, D. (2018). Factors associated with unintended pregnancy among women attending a public health facility in KwaZulu-Natal, South Africa. *South African Family Practice*, 60(3), 79–83. <https://doi.org/10.1080/20786190.2017.1396790>
- Hall, A. (2014). 'Honour' Crimes. In P. Davies, P. Francis, & T. Wyatt (Eds.), *Invisible Crimes and Social Harms* (pp. 81–101). Palgrave Macmillan UK. [https://doi.org/10.1057/9781137347824\\_5](https://doi.org/10.1057/9781137347824_5)
- Hall, K. S., Moreau, C., & Trussell, J. (2016). Determinants of and disparities in reproductive health service use among adolescent and young adult women in the United States, 2002–2008. *American Journal of Public Health*, 102(2), 359–367.
- Hamamy, H. A., & Al-Hakkak, Z. S. (1989). Consanguinity and reproductive health in Iraq. *Human heredity*, 39(5), 271–275.
- Harrison, A., & Montgomery, E. (2001). Life Histories, Reproductive Histories: Rural South African Women's Narratives of Fertility, Reproductive Health and Illness. *Journal of Southern African Studies*, 27(2), 311–328. <https://doi.org/10.1080/03057070120049994>
- Hayawi, N. A.-R. (2005). *The Penal law*. <https://uokirkuk.edu.iq/library/book/3070>

- He, D., Zhou, Y., Ji, N., Wu, S., Wang, Z., Decat, P., Moyer, E., Minkauskiene, M., Pang, C., & Cheng, Y. (2012). Study on sexual and reproductive health behaviors of unmarried female migrants in China: Sexual and reproductive migrant health. *Journal of Obstetrics and Gynaecology Research*, 38(4), 632–638. <https://doi.org/10.1111/j.1447-0756.2011.01753>
- Hilfi, T. K. A., Lafta, R., & Burnham, G. (2013). Health services in Iraq. *The Lancet*, 381(9870), 939–948. [https://doi.org/10.1016/S0140-6736\(13\)60320-7](https://doi.org/10.1016/S0140-6736(13)60320-7)
- Hirz, A. E., Avila, J. L., & Gipson, J. D. (2017). The role of men in induced abortion decision making in an urban area of the Philippines. *International Journal of Gynecology & Obstetrics*, 138(3), 267–271. <https://doi.org/10.1002/ijgo.12211>
- Hocking, J., & Fairley, C. K. (2006). Associations between condom use and rectal or urethral chlamydia infection in men. *Sexually Transmitted Diseases*, 33(4), 256–258.
- Hossain, M. B., Phillips, J. F., & Mozumder, A. K. A. (2007). THE EFFECT OF HUSBANDS' FERTILITY PREFERENCES ON COUPLES' REPRODUCTIVE BEHAVIOUR IN RURAL BANGLADESH. *Journal of Biosocial Science*, 39(5), 745–757.
- Hunshal, S. C., Pujar, L. L., & Netravati, H. S. (2010). Reproductive health knowledge among rural adolescent girls. *Karnataka Journal of Agricultural Sciences*, 23(3), 544–546.
- IWISH2. (2022, July 13). *Iraqi Women Integrated Social and Health Survey (IWISH2)*.
- Jaiswal, S., Magar, B. S., Thakali, K., Pradhan, A., & Gurubacharya, D. L. (2005). HIV/AIDS and STI related knowledge, attitude and practice among high school students in Kathmandu valley. *Kathmandu University Medical Journal (KUMJ)*, 3(1), 69–75.
- Jasim, W. M. (2020). Opinion's assessment of female teachers regarding the risk factors affecting the reproductive health. *Medical Journal of Babylon*, 17(2), 194. [https://doi.org/10.4103/MJBL.MJBL\\_97\\_19](https://doi.org/10.4103/MJBL.MJBL_97_19)
- Jejeebhoy, S., Santhya, K. G., & Archarya, R. (2010). *Health and social consequences of marital violence: A synthesis of evidence from India*. Population Council. <https://doi.org/10.31899/pgy1.1016>

