Winter 2012

Intimate Partner Physical Violence Against Women in Saudi Arabian Primary Healthcare Clinics

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INTIMATE PARTNER PHYSICAL VIOLENCE AGAINST WOMEN IN SAUDI ARABIAN PRIMARY HEALTHCARE CLINICS

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A Dissertation Submitted to the Faculty of

Old Dominion University in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

HEALTH SERVICES RESEARCH

OLD DOMINION UNIVERSITY

December 2012

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ABSTRACT

INTIMATE PARTNER PHYSICAL VIOLENCE AGAINST WOMEN IN SAUDI ARABIAN PRIMARY HEALTHCARE CLINICS

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Intimate partner violence against women (IPPVAW) is a serious public health concern. The Ecological Model provides a model to study several factors associated with IPPVAW. In Saudi Arabia, studies addressing IPPVAW are limited and do not cover the various aspects of the problem. The purpose of this study was to investigate the various factors associated with IPPVAW at the personal, interpersonal, community and societal levels. **Methods:** 200 ever-married women attending six PHC in Jeddah, Saudi Arabia were recruited via convenient sampling method. Women were interviewed on factors related to IPPVAW using an adapted version of WHO survey for violence against women. **Results:** 45% of women were subjected to IPPVAW and 18.5% reported IPPVAW-related injuries. Alcohol and Drug use by Husbands were significant personal factors associated with IPPVAW ($p \leq 0.001$). Marital conflict and male dominance were significantly associated with IPPVAW at the interpersonal level factors ($p \leq 0.001$). Husband's employment and involvement in physical fights with other men were significant community-related factors associated with IPPVAW ($p \leq 0.05$). Most women did not disclose the real cause of IPPVAW-related injuries to healthcare professionals. **Conclusion**: factors related to husband's gender attitude require further elucidation. PHC services may benefit from screening women for IPPVAW for better management of cases.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Intimate partner physical violence against women (IPPVAW) is a serious public health problem. Population surveys from several countries have shown that about 10% to 69% of women are physically assaulted by an intimate partner at some point in their lives (Krug, Mercy, Dahlberg, & Zwi, 2002). Historically, physical violence was first suggested in 1949 as the primary etiology for of diagnosed injuries in an attempt to guide the development of prevention strategies (Gordon, 1949). In 1962, Gomez used the definition of World Health Organization (WHO) of health as "the complete state of well-being and not merely the absence of diseases or infirmity" to frame violence within the context of public health and not merely a legal, social, or political matter (Gomez, 1962). Soon thereafter, feminists' efforts contributed significantly to increased research efforts (Haj-Yahia, 1997; Mays, 2006; Starus, Gelles, & Steinmetz, 1980). These early efforts were mainly directed at the needs of victims, with many fewer interventions directed at perpetrators (Dobash & Dobash, 2011). Two major surveys on family violence, National Family Surveys of 1975 and 1985, brought to light the high prevalence and frequency of violent acts among U.S. families (Rhatigan, Moore, & Street, 2005). Data from the 2005 U.S. Behavioral Risk Factor Surveillance System (BRFSS), a national telephone survey, was used to calculate the prevalence of IPPVAW in 18 US states. The lifetime prevalence rate of IPPVAW was 20.2% (Breiding, Black, & Ryan, 2008). In the US, women of all ages reported between 25 and 30% ever being physically assaulted by an intimate partner (Campbell, 2002).

The scope of negative health consequences associated with IPPVAW include; physical injuries, risky health behaviors, functional disorders, reproductive health disorders, mental and psychological disorders, and fatal outcomes such as suicide and maternal mortality (Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Plichta, 2004). Adverse health outcomes are broad and variable (see Table 1). They range from temporary or direct effects to long term or indirect effects developing over a longer period of time. Violence increases future risk for illness (Heise, Ellsberg, & Gottmoeller, 2002). The effects of violence manifest as poor overall health status, poor quality of life, and high utilization of healthcare services (Campbell, 2002).

Women injured by intimate partners are more likely to be beaten in the head, neck, face, thorax, breasts, and abdomen than women injured by other means (Grisso, Schwarz, & Hirschinger, 1999). In one of the largest surveys of population health in the United States (U.S.), women who reported physical or sexual abuse by intimate partners were 80% more likely to have a stroke, 70% more likely to have a heart disease, 60% more likely to have asthma, and 70% more likely to have drinking problems than women who have not experienced intimate partner violence (CDC, 2008). Mortality for women who report physical violence is alarmingly high in industrialized countries, reaching 40% to 60% of total femicides (i.e. murder of women) (Plichta, 2004).

Table 1

The Adverse Health Outcomes of IPPVAW

Fatal outcomes	
	Homicide
	Suicide
	Maternal mortality
	AIDS-Related
Non-Fatal outcomes on physical health	
Physical health	
	Injury
	Functional impairment
	Physical symptoms
	Poor subjective health
	Permanent disability
	Severe obesity
Chronic conditions	
	Chronic pain syndrome
	Irritable bowel syndrome
	Gastrointestinal disorders
	Somatic complaints
	Fibromyalgia
Mental health	
	Post-traumatic stress syndrome
	Depression
	Anxiety
	Phobias/ panic disorders
	Eating disorders
	Sexual dysfunction
	Low Self-esteem
	Substance abuse
Negative health behaviors	
	Smoking
	Alcohol and drug abuse
	Sexual risk-taking
	Physical inactivity
	Overeating
Reproductive health	
	Unwanted pregnancy
	STIs/ HIV
	Gynecological disorders
	Unsafe abortion
	Pregnancy complications
	Miscarriage/ low birth weight
	Pelvic inflammatory diseases

Note. Adopted from "Researching Violence Against Women: A Practical Guide For Researchers and Activists", by M. Ellsberg & L. Heise, 2005, World Health Organization, P.29.

However, intimate partner physical violence against women is not solely a U.S. or even a Western problem. IPPVAW is a global problem even though surveillance and monitoring may not be as widespread in less industrialized countries (Campbell, 2002). WHO asserts that IPPVAW "occurs in all countries, irrespective of social, economic, religious or cultural group" (Krug et al., 2002). Although both men and women may be victims of as well as perpetrators of violence, women most often bear the burden of IPV (Catalano, Smith, Snyder, & Rand, 2009). Approximately 65% of victims murdered by intimate partners are women (Fox & Zawitz, 2006). Homicide that occurs during battering is a leading cause of death for pregnant women (Chang, Berg, Saltzman, & Herndon, 2005). Violence against pregnant women impacts maternal mortality rates in a range of countries including Bangladesh, India, and the United States (Garcia-Moreno, Heise, Jansen, Ellsberg, & Watts, 2005). Frequently, physical violence is the result of gender inequity and gender disparities that result in relationship power differentials (Germain, 2008; Nagae & Dancy, 2010).

A resolution was adopted by the United Nations Assembly of Health Ministers, first placed the issue of violence against women, on the global health agenda in 1995 (WHO, 1996). Eventually, the concerted efforts of advocacy groups were successful in raising awareness, establishing shelters, and enacting legal reforms to protect women (Heise et al., 2002). There has been an approximately 550% increase in publications on violence and its related health consequences since the 1970's (Krug et al., 2002).

However, the extensive body of research in the past three decades did not improve the global impact of IPPVAW. Research results were inconsistent due to lack of standardization of measures and definitions used (Rhatigan et al., 2005). Researchers face several methodological and ethical challenges. For example, to date violence against women has no universally accepted definition, due to the complex and subjective nature of what constitutes violent acts across different cultures and situations. Researchers have also used inconsistent terms to describe variable acts of violence (Galavotti, Saltzman, Sauter, & Sumatojo, 1997). A uniform definition is essential for successful monitoring of incidence and prevalence trends over time and across different communities (Saltzman, Fanslow, McMahon, & Shelly, 1999). The term "violence against women: VAW" is used comprehensively to describe a range of violent acts, including rape, murder, sexual assault, emotional abuse, battering, stalking, prostitution, genital mutilation, sexual harassment, and pornography (Crowell & Burgess, 1996). This broad definition may not be practical for monitoring specific acts or gaining information about certain types of violence.