- Jewkes, R., & Morrell, R. (2010). Gender and sexuality: Emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *Journal of the International AIDS Society*, *13*(1), 1–11.
- Joubert, S., Tcherdukian, J., Mieusset, R., & Perrin, J. (2022). Thermal male contraception: A study of users' motivation, experience, and satisfaction. *Andrology*, *10*(8), 1500–1510. <https://doi.org/10.1111/andr.13264>
- Kabagenyi, A., Jennings, L., Reid, A., Nalwadda, G., Ntozi, J., & Atuyambe, L. (2014). Barriers to male involvement in contraceptive uptake and reproductive health services: A qualitative study of men and women's perceptions in two rural districts in Uganda. *Reproductive Health*, *11*(1), 1–9.
- Kabir, A., & Jahan, G. (2001). *Female age at marriage as a determinant of fertility*.
- Kaddour, A., Hafez, R., & Zurayk, H. (2005). Women's Perceptions of Reproductive Health in Three Communities around Beirut, Lebanon. *Reproductive Health Matters*, *13*(25), 34–42. [https://doi.org/10.1016/S0968-8080\(05\)25170-4](https://doi.org/10.1016/S0968-8080(05)25170-4)
- Kadomoto, N., Iwasa, H., Takahashi, M., Dulnuan, M. M., & Kai, I. (2011). Ifugao males, learning and teaching for the improvement of maternal and child health status in the Philippines: An evaluation of a program. *BMC Public Health*, *11*(1), 280. <https://doi.org/10.1186/1471-2458-11-280>
- Kakaire, O., Kaye, D. K., & Osinde, M. O. (2011). Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda. *Reproductive Health*, *8*(1), 12. <https://doi.org/10.1186/1742-4755-8-12>
- Keita, M. O., & Moussa, T. H. (2015). مصطلحات الجندر، الصحة الإنجابية، الحقوق الإنجابية، حقوق الشركاء، والجنس الآمن: مفهومها وآثارها على مقصد حفظ النسل. مجلة مجمع, 7, Article 7. <http://ojs.medi.u.edu.my/index.php/majmaa/article/view/203>
- Khalil, I., Collison, M., El Bcheraoui, C., Charara, R., Moradi-Lakeh, M., Afshin, A., Chew, A., Daoud, F., Krohn, K. J., Colombara, D., Ehrenkranz, R., Kutz, M., Wang, H., Abajobir, A. A., Abd-Allah, F., Abraha, H. N., Abu-Raddad, L. J., Ahmad Kiadaliri, A., Ahmadi, A., ... GBD 2015 Eastern Mediterranean Region Maternal Mortality Collaborators. (2018). Maternal mortality and morbidity burden in the Eastern Mediterranean Region: Findings from the Global Burden of Disease 2015 study. *International Journal of Public Health*, *63*(1), 47–61. <https://doi.org/10.1007/s00038-017-1004-3>

- Kim, P., & Swain, J. E. (2007). Sad dads: Paternal postpartum depression. *Psychiatry (Edgmont (Pa.: Township))*, 4(2), 35–47.
- Kingsberg, S. A., Schaffir, J., Faught, B. M., Pinkerton, J. V., Parish, S. J., Iglesia, C. B., Gudeman, J., Krop, J., & Simon, J. A. (2019). Female Sexual Health: Barriers to Optimal Outcomes and a Roadmap for Improved Patient–Clinician Communications. *Journal of Women's Health*, 28(4), 432–443. <https://doi.org/10.1089/jwh.2018.7352>
- Koffi, T. B., Weidert, K., Ouro Bitasse, E., Mensah, M. A. E., Emina, J., Mensah, S., Bongiovanni, A., & Prata, N. (2018). Engaging Men in Family Planning: Perspectives From Married Men in Lomé, Togo. *Global Health: Science and Practice*, 6(2), 317–329. <https://doi.org/10.9745/GHSP-D-17-00471>
- Korra, A., & Haile, M. (1999). Sexual behavior and level of awareness on reproductive health among youths: evidence from Harar, Eastern Ethiopia. *Ethiop J Health Dev*, 13(2), 107-113.
- Kumar, N., & Singh, A. (2015). Trends of male factor infertility, an important cause of infertility: A review of literature. *Journal of Human Reproductive Sciences*, 8(4), 191. <https://doi.org/10.4103/0974-1208.170370>
- Kura, S., Vince, J., & Crouch-Chivers, P. (2013). Male involvement in sexual and reproductive health in the Mendi district, Southern Highlands province of Papua New Guinea: A descriptive study. *Reproductive Health*, 10(1), 1–10.
- Lal, S. S., Vasan, R. S., Sarma, P. S., & Thankappan, K. R. (2000). Knowledge and attitude of college students in Kerala towards HIV/AIDS, sexually transmitted diseases and sexuality. *Natl Med J India*. 2000;13:231–6. *National Medical Journal of India*, 13(5), 231–236.
- Lee, B. X., Kjaerulf, F., Turner, S., Cohen, L., Donnelly, P. D., Muggah, R., Davis, R., Realini, A., Kieselbach, B., MacGregor, L. S., Waller, I., Gordon, R., Moloney-Kitts, M., Lee, G., & Gilligan, J. (2016). Transforming Our World: Implementing the 2030 Agenda Through Sustainable Development Goal Indicators. *Journal of Public Health Policy*, 37(1), 13–31. <https://doi.org/10.1057/s41271-016-0002-7>
- Lee, J. Y., Knauer, H. A., Lee, S. J., MacEachern, M. P., & Garfield, C. F. (2018). Father-inclusive perinatal parent education programs: A systematic review. *Pediatrics*, 142(1).