On the other hand, the scarcity of nationally-representative studies impedes the generalization of information from women with different ethnicities, cultures, and nationalities. Inconsistencies in prevalence rates are common due to different conceptualization and measurement of violence (Ellsberg & Heise, 2005). Two notable studies have standardized methodology and definitions used across ten countries to minimize errors in assessment: the WHO multi-countries study and the USAID study of Intimate Partner Violence among Couples in 10

DHS Countries. Prevalence rates of IPPVAW in the WHO study ranged from 4% in Japan city to 49% in Peru province among ever-partnered women, most other sites had prevalence rates between 23% and 49% (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005). In the DHS study, rates of IPPVAW ranged from 15% in Dominican Republic to 71% in Bangladesh (Hindin, Kishor, & Ansara, 2008). The wide variation in the prevalence rates indicates the significance of establishing correlates of IPPVAW across different populations. Most importantly, the variation suggests that IPPVAW is a modifiable and preventable phenomenon.

Intimate partner violence against women affects many aspects of women's health and increase women's risk for future illness (Campbell, 2002; Devries et al., 2010; Rivara et al., 2007). The impact of IPPVAW on health outcomes is quite significant (Plichta, 2004). Historically, the health sector response has been slow compared to other sectors. Health science schools and universities rarely offer education on the topic. Consequently, health care professionals often fail to properly respond to victims of violence (Bott, Morrsion, & Ellsberg, 2005; Tufts, Clements, & Karlowicz, 2009). Nonetheless, health professionals are well suited to help victims of violence by providing proper treatment, offering counseling, documenting injuries and referring their clients to legal and social services (Heise et al., 2002). Hitherto, the lack of standardization of monitoring and assessment of IPPVAW has not provided the comprehensive and scientifically-sound evidence-base that health professionals require before integrating new knowledge

into practice standards. This is particularly true of the state of the science regarding IPPVAW in the Eastern Mediterranean region of the world.

Problem Statement

In the Eastern Mediterranean region, studies addressing IPPVAW have revealed prevalence rates of physical violence ranging between 13% and 52% (Boy & Kulczycki, 2008). Prevalence rates of IPPVAW were found to be 34.4% in Egypt, 23% in Syria, 52% in Palestine, and 22% in Lebanon (El-Zanaty, Hussein, Shawky, Way, & Kishor, 1996; Haj-Yahia, 1999; Khawaja & Twetel-Salem, 2004; Maziak & Asfar, 2003).

In the Eastern Mediterranean region and particularly in Arabic culture, both universal and culture-specific factors may subject women to serious risk for IPPVAW. Gender inequality in laws and regulations, divorce restrictions, and the nature of a patriarchal society increase the risk for violence (Douki, Nacef, Belhadj, Bousaker, & Ghachem, 2003). IPPVAW is largely viewed as a private family matter. Women are deferred from reporting abuse to healthcare professionals or legal authorities due to the social importance given to maintaining marital links (Douki, Nacef, & Halbreich, 2007). Healthcare professionals often fail to detect and document abuse. Reports of victims of abuse are often denied, minimized, interpreted as delusional or ignored (Douki, et al., 2007). The Pan Arab Project for Family Health (PAPFAM) is a six country survey of households on family health, that collected demographic and health information from Morocco, Algeria, Tunisia, Lebanon, Syria, and the Occupied

Palestinian Territories (OPT). Only 4% of surveyed women in the PAPFAM survey chose to file a complaint and ask for a divorce because of IPPVAW (PAPFAM, 2001).

Information on the prevalence of IPPVAW in Saudi Arabia and the subsequent impact of violence on health outcome is limited. The few published studies used different definitions of violence and methodologies, yielding inconsistent and incomparable results (Afifi, Al-Muhaideb, Hadish, Ismail, & Al-Qeamy, 2011; Rachana, Suraiya, Hisham, Abdulaziz, & Hai, 2002; Tashkandi & Rasheed, 2009). A cross-sectional study conducted at primary healthcare clinics (PHC's) in Medina city in Saudi Arabia reported a prevalence rate of IPPVAW of 25.7%. Severe incidents were reported by 63% of the studied women (Tashkandi & Rasheed, 2009). A longitudinal study documented IPPVAW in 21% of pregnant Saudi women who participated (N=7557). Women who reported IPPVAW were at higher risk for abruptio-placenta, fetal distress, and preterm birth when compared to those who did not report IPPVAW (Rachana et al., 2002).

The Saudi public sector response has been quite recent. A family protection program was established in 2004 under the auspices of the Ministry of Social Affairs (Al-Eissa & Almuneef, 2010). This physician initiated program was instituted for purposes of providing protection to victims of domestic violence who were encountered in a health care setting. Additional goals of the new program were to increase societal awareness of violence prevention and to conduct research on violence related topics. The organization took the approach of focusing on reconciliation between involved parties, social and psychological

rehabilitation of abused individuals, and providing shelters for victims. In 2009, the Ministry of Social Affairs announced the establishment of a national registry for violence cases. No statistics has been released on the prevalence of violence due to lack of coordination between reporting agencies and the national registry (Al-Eissa & Almuneef, 2010).

The National Society for Human Rights (NSHR) in Saudi Arabia reported that emotional and physical abuse were the most common type of domestic violence complaints received by the society in 2011 (NSHR, 2011). Violence against women represented 84% of the domestic violence cases. Husbands were listed as perpetrators in 38% of cases. Approximately, 70% of cases were due to physical and emotional violence (NSHR, 2011). However, with many other reporting agencies and inadequate documentation and coordination, such data remain approximate.

In Saudi Arabia, women's tendency to stay in abusive relationships is mainly in rooted cultural and legislative barriers. An association has been found between frequency of wife beatings and having traditional attitudes among men and women (Haj-Yahia, 1998a, and 1998b). In Saudi society, women are required to be represented/ accompanied by male guardians to access most services and resources (Deif, 2008). Mobaraki and Söderfeldt (2007) have documented the adverse influence of gender inequality on women's health and wellbeing in Saudi Arabia. Women in abusive relationships often hesitate to seek help for fear of social stigma and lack of effective interventions. Consequently, the problem is under-reported. For instance, the number of cases of domestic violence against

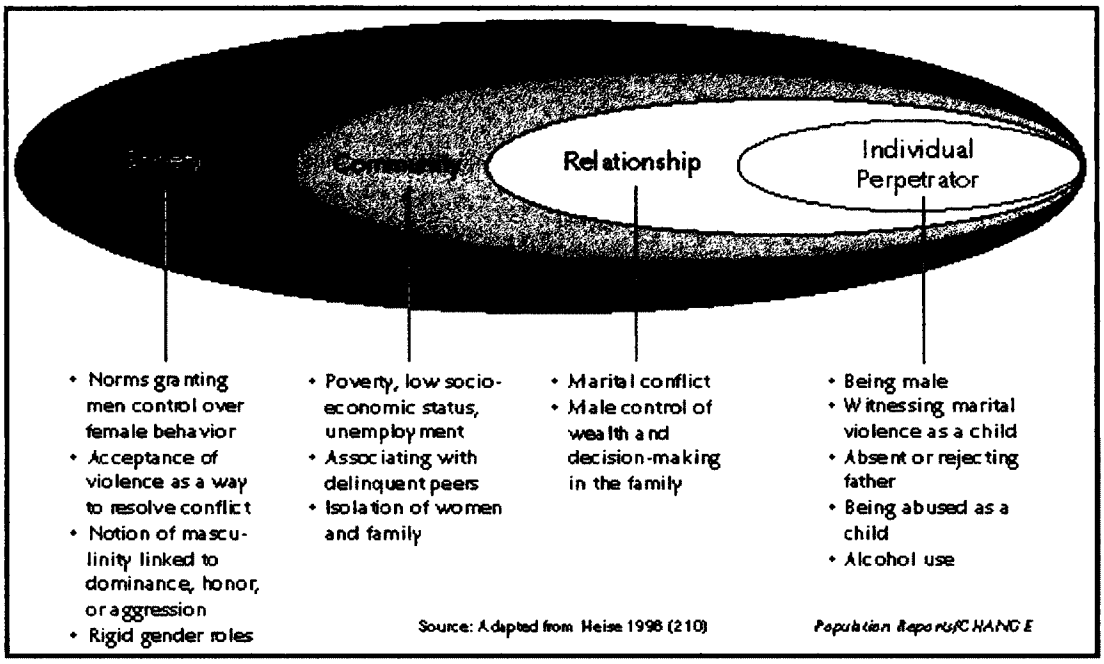
women reported by the Ministry of Social Affairs in 2010 was only 979 cases across all 13 administrative regions of Saudi Arabia (Albalahidi, 2011).