- Li, X. F., Fortney, J. A., Kotelchuck, M., & Glover, L. H. (1996). The postpartum period: The key to maternal mortality. *International Journal of Gynecology & Obstetrics*, 54(1), 1–10.
- MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Recent Increases in the U.S. Maternal Mortality Rate: Disentangling Trends From Measurement Issues. *Obstetrics & Gynecology*, 128(3), 447–455. <https://doi.org/10.1097/AOG.0000000000001556>
- Mahmoud, R. A., & AH Ajeel, N. (2015). Reproductive health/family planning in Basrah: Evaluation of the knowledge, utilization & satisfaction of the service users. *The Medical Journal of Basrah University*, 33(1), 51–61.
- Manandhar, M., Hawkes, S., Buse, K., Nosrati, E., & Magar, V. (2018). Gender, health and the 2030 agenda for sustainable development. *Bulletin of the World Health Organization*, 96(9), 644–653. <https://doi.org/10.2471/BLT.18.211607>
- Manda-Taylor, L., Sealy, D. A., & Roberts, J. (2017). Factors associated with delayed antenatal care attendance in Malawi: Results from a qualitative study. *Medical Journal of Zambia*, 44(1), 17–25.
- Maqbool, M., Khan, M., Mohammad, M., Adesina, M. A., & Fekadu, G. (2019). Awareness about reproductive health in adolescents and youth: a review. *Journal of Applied Pharmaceutical Sciences and Research*, 1-5.
- Marks, J. L., Lam, C. B., & McHale, S. M. (2009). Family Patterns of Gender Role Attitudes. *Sex Roles*, 61(3–4), 221–234. <https://doi.org/10.1007/s11199-009-9619-3>
- Marphatia, A. A., Ambale, G. S., & Reid, A. M. (2017). Women’s Marriage Age Matters for Public Health: A Review of the Broader Health and Social Implications in South Asia. *Frontiers in Public Health*, 5, 269. <https://doi.org/10.3389/fpubh.2017.00269>
- Marrazzo, J. M., & Cates, W. (2011). Interventions to Prevent Sexually Transmitted Infections, Including HIV Infection. *Clinical Infectious Diseases*, 53(suppl 3), S64–S78. <https://doi.org/10.1093/cid/cir695>
- Maryland, R. (2017). *Demographic and Health Survey*. <https://dhsprogram.com/pubs/pdf/FR328/FR328>

- Mbizvo, M. T., & Bassett, M. T. (1996). Reproductive health and AIDS prevention in sub-Saharan Africa: the case for increased male participation. *Health policy and planning*, 11(1), 84-92.
- McMurray, M., Armstrong, M., & Paulson, J. (2018). Addressing the Increased Incidence of Common Sexually Transmitted Infections. *Journal of Osteopathic Medicine*, 118(8), e51–e55. <https://doi.org/10.7556/jaoa.2018.125>
- Meyer, E. (2015). Designing Women: The definition of woman in the convention on the elimination of all forms of discrimination against women. *Chi. J. Int'l L.*, 16, 553.
- MICS Iraq. (2011). *IRAQ \_ WOMEN INTEGRATED SOCIAL AND HEALTH (I-WISH)*. UNICEF Iraq. [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj5xb3qtYH8AhUBRvEDHScXDDUQFnoECAoQAQ&url=https%3A%2F%2Fmics.unicef.org%2Ffiles%3Fjob%3DW1siZiIsIjIwMTUvMDEvMjcvMTEvNTMvMjIvMzIvTUIDUzRfSXJhcV9MYXVuY2hfUHJlc2VudGF0aW9uLnBwdHgiXV0%26sha%3D4c5b52a0915e7e2c&usg=AOvVaw21C3o6Svh\\_PNAIPPcnkE5](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj5xb3qtYH8AhUBRvEDHScXDDUQFnoECAoQAQ&url=https%3A%2F%2Fmics.unicef.org%2Ffiles%3Fjob%3DW1siZiIsIjIwMTUvMDEvMjcvMTEvNTMvMjIvMzIvTUIDUzRfSXJhcV9MYXVuY2hfUHJlc2VudGF0aW9uLnBwdHgiXV0%26sha%3D4c5b52a0915e7e2c&usg=AOvVaw21C3o6Svh_PNAIPPcnkE5)
- MICS Iraq. (2018a). *IRAQ 2018 MICS DATASETS, SURVEY FINDINGS REPORT, AND SNAPSHOTS RELEASED - UNICEF MICS*. [https://mics.unicef.org/news\\_entries/125/IRAQ-2018-MICS-DATASETS,-SURVEY-FINDINGS-REPORT,-AND-SNAPSHOTS-RELEASED](https://mics.unicef.org/news_entries/125/IRAQ-2018-MICS-DATASETS,-SURVEY-FINDINGS-REPORT,-AND-SNAPSHOTS-RELEASED)
- MICS Iraq. (2018b). *Multiple Indicator Cluster Survey 2018*. Multiple Indicator Cluster Survey 2018. <https://mics.unicef.org/files?job=W1siZiIsIjIwMTkvMDMvMDEvMTkvMjMvMTgvNTg5L0VuZ2xpc2gucGRmIlld&sha=aea1de7cc6f6ec09>
- Mohammed, B. H., Johnston, J. M., Vackova, D., Hassen, S. M., & Yi, H. (2019). The role of male partner in utilization of maternal health care services in Ethiopia: A community-based couple study. *BMC Pregnancy and Childbirth*, 19(1), 28. <https://doi.org/10.1186/s12884-019-2176>
- MOH-Iraq. (2009). *Iraq Basic Health Services Kit—Google Search*. <https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/BASIC%20NEW%20arabic%20NEW>