Introduction of Theoretical Framework

The roots of violence are embedded in personal, interpersonal, cultural, and legislative factors (Belsky, 1980). Therefore, the ecological model serves as a suitable structure for studying IPPVAW (Heise, 1998). The model allows for the examination and the interaction of a number of factors from different levels under the same framework. Belsky (1980) first introduced the model to organize various research findings on child abuse and neglect. The model was utilized in a variety of studies, including educational technology (Bruce & Hogan, 1998), health behavior (Sallis, Owen, & Fisher, 2008), and the social studies of dysfunctional families (Caldwell & Darling, 1999). Heise then adopted the model for the study of intimate partner violence against women (Belsky, 1980; Heise, 1998) (see Figure 1). The model highlights personal, interpersonal, community, and societal factors which represent risk for IPPVAW.

The development of effective interventions for addressing IPPVAW requires exploring multidimensional factors that may contribute to IPPVAW or protect women from IPPVAW within the context of Saudi culture. The problem is difficult to assess in the Saudi culture where women rely on male guardians or husbands for community and legal representation and aren't often in public places by themselves. However, most women visit healthcare facilities at some point in their lives for medical attention for themselves or for their children.

Figure 1. Factors affecting women's risk for intimate partner violence within the Ecological Model.



Note. Adapted from "Violence against Women: An Integrated, Ecological Framework," by L. L. Heise, 1998, *Violence against Women,* 4, p.265.

Therefore, the healthcare setting may be an ideal place to identify women who have experienced IPPVAW and for referring them to suitable services (Alper, Ergin, Selimoglu, & Bilgel, 2005; Davidson, Grisso, Garcia-Moreno, King, & Marchant, 2001; Tufts, Clements, & Karlowicz, 2009; Wilson, Silberberg, Brown, & Yaggy, 2007).

Significance of the Study

To date, very little has been done to assess risk and protective factors for IPPVAW among Saudi women. Most studies of intimate partner violence have

been conducted in Westernized settings (i.e. Canada, United States, and Western Europe) (Alhabib, Nur, & Jones, 2010). The current study adds to the literature by expanding the limited knowledge base about IPPVAW in Arabic countries. Identifying the variables associated with IPPVAW in the context of an Arabic culture can inform public policy. It may also inform the design of appropriate public health strategies and protocols for prevention of and intervention with IPPVAW in Saudi primary healthcare settings.

Purpose of the Study

Therefore, the purpose of the study was to explore the association between IPPVAW and personal, interpersonal, community, and societal factors as reported by Saudi women in health care settings. The secondary aim was to explore the frequency of perceived adverse health outcomes and IPPVAW-related injuries in those Saudi women who reported physical violence as compared to those who did not report it.

For the purposes of this study, the following conceptual definitions were used:

Intimate partner. Intimate partner has been defined as any current or former intimate partner of the same or opposite sex (Saltzman, 2004). For purpose of this study, intimate partner referred to any current or previous husbands of the participating women, because intimate relationships customarily occur within the context of marriage in Saudi Arabia.

Intimate partner physical violence against women (IPPVAW). The definition of intimate partner physical violence used in this study was based on

the definition used by the WHO multi-country study. Intimate partner physical violence referred to a range of physically coercive or violent acts used against adult and adolescent women by current or former husbands (Ellsberg & Heise, 2005).

A working definition of IPPVAW classifies violence as moderate or severe based on the likelihood of a violent act causing physical injury. This definition has been used in several international studies to enable comparison of data across countries (Ellsberg, Heise, Peña, Agurto, & Winkvist, 2001):

A moderate physical violence is identified if the victim:

- Was slapped, or had something thrown at her that could hurt her
- Was pushed or shoved or pulled by hair

A severe physical violence is identified if the victim:

- Was hit with a fist or something else that could hurt her
- Was kicked, dragged, or beaten up
- Was choked or burnt on purpose

Patriarchy. The term consists of two elements: structure and ideology (Dobash & Dobash, 1979). The structural element refers to the hierarchical organization of social institutions and social relations that maintain the authority and advantages of the few by depending on the acceptance of such values by the many. In the family, patriarchal ideology refers to the relative inferiority of women compared with men, reflected in values, beliefs, and norms which justify male dominance in all social spheres (Yllo & Straus, 1990).

Guardian. A guardian is a close male-relative, usually a father or husband. This could also include any other male-relative, whom it would be unacceptable for the woman to marry (Deif, 2008).

Eastern Mediterranean region. Eastern Mediterranean region is a WHO term that encompasses 22 countries that share similar cultural and geographic characteristics. The countries are located across two continents: West Asia and North and East of Africa. The list of countries include: Afghanistan, Iran, Pakistan, Iraq, Jordan, Lebanon, Syria, Kuwait, Qatar, Bahrain, Saudi Arabia, Oman, United Arab Emirates (UAE), Yemen, Egypt, Libya, Tunisia, Morocco, Sudan, South Sudan, Dijbouti, and Somalia. The regional office for the Eastern Mediterranean region has the required information (http://www.emro.who.int/).

Research Questions

The research questions were:

1. Is there an association between personal factors (woman's history of childhood abuse, husband's history of childhood abuse, woman witnessing marital violence as a child, husband witnessing marital violence as a child, husband's alcohol use, and husband's drug use) and reported IPPVAW in Saudi women?

2. Is there an association between interpersonal factors (marital conflicts, male dominance, polygamous marriages, and husband's involvement in physical fights with other men) and reported IPPVAW in Saudi women?

3. Is there an association between community-related factors (employment status of women, employment status of husband, woman's educational level, husband's educational level, and social isolation of women) and reported IPPVAW in Saudi women?

4. Is there an association between societal-related factors (acceptance of physical chastisement of wives and gender attitudes) and reported IPPVAW in Saudi women?

5. Which factors are most predictive of risk for IPPVAW in Saudi women?

6. Which factors are most predictive of decreased risk for IPPVAW in Saudi women?

7. Is there an association between IPPVAW and reported adverse health outcomes?

CHAPTER II

LITERATURE REVIEW

Intimate partner violence against women (IPPVAW) is prevalent in the Eastern Mediterranean region. Surveys and research conducted showed that almost one out of every three women is beaten by her husband (Douki et al., 2007). The World Health Organization (WHO) report on Violence and Health listed three regional studies on IPPVAW. Studies showed prevalence rates between 16% and 52%, compared with 1.3% to 12% in Europe and North America (Krug et al., 2002).

Table 2 lists selected studies on IPPVAW conducted in the Eastern Mediterranean region. In Egypt, Diop-Sidibe', et al. (2006) analyzed the DHS data of 6566 women and found that 34% had been beaten by their husbands (Diop-Sidibe, Campbell, & Becker, 2006). Other Egyptian studies have documented similar but variable prevalence rates for IPPVAW between 11-34% (Akmatov, Mikolajczyk, Labeeb, Dhaher, & Khan, 2008; Bakr & Ismail, 2005; Fahmy & Abd, 2008; Habib, Abdel Azim, Fawzy, Kamal, & El Sherbini, 2011, 2011; Ramiro, Hassan, Peedicayil, 2004).

In Jordan, Clark, et al. (2009) conducted a cross-sectional survey of 517 reproductive clinics attendees. IPPVAW was found in 31.2% of women (Clark, Bloom, Hill, & Silverman, 2009). Clark, et al. conducted another study of 390 pregnant Jordanian women and found IPPVAW in 15% of cases (Clark, Hill, Jabbar, & Silverman, 2009). A study of 351 Palestinian pregnant women in a Lebanese refugee camp found 59% of women reported physical and/or emotional abuse and 11.4% were abused during pregnancy (Hammoury, Khawaja, Mahfood, Afifi, & Madi, 2009).

Table 2

IPPVAW Selected Studies in the Eastern Mediterranean Region

Authors/ Year	Country/ Population Characteristics	N	% IPPVAW		
			Ever	Pregnancy	Last year
Clark et al, 2009	Jordan/ women of various marital status	517	31.2%	-	-
Clark et al., 2009	Jordan/ Pregnant women	390	-	15%	-
Khawaja & Barazi; 2005	Jordan's refugees camps/ Women and men 15+ years, currently married or living with the spouses	262	44.7%	-	19%
Usta et.al., 2007	Lebanon/ ever-married women	1418	23.1%	-	-
Hammoury et al., 2009	Palestenian refugee camp in Lebanon/ pregnant women 15-42 years	351	-	11.4%	19%
Maziak & Asfar; 002	Syria/ Low-income Women 15+ years	411	26%	-	-
Mohammadhus seini et.al, 2010	Iran, women with a child aged 6-18 months	300	16.7%	10%	-
Vakili et.al.; 2010	Iran, Married women in Kazeroon	702	43.7%	-	-
Nojomi et.al.; 2007	Iran, women (15-64 years) attending gynecology clinics	1000	34.3%	-	-
Ghazizadeh, 2005	Iran, married women in Sanandaj city	1000	38%	-	15%
Faramarzi et.al.; 2005	Iran, Maried women in Babul city	2400	-	-	15%
Habib et.a;.; 2011	Egypt (rural Minia), Married women	770	29.8%	-	-
Fahmy & Abd El-Rahman; 2008	Egypt (Zagazig); Women 18-50 years	500	22.4%	-	-
Bakr & ismail, 2005	Egypt/ Ever-married women	509	34.2%	-	-
Diop-Sidibé et.al., 2006	Egypt/ Currently married women age 15–49 Years	6566	34%	-	16%
Akmatov et al., 2008	Egypt/ DHS survey/ married women	5612	-	-	19%
Ramiro et.al., 2004	Egypt, women 15-49 years who care for at least 1 child younger than 18y	631	11%	-	10.5
Al-Tawil, N.G., 2012	Iraq, 250 Muslim & 250 Christian women	599	17-18.%	-	-
Al-Ghanim K.A., 2009	Qatar, 2,787 University female students	2787	11%	-	-

Maziak and Asfar (2003) in a study of 262 women in Jordanian refugee camps reported a prevalence rate of 42.5% of IPPVAW. Approximately, 26% of married women reported IPPVAW. Rural residents reported higher rates of physical abuse (44%) compared to city residents (18.8%) (Maziak & Asfar, 2003).

In Lebanon, Usta and colleagues (2007) surveyed 1418 women and found IPPVAW in 23% (Usta, Farver, & Pashayan, 2007). Al-Ghanim (2009) conducted a study in Iraq of 599 married women, 250 Muslim and 250 Christian. He found similar rates of IPPVAW in Muslim 16.8%) and Christian women (18.4%). Other studies in Iraq have shown rates of 39.9% and 15.1% of physical violence against women (Abdul Jabbar, 2006; Muhammad-Taher, 2011). In the Iranian city of Babol, a cross-sectional survey was conducted of 2400 married women who frequented obstetrics and gynecology clinics. Approximately, 15% of these women reported IPPVAW during the last year (Farmarzi, Esmailzadeh, & Mosavi, 2005). At Qatar University 2,787 students were surveyed on violence. Approximately, 11.4% of Qatari women identified husbands as perpetrators of violence against them (Al-Ghanim, 2009).

The variation observed in the reported prevalence rates of IPPVAW in the Eastern Middle region reflect not only the difference in methods and data collection but also the difference in the populations studied. Rates of physical abuse were higher in women from vulnerable populations. Notably, studies conducted in areas of lower socioeconomic status, such as those in refugees' camps reported higher rates of IPPVAW.

In Saudi Arabia, the studies addressing IPPVAW are limited (see Table 3). Similar to regional studies on IPPVAW, Saudi studies have utilized variable methods and

definitions. Rachana, et al. (2002) conducted a retrospective study on 7,105 Saudi pregnant women in Eastern province of Saudi Arabia. Physical violence was reported by 21% of pregnant women. The husband was the perpetrator of violence in 87% of the cases (Rachana et al., 2002). A cross-sectional survey conducted on 2000 ever-married women who frequented PHC's in the Eastern province found that 17.9% of women suffered physical violence. Husbands were the main perpetrators of violence in 45.9% of women (Afifi et al., 2011). In the Western province of Saudi Arabia, a cross-sectional survey of 689 ever-married women attending PHC's was conducted (Tashkandi & Rasheed, 2009). 25.7% of women reported IPPVAW. Of those women who reported IPPVAW, 63.3% had severe injuries due to physical violence. Almosaed (2004) investigated the attitudes of 230 Saudi men and women regarding wife beating. The ratio of men who supported the use of violence against women in case of misconduct was 52.7%, with 32% of men having actually used violence against their wives. About 36% of the women in the sample agreed with the use of violence in response to a woman's misconduct (Almosaed, 2004).

The Health Effects of IPPVAW

The health outcomes of IPPVAW are well-documented. Adverse health outcomes of IPPVAW range from temporary or direct effects to long term or indirect effects developing over a longer period of time (Plichta, 2004).

The WHO multi-countries study on violence against women reported wide range of adverse health outcomes. Abused women were more likely to report difficulty in walking and daily activities, pain, memory loss, dizziness, and vaginal discharge than

women who were never abused. Moreover, women who reported intimate partner violence at least once in their lives were more likely to report emotional distress, suicidal thoughts, and suicidal attempts than non-abused women (Ellsberg et al., 2008).

Table 3

IPPVAW Selected Studies in Saudi Arabia

Authors/ Year	Country/ Population Characteristics	N	% IPPVAW		
			Ever	Pregnancy	Last year
Afifi et.al., 2011	Saudi Arabia: Ever-married women 15-60 years	2000	17.9%	17%	22.8%
Tashkandi & Rasheed/ 2009	Saudi Arabia-Medina, Western province/ ever-married women 16-60 years	689	26.9%	-	25.7%
Rachana et.al., 2002	Saudi Arabia-Eastern province/ pregnant women in 1st trimester	7105	-	21%	-
Almosaed, N, 2004	Violence Against women: A Cross-Cultural Perspective	230	34%	-	-

The effects of IPPVAW on women's health prolong even after the end of the abuse. The long term effects of violence range from lower health status, lower quality of life, and higher utilization of health services (Campbell, 2002). In the U.S., a telephone survey on IPPVAW in a random sample of 3,568 women, revealed that abused women had

relatively higher risk for substance use (5.89), family and social problems (4.96), depression (3.26), anxiety/ neurosis (2.73), and tobacco use (2.31) compared with women with no IPPVAW (Bonomi, Anderson, Reid, Rivara, Carrell, & Thompson, 2009).

Increased healthcare utilization as a burden of intimate partner violence against women is well documented (Coker et al., 1999). Increased costs of healthcare are reflected in increased inpatient hospitalization, primary and specialty care, and mental healthcare. Approximately, 1.5 to 4-folds increase in healthcare utilization is attributable to intimate partner violence (Ulrichm Cain, Sugg, & Rivara, 2003). A U.S. longitudinal study of women (N=3333) investigated the increased cost of healthcare utilization and found that healthcare utilization was higher for all categories of services during periods of exposure to intimate partner violence. Utilization was higher for 5 years after the end of violence compared with women who did not report intimate partner violence. Annual healthcare costs were 19% higher in women with a history of violence compared to women who did not report violence (Rivara et al., 2007). A comparative review of the computerized healthcare cost data of women abused by their intimate partners revealed a striking increase in the medical cost of 92% per year when compared to non-abused women. This study confirmed the findings from other studies regarding the association with increased hospitalizations, general clinic use, mental health services use, and out of pocket referrals (Wisner et al., 1999).

Studies in the Eastern Mediterranean region have documented the deleterious health impact of IPPVAW. In the Egyptian DHS survey, women who were beaten were more likely to report ill health than women who were never beaten. Moreover, there were significant inverse relationship between the frequency of beatings in the past year

and contraceptive use (Diop-Sidibe et al., 2006). An earlier Egyptian DHS survey reported that abused women were more likely to have unwanted or mistimed pregnancies, to commence antenatal care later, and to terminate a pregnancy. DHS showed that infant and child mortality rates in children born to abused mothers are significantly higher compared to the mortality in children of non-abused mothers (Kishor & Johnson, 2004). Mortality of mothers due to IPPVAW was also documented in Egypt. The Land Center for Human Rights in Egypt found 140 cases of wife death due to spousal violence published in national newspapers, out of total 300 death cases reported (Ammar, 2000).

Mental health consequences were documented in some regional studies. In rural Egypt, women subjected to IPPVAW showed a significant increase in psychiatric disorders than women who were (Habib et al., 2011). Injuries and death were frequent consequences of wife beating in Egypt. Approximately, 5.5% of wife beating led to disabilities and 21.1% led to death. Physical abuse of wives was one of the strongest determinants of mental distress in a study of low income Syrian women (Maziak, Asfar, Mzayek, Fouad, & Kilzieh, 2002). Depression, somatization and suicide were highly correlated with IPPVAW (Haj-Yahia, 1999; 2000a). In Lebanon, women exposed to IPPVAW reported more frequent occurrences of health complaints than women who were not exposed (Usta, Farver, & Pashayan, 2007).