- MOH-Iraq. (2020a). *A Trainer's Guide to the Orientation Program for Adolescent Health Care Providers in Iraq*.
- MOH-Iraq. (2020b). *Annual statistical report*. <https://moh.gov.iq/upload/1540>
- MOH-Iraq. (2021). *A guide to safe reproductive health for nurses and midwives*. Iraq/ Baghdad: Ministry of Health-Iraq.
- MOH-Iraq. (2022). *Public Health Department*. Reproductive Health and School Health. <http://www.phd.iq/>
- MOHP Nepal. (2012). *Nepal Demographic and Health Survey 2011*. <https://dhsprogram.com/pubs/pdf/fr257/fr257%5B13april2012%5D>
- Morland, L. A., Leskin, G. A., Rebecca Block, C., Campbell, J. C., & Friedman, M. J. (2008). Intimate Partner Violence and Miscarriage: Examination of the Role of Physical and Psychological Abuse and Posttraumatic Stress Disorder. *Journal of Interpersonal Violence*, 23(5), 652–669. <https://doi.org/10.1177/0886260507313533>
- Mullany, B. C. (2006). Barriers to and attitudes towards promoting husbands' involvement in maternal health in Katmandu, Nepal. *Social Science & Medicine*, 62(11), 2798–2809. <https://doi.org/10.1016/j.socscimed.2005.11.013>
- Nahar, M. Z., Zahangir, M. S., & Shafiqul Islam, S. M. (2013). Age at first marriage and its relation to fertility in Bangladesh. *Chinese Journal of Population Resources and Environment*, 11(3), 227–235. <https://doi.org/10.1080/10042857.2013.835539>
- Naik, D. D., Begum, S., Tapase, P., & Donta, B. (2016). Involving Men in Reproductive Health: Experiences in Slums of Mumbai.
- Nappi, R. E., & Kokot-Kierepa, M. (2010). Women's voices in the menopause: Results from an international survey on vaginal atrophy. *Maturitas*, 67(3), 233–238.
- Nasreddine, Z. A. (2018). *Gender discrimination and its relationship to deprivation of education*. *Al-Namaa Center for Human Rights* <https://alnamaa.org/wp-content/uploads/2020/08/%d8%a8%d8%ad%d8%ab-%d8%b2%d9%8a%d9%86%d8%a9-2>
- Natoli, L., Holmes, W., Chanlivong, N., Chan, G., & Toole, M. J. (2012). Promoting safer sexual practices among expectant fathers in the Lao People's Democratic

- Republic. *Global Public Health*, 7(3), 299–311.  
<https://doi.org/10.1080/17441692.2011.641987>
- NCERT. (2020, September 29). NCERT Solutions For Class 12 Biology Reproductive Health. *Learn CBSE*. <https://www.learncbse.in/ncert-solutions-for-class-12-biology-reproductive-health/>
- NIPORT/Bangladesh, N. I. of P. R. and T.-, Associates, M. and, & International, I. C. F. (2016). *Bangladesh Demographic and Health Survey 2014*.  
<https://dhsprogram.com/publications/publication-fr311-dhs-final-reports.cfm>
- Niccolai, L. M., Rowhani-Rahbar, A., Jenkins, H., Green, S., & Dunne, D. W. (2005). Condom effectiveness for prevention of Chlamydia trachomatis infection. *Sexually Transmitted Infections*, 81(4), 323–325.
- Obeid, R. Z., Salman, D. A., & Abdul Ameer Jaafar, Z. (2020). Maternal Mortality in an Iraqi Tertiary Hospital: Lessons From the Years of the Crisis. *International Journal of Women's Health and Reproduction Sciences*, 8(4), 362–367.  
<https://doi.org/10.15296/ijwhr.2020.58>
- OCHA. (2022, April 12). *Programs show importance of sharing household duties—World | ReliefWeb*. <https://reliefweb.int/report/world/programs-show-importance-sharing-household-duties>
- Palmer, C. A. (1999). Rapid appraisal of needs in reproductive health care in southern Sudan: Qualitative study. *BMJ*, 319(7212), 743–748.  
<https://doi.org/10.1136/bmj.319.7212.743>
- Paz-Bailey, G., Koumans, E. H., Sternberg, M., Pierce, A., Papp, J., Unger, E. R., Sawyer, M., Black, C. M., & Markowitz, L. E. (2005). The effect of correct and consistent condom use on chlamydial and gonococcal infection among urban adolescents. *Archives of Pediatrics & Adolescent Medicine*, 159(6), 536–542.
- Rahimi-Naghani, S., Merghati-Khoei, E., Shahbazi, M., Khalajabadi Farahani, F., Motamedi, M., Salehi, M., ... & Hajebi, A. (2016). Sexual and reproductive health knowledge among men and women aged 15 to 49 years in metropolitan Tehran. *The Journal of Sex Research*, 53(9), 1153-1164.
- Rakovec-Felser, Z. (2014). Domestic violence and abuse in intimate relationship from public health perspective. *Health Psychology Research*, 2(3).  
<https://doi.org/10.4081/hpr.2014.1821>

- Refugees, U. N. H. C. for. (2017). *Refworld | Report on Human Rights in Iraq: July to December 2017*. Refworld. <https://www.refworld.org/docid/5b6afc544>
- Ricci, S. S. (2013). *Essentials of maternity, newborn, & women's health nursing: Essentials of Maternity, Newborn, & Women's Health Nursing*.
- Ritter, T., Dore, A., & McGeechan, K. (2015). Contraceptive knowledge and attitudes among 14–24-year-olds in New South Wales, Australia. *Australian and New Zealand Journal of Public Health, 39*(3), 267–269.
- Robey, B., & Drennan, M. (1998). Male participation in reproductive health. *Network (Research Triangle Park, N.C.), 18*(3), 11–15.
- SADHS. (2016). *South African Demographic and Health Survey 2016: Key Indicator Report*. <https://dhsprogram.com/pubs/pdf/FR337/FR337>
- Sahu, D., Dutta, T., Kumar, S., Mishra, N. R., Neogi, S., Mondal, S., Dadhwal-Singh, A., & Levitt-Dayal, M. (2016). Effects of Women's Autonomy and Male Involvement on Reproductive and Child Health (RCH) Service Utilization in Uttar Pradesh. *Open Journal of Preventive Medicine, 6*(11), Article 11. <https://doi.org/10.4236/ojpm.2016.611024>
- Sanaati, F., Charandabi, S. M.-A., Eslamlo, H. F., & Mirghafourvand, M. (2018). A randomized controlled trial on the effect of lifestyle education for Iranian women and their husbands on post-partum anxiety and depression. *Health Education Research, 33*(5), 416–428. <https://doi.org/10.1093/her/cyy026>
- Santos, M. J., Ferreira, E., & Ferreira, M. (2016). Knowledge of and attitudes toward sexual and reproductive health among college students. *Atención Primaria, 48*, 188–194.
- Scarff, J. R. (2019). Postpartum Depression in Men. *Innovations in Clinical Neuroscience, 16*(5–6), 11–14.
- Sekirime, W. K., Tamale, J., Lule, J. C., & Wabwire-Mangen, F. (2001). Knowledge, attitude and practice about sexually transmitted diseases among university students in Kampala. *African Health Sciences, 1*(1), 16–22.
- Service, F. I. (2018, May 22). *Overview of the Satus of Women living without Safety Net in Iraq* (Iraq). [https://Migri.Fi/Documents/5202425/5914056/Report\\_Women\\_Iraq\\_Migri\\_CIS](https://Migri.Fi/Documents/5202425/5914056/Report_Women_Iraq_Migri_CIS)