In Saudi Arabia, one quarter of women surveyed in Al-Ahsa region reported injuries following violent incidents. Injuries included scratches/ bruises, wounds, torsion/ sprains, fractures, loss of consciousness, and ear drum or eye injuries. Life time violence was significantly associated with perceived poor general health and significantly increased odds of diseases, abortion, hemorrhage, and increased body mass index (BMI).

Recent overall abuse was significantly associated with increase in vaginal bleeding, taking drugs, movement and activity problems, pain, and stress. Furthermore, the study documented the increased use of health services by abused women compared with non-abused ones (Afifi et al., 2011). Saudi women who reported physical abuse during pregnancy were more likely to be hospitalized antenatally for maternal complications such as trauma, abruptio-placenta, pre-term labor, and kidney infections (Rachana et al., 2002). The negative sequelae that violence propagates have resulted in many theoretical explanations of its etiology.

Theoretical Frameworks for Violence

Several theories have been used to explain gender-based violence against women. Initially, IPPVAW received little attention during the 1970's until a number of changes took place. In the US, official reporting of all cases of child abuse and neglect were mandated by all states, and statistics were available for sociologists to study (Gelles, 2000). Domestic violence shelters became available to feminists' organizations and female sociologists were granted access to shelters for research and investigation. Hence, the early research on violence against women by their husbands/partners was based on samples drawn from women shelters (Dobash & Dobash, 1979; Giles-Sims & Straus, 1983; Pagelow, 1981).

This early research was shaped by a psychiatric/medical model. Violence was viewed by the public as a psychological problem, and social factors were essentially not relevant (Gelles, 1985). Since violence against women has multidimensional consequences, research on violence has developed across many disciplines, including

sociology, psychology, criminal justice, and public health (Johnson & Ferraro, 2004; Krug, Mercy, Dahlberg, & Zwi, 2002; Tjaden & Thoennes, 2000; Walker, 1999). Therefore, different theories developed from many different perspectives.

Earlier theoretical frameworks were organized around micro-and macro-oriented perspectives, primarily focusing on individual's characteristics and more recently within the context of their environments. Modern theories are multidimensional in nature, combining elements across disciplines and developing a more comprehensive and complete explanation (Jasinski, 2001). Generally, violence against women in the family has been explained by several theories of causation. These include a) biological theories of criminal behavior, b) theories of psychopathology of individual perpetrators, c) family systems theories, d) social learning theories, and e) feminist theory (Cunningham et al., 1998).

The Biologic and Organic Theories

The earliest theories were driven by Darwin's ideas of evolution and survival of the fittest during mid-19th century. The biological and organic approach theories explain IPVAW as a result of head injury or evolutionary adaptations causing male violence against women (Cunningham et al., 1998). Rosenbaum and his colleagues published several articles on 1980's and early 1990's linking marital aggression to head injury (Rosenbaum, 1991; Rosenbaum & Hoge, 1989; Rosenbaum, Sterling, & Weinkam, 1993). The basis of their theory was the finding that many men with head injuries were aggressive to their family members. They concluded that head injury may cause brain dysfunction and neurological impairment and can in turn reduce impulse control, distort

judgment, cause communication difficulties, a and create hypersensitivity to alcohol (Cunningham et al., 1998). However, research has documented that head-injured men were not more abusive to family members when compared to men who did not have head injuries (Warnken, Rosenbaum, Fletcher, Hoge, & Adelman, 1994).

An extension of the biological theory is based on evolutionary genetic predisposition of males to become aggressive. Gender-based violence is explained as a result of genetic influence on behavior. The evidence is drawn from animal studies. Theoretically, males utilize violence to ensure reproductive control over their mates. Sexual jealousy and infidelity trigger aggressive behavior of assaults and homicides (Buss & Shackelford, 1997; Wilson & Daly, 1996). Finding a causal link between genes or head injury and spousal violence towards woman is hard to test empirically. Additionally, researchers criticize this approach as it may absolve aggressive men from the responsibility for their actions (Cunningham, 1998).

Psychopathologic Theories

Psychopathological theories explain intimate partner violence as a result of mental disorders that cause perpetrators to use violence against victims (Pagelow, 1981). Psychopathology offers an explanation of intimate partner violence based on personality traits of aggressors (Dutton, 1995). Initially, the link was drawn from studies on identified batterers in prisons or community-based treatment settings. Dutton and other psychologists studied the traits of aggressors in comparison with controls with no known history of violence. Borderline personality disorders were over represented in the male batterers. Dutton and Golant (1995) suggested that individuals with borderline

personality disorders have a childhood experience of real or imagined loss, abandonment, ambivalent or angry attachment. In turn, the childhood experience creates an angry adolescent with feeling of inferiority. In a social environment that condones violence against women, such individuals fail to develop age-appropriate sense of responsibility and become aggressive in their intimate relationships (Dutton & Golant, 1995).

This theory came to prominence in 1990's to provide an alternative to feminist theory, noting the failure of the feminist theory to provide an explanation for abusive behavior in the same-sex intimate relationships and the fact that not all men in patriarchal societies abuse their intimate partners. A limitation of the theory is in its reliance on accurate diagnosis of the personality disorder as well as on the long term and personalized treatment of the offenders (Cunningham et al., 1998).

System Theory

Another explanation of violence as a result of interpersonal factors has been grounded in system theory. In this theory, the family is viewed as a component of interdependent components within a system. If a system condones violence against women, then violence against women would not be stopped and more likely to be repeated (Cunningham et al., 1998). Aggressive and non-aggressive intimate relationships are identified by certain interpersonal patterns such as hostility, verbal aggression, increased conflicts, and decreased levels of constructive arguing (Cordova, Jacobson, Gottman, Rushe, & Cox, 1993).

Criticism for the systems theory as explanation for intimate partner violence is controversial (Cunningham et al., 1998). System explanation assigns co-responsibility for

violence, justifying abuse and blaming the victims. The theory fails to address gender aspects and to suggest treatment modality for both men and women, thus creating a safety concern (Hansen, 1993).

Sociological Theory

Sociological theory broadens the explanation of violence beyond the individual and couples interactions to the larger social context in which violence exists (Bandura, 1977). Opponents of the sociological theory draw evidence from cross-cultural research of variable rates of partner violence. The variation is indicative of the social norms and attitudes toward violence as mean to resolve conflicts (Levinson, 1989). Intimate partner violence is explained by the social learning theory as a result of learned behavior of the violence in the family during childhood. Violence is learned by observation either in the family, media or other subcultures. Individuals learn that violence is an acceptable behavior because of their previous experience or witnessing of violence in the family to get what they want (Bandura, 1978). A modification of the theory is the "learned helplessness of women", which develops as women try to control their partners' abusive behavior together with the unpredictable response of abusers. Women learn that abuse is outside their control and they subsequently become unable to help themselves (Walker, 1984). Several studies have used the theory in exploring marital and intimate partner violence (Malamuth, Sockloskie, Koss, & Tanaka, 1991; Mihalic & Elliott, 1997). The theory is often termed "the intergenerational transmission of violence", and suggests that violence is learned through socialization in the family, culture, or media. Studies examining the effect of witnessing family violence in childhood on becoming perpetrators of violence as adults had controversial results. Some studies have supported

the inter-generation transmission of violence (Straus, Gelles, & Steinmetz, 1980; Straus & Smith, 1990). Other studies did not find significant association between childhood violence and perpetration of violence in adults (Doumas, Margolin, & John, 1994).

Feminist Theory

Feminist theory is essentially grounded in the concept of a patriarchal society. Patriarchy, literally meaning the "rule of the father", explains gender-based violence against women as a result of unequal power structure between men and women in the family and social systems. Patriarchy is a socio-cultural tradition sanctioned by society in which men dominate women socially and economically (Hunnicut, 2009). Researchers have used this concept to explain the historical systematic subordination of women by men. Thus, violence against women is a result of the perceived right of a husband to dominate and chastise his wife with no social or legal consequences (Dobash & Dobash, 1979). Feminist scholars explain violence against women as a result of unequal power structure between men and women, male dominance, the subordination of women, the patriarchal society with strict gender roles and limitations on women's access to resources (Dobash & Dobash, 1979; Pagelow, 1984, Yllo & Straus, 1990). Violence according to the feminist theory is a mean to maintain the control and power of men over women in marriage or intimate relationships due to gender-based inequities.