[.Pdf/Ab7712ba-Bad7-4a1f-8c1ff3f4013428a7/Report\\_Women\\_Iraq\\_Migri\\_CIS  
https://www.ecoi.net/en/document/1442153](https://www.ecoi.net/en/document/1442153)

- Shah, P. S., & Shah, J. (2010). Maternal Exposure to Domestic Violence and Pregnancy and Birth Outcomes: A Systematic Review and Meta-Analyses. *Journal of Women's Health, 19*(11), 2017–2031. <https://doi.org/10.1089/jwh.2010.2051>
- Shahjahan, M., Mumu, S. J., Afroz, A., Chowdhury, H. A., Kabir, R., & Ahmed, K. (2013). Determinants of male participation in reproductive healthcare services: A cross-sectional study. *Reproductive Health, 10*(1), 1–6.
- Sharma, S., Kc, B., & Khatri, A. (2018). Factors influencing male participation in reproductive health: a qualitative study. *Journal of multidisciplinary healthcare, 601-608*.
- Singh, M. M., Devi, R., & Gupta, S. S. (1999). Awareness and health seeking behaviour of rural adolescent school girls on menstrual and reproductive health problems. *Indian Journal of Medical Sciences, 53*(10), 439-443.
- SRHR. (2019, May 2). *We love SRHR*. <https://web.archive.org/web/20190502051537/https://inspire-partnership.org/we-love-srhr.html>
- Strong, J. (2022). Men's involvement in women's abortion-related care: A scoping review of evidence from low- and middle-income countries. *Sexual and Reproductive Health Matters, 30*(1), 2040774. <https://doi.org/10.1080/26410397.2022.2040774>
- Suleiman, E. (2021). *The rule of marital rape in Islam .. Al-Azhar clarifies—Egypt—Al-Watan*. <https://www.elwatannews.com/news/details/5543185>
- Svevo-Cianci, K. A., Herczog, M., Krappmann, L., & Cook, P. (2011). The new UN CRC General Comment 13:“The right of the child to freedom from all forms of violence”Changing how the world conceptualizes child protection. *Child Abuse & Neglect, 35*(12), 979–989.
- Şimşek, H. (2011). Toplumsal Cinsiyet Eşitsizliğinin Kadın Üreme Sağlığına Etkisi: Türkiye Örneği,. *Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi, 25*(2), Article 2.
- T.C. SAĞLIK BAKANLIĞI. (2013). *Evlilik öncesi kontroller, evlilik öncesi kontroller* . <https://www.google.com/Url?Sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj68nUxvP5AhVrSfEDHVCHBLEQFnoECCIQAQ&url=https%3>

[A%2F%2Fkaramanism.Saglik.Gov.Tr%2FEklenti%2F10503%2F0%2Fevlilik-Oncesi-Muayene-ve-Danismanlik-](#)

[Rehberipdf.Pdf&usg=AOvVaw0nQ1VhdEpmh\\_n5cPIykcOO](#) .

Taskin, L. (2016). *Dogum ve kadin sagligi hemsireligi*. Sistem Ofset.

UN. (2016). *United Nations General Assembly Economic and Social Council*. 2016. [https://ggim.un.org/documents/E\\_Res\\_2016-27\\_en](https://ggim.un.org/documents/E_Res_2016-27_en)

UNFPA Iraq. (2016, March 7). *Reproductive Health*. UNFPA Iraq. <https://iraq.unfpa.org/ar/topics/%D8%A7%D9%84%D8%B5%D8%AD%D8%A9-%D8%A7%D9%84%D8%A5%D9%86%D8%AC%D8%A7%D8%A8%D9%8A%D8%A9>

UNFPA Iraq. [https://iraq.unfpa.org/sites/default/files/resource-pdf/iwish\\_summary\\_report\\_final\\_june2022.pdf](https://iraq.unfpa.org/sites/default/files/resource-pdf/iwish_summary_report_final_june2022.pdf)[https://iraq.unfpa.org/sites/default/files/resource/iwish\\_summary\\_report\\_final\\_june2022.pdf](https://iraq.unfpa.org/sites/default/files/resource/iwish_summary_report_final_june2022.pdf)[https://iraq.unfpa.org/sites/default/files/resource-pdf/iwish\\_summary\\_report\\_-\\_final\\_june2022](https://iraq.unfpa.org/sites/default/files/resource-pdf/iwish_summary_report_-_final_june2022)