The theory has been criticized for its focus on gender and patriarchal society to explain violence against women (Gelles, 1993). Additionally, the theory does not explain women violence against their intimate partners or violence within the same sex relationships (Dutton, 1994). Gender has been argued as a reason for victimization/ abuse. The controversy surrounding using gender asymmetry a theory for explaining why

some perpetrate violence is mostly due grounded in the fact that early feminist scholars obtained their data from shelters, courts, and criminal records. This explains the gender asymmetry in their findings. However, the large scale national surveys have documented gender symmetry in the initiation and engagement of violence within intimate relationships (Kelly & Johnson, 2008). Stets and Straus (1990) have examined the assumption that men and women are unequally subjected to violence within intimate relationships. They found that men and women equally engage in violent acts, they found that 23% of cases perpetrated by men and 28% of cases by women (Stets & Straus, 1990).

The aforementioned theories have been used to explore the etiology of physical violence against women. These theories explore violence against women in a piecemeal fashion, based on individual or socio-political characteristics. Recently, a more comprehensive approach has been suggested; asserting that the roots of violence are embedded in personal, interpersonal, community, and societal factors. Hence the ecological model may provide a more suitable frame for assessing risk and protective factors for physical violence against women (Kelly & Johnson, 2008).

The Ecological Model Theory

The Ecological model (Belskey, 1980) was initially developed to explain the complexity of child maltreatment (Brunk, Henggeler, & Whelan, 1987; English, Marshall, Brummel, & Orme, 1999; Gillham et al., 1998). The model deals with three levels of analysis, the relationship between the organism and environment, the interacting and overlapping systems in which human development occurs, and the environmental

quality. The model aimed to explain child neglect and abuse as a result of interactive set of systems nested within each other. Child abuse, according to the model, was a result of a mismatch of a parent, child, and family to neighborhood and community (Garbarino, 1977).

The Ecological model is conceptualized as four concentric circles. The personal history factors represent those characteristics of the individual perpetrator and victim, are placed in the innermost circle. The interpersonal context of the intimate relationship represents the next circle, the microsystem. The exosystem is the institutional and social structures where the violence takes place. The macrosystem is the final circle which represents the general views and attitudes permeating the culture. Some theorists have suggested the addition of an additional layer, the mesosystem, which represents the aspects of a person's social environment. The mesosystem includes variables which link the individual's family to other linkage in the environment such as the extended family and the social institutions (Edelson & Tolman, 1992). The model integrates concepts from the fields of psychology, anthropology, sociology and cross-cultural comparative research. These were used to build the adapted, integrated model variables.

Heise (1998) suggested the use of an integrated, ecological framework to completely capture multiple levels of variables that influence the experience of intimate partner violence (IPV). Heise conceptualized intimate partner violence against women according to the four concentric levels of Belsky's framework (Heise, 1998). The ecological framework identifies various causes of IPV that operate at different levels. The first level represents the personal history factors affecting the behavior of each partner in the relationship. The next level, the microsystem, represents the interpersonal context in

which violent acts occur, or the dynamics of the intimate relationship. The exosystem, or the community-related factors, represents the institutional and social structures such as the neighborhood, work, and social network and identity groups. The macrosystem, the societal-related factors, is the final level which encompasses the general views and attitudes in the culture at large (Heise, 1998). These levels are all interrelated.

Heise included witnessing marital violence as a child, being abused during childhood, and having an absent or rejecting father in men under the individual/ personal factors. She added male dominance, male control of wealth, marital conflict, and men's abuse of alcohol under the microsystem/ interpersonal factors. She listed male unemployment and low socioeconomic status, isolation of the woman and the family, and delinquent peer association in male partners under exosystem/ community factors. The notion of masculinity as linked to dominance and honor, rigid gender roles, sense of male entitlement or ownership over women, approval of physical chastisement of women, and cultures which condone violence as a mean to settle interpersonal disputes were listed under the macro/ societal level (Heise, 1998).

The Ecological model has three main advantages over earlier models. The model is used as a heuristic approach, organizing variables discovered from various research into an intelligent, synthetic model. Secondly, data from international as well as North American research were used to accommodate cross-cultural research of violence. Thirdly, data related to both physical and sexual abuse were integrated in the model to encourage the use of model in all kinds of violence investing actions (Heise, 1998). However, one cannot conclude that the model is not fully comprehensive or complete,

critical factors may be missing due to lack of research or testing of certain factors related to violence against women across cultures.

For purposes of this research, several factors were selected from the Ecological model for exploration. Personal factors included the woman's history of childhood abuse, husband's history of childhood abuse; woman's witnessing parental violence as a child, husband witnessing parental violence as a child, and husband's alcohol or drugs use. Interpersonal factors included marital conflicts, male dominance, and polygamous marriages. Community factors included employment status of women, employment status of husbands, women's educational level, husbands' educational level, husband's involvement in physical fights with other men and social isolation of women. Societal factors included acceptance of physical chastisement of wives and gender attitudes.

Demographic Characteristics of Victims of IPPVAW

In the Eastern Mediterranean studies, women subjected to IPPVAW share common characteristics. Age was not a significant predictor of domestic violence in Lebanese, Palestinian, and Saudi women (Afifi et al., 2011; Khawaja, Linos, & El-Roueiheb, 2008; Usta et al., 2007). Some studies have shown that younger women were at greater risk than older women. In Syria, Jordan, and Egypt, younger women between the ages of 16-20 years were more likely to be report abuse than older women (Al-Nsour, Khawaja, & Al-Kayyali, 2009; Diop- Sidibé et al., 2006; Habib et al., 2011; Maziak & Asfar, 2003). It appears that IPPVAW was more likely in women who married before the age of 20 years old (Akmatov et al., 2008; Habib et al., 2011). However, age of women was not a significant predictor of wife abuse in two Saudi and Palestinian studies

(Afif et al., 2011; Khwaja et al., 2008). On the other hand men between the ages of 30-44 were almost 15 times more likely to support wife beatings when compared to men younger than 30 years of age (Khawaja et al., 2008).

Regional studies show that women living in rural areas are at a greater risk for IPPVAW than women living in urban areas. Significant variation of abuse was found in Syria, where 44.3% of women from rural areas were abused compared to 18.8% from urban areas (Maziak & Asfar, 2003). This in accordance findings of higher rates of reported IPPVAW of about 57% in rural area of Egypt (Habib et al., 2011). The National Palestinian survey on violence indicates that the place of residence is a significant predictor of physical violence against women, with women in rural areas or refugee camps at greater risk of abuse (Haj-Yahia, 2000a).

Review of Risk and Protective Factors for IPPVAW

Personal factors. These factors are those characteristics of an individual's personality which affect his or her response to interpersonal and community stress. Case-control studies have yielded valuable information on such characteristics distinguishing victims and/or perpetrators from matched controls (Heise, 1998).

Hotaling and Sugarman (1986) found that having a history of domestic violence in the wife's family was the only factor out of 42 potential risk factors consistently associated with being a victim of IPPVAW. The link between being exposed to domestic violence as a child and becoming a victim of intimate partner abuse as an adult may be explained by the effect of being raised to accept violence as a mean to resolve conflicts and to submit to gender inequality at home (Hotaling & Sugarman, 1986).

There are conflicting accounts of the effect of women's history of childhood abuse as a risk factor for future assault in the Eastern Mediterranean region. A Syrian study on low-income women showed that women's history of familial violence was a strong predictor of future intimate partner violence (Maziak & Asfar, 2003). Clark and colleagues did not find women's history of childhood violence to be associated with IPPVAW in Jordanian study (Clark et al., 2009). On the other hand, they found that spousal exposure to childhood domestic violence was associated with a fourfold greater risk of IPPVAW.