UNFPA. (2019). *Explainer: What is the ICPD and why does it matter?* - World | ReliefWeb. <https://reliefweb.int/report/world/explainer-what-icpd-and-why-does-it-matter>

UNFPA. (2022a). *Sexual & reproductive health*. United Nations Population Fund. <https://www.unfpa.org/sexual-reproductive-health#readmore-expand>

UNFPA. (2022b, December 9). *Germany provides 7 million euros in life-saving support for women and girls amid soaring humanitarian needs—World | ReliefWeb*. <https://www.unfpa.org/updates/germany-provides-7-million-for-life-saving-humanitarian-support>

UNFPAIraq. (2018). *Reproductive Health Humanitarian Response in Iraq—2018 -2019*. 1.

UNHCR-Iraq. (2019). *International Protection Considerations with Regard to People Fleeing the Republic of Iraq*. <https://www.refworld.org/pdfid/5cc9b20c4>

UN-HRC. (2020, May). *WOMEN'S HUMAN RIGHTS VIOLATIONS IN IRAQ* [https://tbinternet.ohchr.org/Treaties/CESCR/Shared%20Documents/IRQ/INT\\_CESCR\\_CSS\\_IRQ\\_21592\\_E](https://tbinternet.ohchr.org/Treaties/CESCR/Shared%20Documents/IRQ/INT_CESCR_CSS_IRQ_21592_E)

- UNICEF. (2019). *Iraq Humanitarian Situation Report -2019*.  
<https://www.unicef.org/iraq/reports/iraq-humanitarian-situation-report-2019>
- USAID-Iraq. (2013). *Antenatal and Postnatal Care Work Guide—Google Search*.  
<http://phd.iq/LionImages/PDFStore/ANC%20GL>
- Vargas, G., Borus, J., & Charlton, B. M. (2017). Teenage pregnancy prevention: The role of young men. *Current Opinion in Pediatrics*, 29(4), 393–398.  
<https://doi.org/10.1097/MOP.0000000000000510>
- Wegner, M. N., Landry, E., Wilkinson, D., & Tzanis, J. (1998). Men as Partners in Reproductive Health: From Issues to Action. *International Family Planning Perspectives*, 24(1), 38–42. <https://doi.org/10.2307/2991918>
- Wentzell, E. A., & Inhorn, M. C. (2014). Reconceiving masculinity and ‘men as partners’ for ICPD Beyond 2014: Insights from a Mexican HPV study. *Global Public Health*, 9(6), 691–705. <https://doi.org/10.1080/17441692.2014.917690>
- Whiteman, S. D., & Loken, E. (2006). Comparing analytic techniques to classify dyadic relationships: An example using siblings. *Journal of Marriage and Family*, 68(5), 1370–1382.
- WHO. (2004). *Reproductive health: Report by the Secretariat (A57/13)*. World Health Organization. <https://apps.who.int/iris/handle/10665/20089>
- WHO. (2005). *Decision-making tool for family planning clients and providers: A WHO Family Planning Cornerstone*. WHO.
- WHO. (2006). *Orientation programme on adolescent health for health-care providers*. <https://www.who.int/publications-detail-redirect/9241591269>
- WHO. (2012). *Making health services adolescent friendly: Developing national quality standards for adolescent friendly health services*.
- WHO. (2015). *Core competencies in adolescent health and development for primary care providers*. <https://www.who.int/publications-detail-redirect/9789241508315>
- WHO. (2017). *Sexual health and its linkages to reproductive health: An operational approach*.
- WHO. (2019, May 22). *WHO | Maternal mortality ratio (per 100 000 live births)*. <https://web.archive.org/web/20190522222042/https://www.who.int/healthinfo/statistics/indmaternalmortality/en/>