Because of the role that alcohol plays in inducing violence via reducing sound judgment and the ability to control impulses in perpetrators (Abbey, Ross, McDuffle, & McAuslan, 1996). Heise (1998) chose to place alcohol consumption either as a micro-system/ personal factor or as an interpersonal factor. Husband's alcohol or drugs use is a documented risk factor for IPPVAW. This association has held firm across men of diverse ethnic backgrounds who were arrested for domestic violence (Stuart et al., 2006; Temple, Weston, Sturat, & Marshall, 2008). It was also documented in meta-analytic reviews of intimate partner violence research (Foran & O'Leary, 2008). There is still controversy regarding alcohol use and its association with violence. Feminist scholars criticized the use of alcohol consumption as a factor in violence research as this may be used to avoid responsibility for violence. While not all alcohol consuming men are violent to their wives, the evidence exists that men who abuse their wives are more frequently presented with alcohol problems than men who do not abuse their wives (Coker, Smith, McKeown, & King, 2000; Frieze & Browne, 1989). Leonard (1985) analyzed patterns of aggressive behavior and alcohol use in blue collar men (N=484). He

found that men diagnosed with alcohol problems are three times more likely to be aggressive to their wives than men without alcohol problems (Leonard, 1985). Alcohol and/or drug use by male intimate partners was found to be the strongest correlate of violence in a Columbian study (Coker et al., 2000).

In a review of studies on spousal violence against women in Egypt, there was not conclusive evidence of an association between alcohol uses by husbands IPPVAW (Ammar, 2006). Nonetheless, others have concluded that there is a link. A survey of married women (N=772) in rural Egypt found husbands' drug use was significantly associated with IPPVAW (Habib et al., 2011). Clark and colleagues found a significant risk for violence in pregnant women with alcohol-using husbands in Jordan (Clark et al., 2009). Their findings parallel a previous study in Lebanon, which concluded that alcohol use was associated with the most severe instances of domestic violence in maternal and child health clinic attendees (Keenan, El-Hadad, & Balian, 1998). In Egypt, drug and alcohol use in husbands were more common in abused women when compared those who did not report abuse (Habib et al., 2011).

Microsystem/ interpersonal factors. The family is the system in which violence between intimate partners takes place. Several factors within the traditional family structure emerge as risk factors for violence, including; marital conflicts, male dominance, and polygamous marriages (Heise, 1998).

Marital conflicts have been found to be repeatedly predictive of wife assault even after controlling for other variables. In the national survey of family violence of US, extremely high-conflict couples had a rate of violence 16 times greater than couples with

low-level of conflicts (Straus et al., 1980). Marital conflicts are usually investigated in most studies as a result or form of violence and not as a risk factor for IPPVAW.

In the Eastern Mediterranean region, there is a limited data on marital conflict as a risk factor for IPPVAW. Clark and colleagues found that the risk of physical violence on pregnant Jordanian women was 17 times more likely for couples with the most frequent arguments, expressed as "often or always" (Clark et al., 2009). The second Palestinian national survey on violence against women revealed that abused wives expressed significantly higher levels of negative marital relations compared with their non-abused counterparts. The scope of the negative relations included negative patterns of communications and lower levels of commitment to marriage, marital satisfaction, affection, harmony, and happiness (Haj-Yahia, 2002). In Iran, a significant association was found between being in a coercive marriage (i.e. being forced into unwanted marriage by parents) and physical, psychological, and sexual violence (Ardabily, Moghadam, Salsali, Ramezanzadeh, & Nejdat, 2011).

Tashkandi and Rasheed (2009) utilized the Kansas marital satisfaction scale to assess levels of marital satisfaction in 689 Saudi women. They found that the level of satisfaction was significantly lower among physically abused women than among non-abused women. Abused women had poorer relationships with their husbands compared with non-abused women (Tashkandi & Rasheed, 2009). In Saudi Arabia, most marriages are traditionally arranged and more than 50% of Saudi marriages are consanguineous (Mobaraki & Söderfeldt, 2007). Chaleby conducted a study on Saudi female outpatients who were either married or divorced. Conjugal discord or divorce was more frequent when the couple had never been met before marriage or among consanguineous couples.

Traditional marriages were also associated with more anxiety and dythemic disorders (i.e. mild depression) in females than males (Chaleby, 1988).

Male dominance (i.e. patriarchy), refers to the power that men have in decision-making within the family (Yllo & Straus, 1990). In societies where male dominance was endorsed in family relationships, it was shown to be one of the strongest predictors of violence against women (Levinson, 1989). Asymmetric family power structures are a possible explanation for increased marital conflict and hence, violence against women. In a U.S. national family violence survey, wife abuse was found in 11% of couples with dominant husbands (Straus et al., 1980). In the U.S states where males dominate decision-making in the family, the rate of wife beatings was double the rate in the states where equal decision-making was more frequent (Yllo & Straus, 1990). In U.S., the economic dependence of wives on husbands was found to be a strong predictor of severe wife-beating (Kalmuss, 1984). In a cross-cultural study, male dominance, male control of wealth in the family, and divorce restrictions placed on women, were the strongest predictors of violence. Male dominance and restrictions on divorce were found to be mediators of the relationship between male control of wealth in the family and wife beating (Levinson, 1989).

In the Eastern Mediterranean region, male dominance in the family is generally tolerated. Violence against women is tolerated under three conditions: a) a religious sanction of wife discipline as a duty for father and husband, b) economic dependence of women, and c) traditional marriages. The husband's role is often seen as an authoritarian one, with responsibility for maintaining the family order and honor even by violence (Douki et al., 2003). In a patriarchal system, male dominance and women subordination

are advocated in both public and private life (Mann, 1986). The social structure is based on the traditional Islamic interpretation of relationships between men and women. Islamic teaching advocates marriage as a union based on love and mercy. The Islamic holy book implies this meaning (Qur'an 30:21):

> "He created mates for you from yourselves that you may find rest, peace of mind in them, and he ordained between you love and mercy. Lo, herein indeed are signs for people who reflect." (Qur'an 30:21).

The emphasis on compassion is emphasized in yet another verse:

> "But consort with them with them in kindness, for if you hate them it may happen that you hate a thing wherein God has placed much good" (Qur'an 4:19).

These verses direct men to deal with women in marriage with kindness and to share a marital relationship based on mutual harmony and emotional well-being. However, another verse in Qur'an advocates a superior position for husbands as superior to women and responsible for their obedience and fulfillment of marital duties. Several scholars commonly refer to this verse in the holy book to advocate the superior position of males to women:

> The men are placed in charge of the women, since God has endowed them with the necessary qualities and made them breadwinners. The righteous women will accept this arrangement obediently, and will honor their husbands in their absence, in accordance with God's commands. As for the women who show rebellion, you shall first enlighten them, and then desert them in bed, and you may beat them as a last resort. Once they obey you, you have no excuse to transgress against them. God is high and most powerful (Qur'an 4:34).

Nevertheless, different scholars have different interpretation of this verse. Some have said that men are inherently superior to women, have control of them, and are considered to be their guardians in all matters. Others argue that men are obligated to provide for women, owing to their greater economic advantages. Regardless of the controversy over

the exact meaning of the verse, it is believed that the passage advocates clearly the obedience and respect for husbands as a Muslim wife's duty (Haj-Yahia, 1998b).

In most of the Eastern Mediterranean studies, male dominance was closely linked to positive attitude toward wife beating in most men and women. Male dominance as a factor of wife abuse was investigated in 2000 Iranian women seen at a healthcare facility. The study found that women with positive attitude toward male dominance reported physical violence 4.8 times more than women with negative attitude (Faramarzi et al., 2005). Haj-Yahia (1998b) used the Familial Patriarchal Belief instrument in a survey of Palestinian husbands to measure their attitudes toward women's autonomy and patriarchal attitudes. He found that men who held negative and traditional attitudes toward women had greater tendency to support wife beating. Men are more likely to justify wife beating if they hold patriarchal and non-egalitarian role expectations (Haj-Yahia, 1998b). Controlling behavior was found to be predictive of abusive relationships among Egyptian women in general. An analysis of demographic and health survey found that women who reported ever-beaten by their husbands were frequently not permitted to go places or needed to be accompanied by a child or another adult, compared to never beaten women (Diop-Sidibé et al., 2006). Women living in more patriarchal governorates in Egypt were found to have a higher likelihood of justifying wife beating than women from less patriarchal governorates (Yount & Li, 2009).

In Saudi Arabia, patriarchy is institutionalized through the guardianship system. Human Rights Watch outlined the adverse effects of the guardianship system on women's autonomy and on their children. Under the guardianship system, a woman needs the consent of a male guardian in order to complete procedures of enrollment for

education, employment, travel, healthcare, and starting court proceedings. This institutionalized dependence of women as regards accessing services and resources contributes to their risk for domestic violence, particularly if the guardian is the abuser. Even in places where the guardian consent is not mandatory by government regulations, some officials still may ask for it (Deif, 2008).