- WHO. (2021). *Reproductive health*. WHO. <https://www.who.int/westernpacific/health-topics/reproductive-health>
- WHO. (2022). *Family planning data*. <https://platform.who.int/data/sexual-and-reproductive-health-and-rights/srh/family-planning>
- Wiggins, N., Vance, S., Ranjith, A., & bin'Abdullah, A. (2017). *Striving to Reduce Youth Violence Everywhere (STRYVE) Final Evaluation Report*. <http://qualitylifeblueprint.org/documents/stryve-evaluation-report>
- Wilkinson, D. (1997). Man-myths: Some perceptions from Kenya: Reproductive health attitudes and behaviour in three sublocations. *Unpublished Paper*. AVSC International, New York.
- Yaya, S., Okonofua, F., Ntoimo, L., Udenigwe, O., & Bishwajit, G. (2019). Men's perception of barriers to women's use and access of skilled pregnancy care in rural Nigeria: A qualitative study. *Reproductive Health*, 16(1), 86. <https://doi.org/10.1186/s12978-019-0752-3>
- Yip, P. S., Zhang, H., Lam, T.-H., Lam, K. F., Lee, A. M., Chan, J., & Fan, S. (2013). Sex knowledge, attitudes, and high-risk sexual behaviors among unmarried youth in Hong Kong. *BMC Public Health*, 13(1), 691. <https://doi.org/10.1186/1471-2458-13-691>
- Zavales, A. (1996). Genital mutilation & the United Nations: Male and female circumcision, human rights & the restoration of spiritual integrity & freedom. *Fourth International Symposium on Sexual Mutilations, University of Lausanne, Lausanne, Switzerland*.
- Zeng, J., Zou, G., Song, X., & Ling, L. (2015). Contraceptive practices and induced abortions status among internal migrant women in Guangzhou, China: A cross-sectional study. *BMC Public Health*, 15(1), 552. <https://doi.org/10.1186/s12889-015-1903-2>

## **APPENDICES**

### **APPENDIX 1. Ethics committee approval**



## APPENDIX 2. Men's Questionnaire



**7. Have you ever heard of reproductive health?**

No Yes

If your answer is yes, what is your information? (Check every piece of information you know)

- Knowledge and information about pre-marital examinations.
- Knowledge and information about the care of pregnant women and the services and programs provided for maternal and child care.
- Knowledge and information about the justifications for abortion
- Men's and women's knowledge and information about birth control methods.
- Knowledge and information about sexually transmitted diseases and HIV (AIDS).
- Knowledge and information about domestic violence of all kinds (verbal, psychological, physical, sexual).

**8. Are you encouraged to hold courses to educate young people's involvement in reproductive health issues?**

No Yes

**9. Do you think that Iraqi society motivates men to join reproductive health issues?**

No Yes

**10. Do you know the signs of puberty in a female?**

No Yes

**What is the source of your information? if the answer is yes in point (10)**

- The school
- Internet
- Books, newspapers and magazines.
- Friends and neighbors
- Family
- TV and radio

**11. What is the Educational level of your wife?**

- Illiterate does not know how to read and write
- knows how to read and write
- Primary School
- Intermediate School
- Highschool
- Diploma or Bachelor's degree or higher

**12. Working condition of your wife**

- Housewife
- Governmental work
- Private job
- Retired
- Freelance work
- Other

**13. Do you encourage early marriage?**

No Yes

**14. Does the age difference between your wife and you is less than ten years?**

No Yes

**15. Do you have children?**

No Yes

**16. Do you currently using any of family planning ways?**

No Yes

**17. Do you help your wife in housework?**

No Yes

**18. Do you go with your wife for periodic reviews during pregnancy and after childbirth?**

No Yes

**Below are some data on reproductive health issues. Please express your opinion on these expressions by choosing the appropriate ones**

State	Strongly Agree	Agree	I cannot decide	disagree	Strongly disagree
Women suffer from reproductive health more than men					
Men and women must find solutions to reproductive health problems					
It is easier to treat reproductive health problems for men than for woman					
Only a man has the right to determine the number of children in a family					
Men are able to use family planning ways					
Encouraging men's participation in the using of family planning ways to take responsibility for their sexual behavior					
Sexually transmitted diseases and AIDS are more common among women than men					
It is necessary to take the necessary precautions to protect against sexually transmitted infectious agents					
The husband feels responsible when he prevents his partner from getting pregnant in a certain way					
Both women and men need a counseling center on reproductive health issues					
Women care more about reproductive health than men					
The man must be with the woman in cases of childbirth and abortion					
Women should go without their husbands for periodic examinations during pregnancy					
Taking care of children in all situations and circumstances should be the responsibility of the woman					
The spouses bear responsibility in cases such as pregnancy, childbirth, miscarriage, postpartum, etc.					
The position of women in society should be lower than that of men					
Violence against women is high in Iraqi society					
It is the responsibility of men to protect women from violence					
When a woman suffers from postpartum depression, a man must help her in treatment					

### **APPENDIX 3. Women's questionnaire**







**APPENDIX 4. Iraq Ethics Committee Approval-1**



**APPENDIX 5. Iraq Ethics Committee Approval-2**



**APPENDIX 6.** Stylistics and linguistics (grammar and spelling) document.



**APPENDIX 7.** Expert's Panel, the jury members arranged according to their alphabetically.



## **CURRICULUM VITAE**

### **Personal KNOWLEDGE**

Name and Surname : Muna ABDULWAHID OMAR AL- GBURI