Male polygamy, or polygny, is permitted in Islam. Men are allowed to marry up to four wives simultaneously under the obligation to treat each wife justly. The obligation of just treatment means equal provisions of housing, food, clothing, kind treatment, etc., to each wife (Mobaraki & Söderfeldt, 2007). Some of the regional studies have documented an increased risk for physical, sexual, and emotional abuse of women in polygamous marriages (Hassouneh-Phillips, 2001; Lev-Wiesel & Al-Krenawi, 1999; Maziak & Asfar, 2003). Women in polygamous marriages reported more problems in family functioning and marital satisfaction. Additionally, they reported significantly lower self-esteem and life satisfaction. Family structure (i.e. polygamous vs. monogamous) was found to be a major predictor for marital satisfaction and family functioning (Al-Krenawi, 2010; Mobaraki & Söderfeldt, 2007). Interestingly, a study on Jordanian women (N= 356) did not find a significant correlation between physical violence against women and polygamy, this may be due to the small number of women in polygamous marriages in the study sample (n=28) (Al-Nsour et al., 2009). The relation between IPPVAW and being in a polygamous relationship has not yet been fully studied. However, the relationship may be mediated by other risk factors such as increased stress and marital conflict, or the reduction of family income.

Exosystem/ community factors. These factors are defined by Belsky as "the social structures both formal and informal which impinge on the immediate settings in which a person is found and thereby influence, delimit or determine what goes on there" (Belsky, 1980). These include employment status of women and husbands, women's and husbands' educational levels, social isolation of women, and husband's involvement in physical fights with other men.

Though intimate partner violence against women is found across all socioeconomic strata, it has been more frequently reported in families with lower socioeconomic levels (Hotaling & Sugarman, 1986). Population-based surveys in North America and across the world have found association of violence with lower socioeconomic status (Abramsky et al., 2011; Balci & Ayranci, 2005; Straus et al., 1980). Unemployment in men has been associated with violence against women, though the link is unclear (Deyessa et al., 2009; Straus et al., 1980). It is hypothesized that unemployment and poverty do not affect violence directly, but through problems of male identity and marital conflict. Unemployment affects the traditional male role as the provider for the family, thus creates stress and frustration, leading to disagreement and marital conflicts. Consequently, violence against women becomes a mean for resolving male-identity crisis because it allows expression of power (Gelles, 1974; Jewkes, 2002).

Employment of women is often considered a protective factor against IPPVAW. Middle Eastern studies have contradictory findings on the role of woman employment. Several studies on Palestinian, Lebanese, Jordanian, Egyptian, and Iranian women have documented the protective effect of women employment in the risk for IPPVAW (Al-

Nsour et al., 2009; Habib et al., 2011; Haj-Yahia, 2000a; Usta et al., 2007; Vakili, Nadrian, Fathipoor, Boniadi, & Morowatisharifabad, 2010).

The employment status of husbands was not consistently related to IPPVAW in regional studies. The study on Arab Bedouin in Nejef region indicated a significant correlation between wife abuse and unemployment in husbands (Cwikel, Lev-Wiesel, & Al-Krenawi, 2003). A significant relation was found between domestic violence against Iranian women and having unemployed husbands (Ardabily et al., 2011; Vakili et al., 2010). This was consistent with the findings from national surveys from Palestinian society and the Minia governorate in Egypt ((Habib et al., 2011; Haj-Yahia, 2000a; Khawaja et al., 2008).

The women's education level is a significant predictor of risk for violence, particularly in relation to the husband's level of education. Educational level was the most significant protective factor from physical abuse. Women finishing 12 years or more of education were 10 times less likely to report IPPVAW when compared to women with less than 12 years of education. It appears that educated women are more respected by their husbands, well-equipped to deal with stressful situations, less likely to get involved with abusive husbands, and have a better choice of husbands in traditional society where marriages are arranged (Maziak & Asfar, 2003). Egypt national DHS showed that the past-year prevalence of wife beating was lower when both partners were educated. Women with higher educational levels experienced less severe forms of wife beatings than less educated women (Akmatov et al., 2008; Clark, et al., 2009). Illiteracy and being a housewife places women at a higher risk for violence. A couple of studies found that the husband's education was also a factor. Women with illiterate husbands had

a higher likelihood of experiencing violence than those with husband with higher educational attainment (Habib et al., 2011; Usta et al., 2007).

Interestingly, differences between educational levels of wives and their husbands are more significant predictor of violence than the level of each partner. Studies on Bedouin women in Nejef and on Palestinian couples have documented the risk for physical violence in spouses with different educational level, possibly through challenging the traditional gender roles (Cwikel et al., 2003; Haj-Yahia, 2000a). On the other hand, some regional studies did not find any protective role for increasing a woman's education in her risk for intimate partner violence, which may be caused by the neutralization of education due to prevalent cultural norms placing women at a subordinate position (Al-Nsour et al., 2009; Khawaja et al., 2008).

Social isolation of women has been suggested to increase risk for violence. Isolation of the woman and the family has been found to be both a cause and a consequence of wife abuse (Dobash & Dobash, 1979; Gelles 1974, 1985). Intimate partner violence rates increase if the family is isolated and those from the outside have no right to interfere. In contrast, intimate partner violence rates are low in societies where the family and friends feel obliged to interfere whenever women are being abused (Heise, 1989). Women with strong social interactions with family and friends experienced lower rates of violence as shown by the National Family violence survey (Cazenave & Straus, 1979).

In Arabic families, the usual support for women is through their families of origin. The family in the Arab sociocultural structure plays a central role in

supplementing assistance for children and members in various needs such as education, marriage, employment, and so on. Family members are responsible for each other (Barakat, 1993; Haj-Yahia, 1995). Battered Arab women are presumably reluctant to seek support outside their nuclear family. Spousal relations and dynamics are largely influenced by their family of origin, their extended families, and by significant members of their cultural and religious community. The commitment of family members to support each other's often leads to sacrificing personal needs and aspirations for the sake of family well-being and reputation (Haj-Yahia, 2000a). Regional studies support the notion that the family of the woman is a significant source of support in decreasing risk for IPPVAW (Cwikel et al., 2003; El-Zanaty et al., 2006). Arab families value mutual support, yet support is constrained by values of privacy and unity, and maintaining family reputation. This in turn, may cause individuals to sacrifice their own needs of protection from spousal abuse to ensure family solidarity (Douki et al., 2003; Haj-Yahia, 2000a). Thus, it is not surprising that the majority of women surveyed in regional studies indicated that they often contacted their families of origin to complain about abuse.

In a review of Egyptian surveys on spousal violence, the majority of women were found to report abuse to family members, friends, and neighbors (Ammar, 2006). The majority of Bedouin women who were surveyed from Nejef region reported seeking help for spousal violence from informal family networks (Cwikel, et al., 2003). In the Saudi study of Al-Ahsa region, the majority of women did not seek help for spousal abuse. One of every five women consulted their family of origin, and half of the abused women did not receive any help at all (Afifi, et al., 2011). Clark studied the role of extended family and the risk for IPPVAW in Jordan. She found a significant relationship between family

interference with IPPVAW when respondents identified the interference of family members as harmful. Living with in-laws had a mixed effect on the incidence of IPPVAW. Living with the woman's natal family was significantly associated with support and protection from IPPVAW (Clark, Silverman, Shahrouri, Everson-Rose, & Groce, 2010). In Jordanian pregnant women, Clark found significantly lower rates of communication between women and her family members among physically abused women (Clark, et al., 2009). Living with a woman's family or the husband's family was not association with any significant risk for IPPVAW in a Syrian study (Maziak & Asfar, 2003).

Male association with delinquent peers has been linked to aggressive attitudes toward women. Most of the research on this regard was done on relevance of aggressive peer association in men who sexually abuse women, possibly through a desire to be held in high esteem by peers (Petty & Dawson, 1989). A national study of college students has found a causal link between delinquent peer association and overall coerciveness toward women (Malamuth et al., 1991). In college men (N= 1307) attachment to male peers who condone abuse of women is a statistical significant predictor of all types of abuse, including; sexual, physical, and psychological abuse (DeKeseredy & Kelly, 1993). Cultural ethics which condone violence as a mean to resolve interpersonal conflict perpetuate violence against women. Abrahams and colleagues (2006) interviewed 1378 South African men and found that 2% of men reported physical abuse against their intimate partners. A considerable proportion of men (26%) were involved in physical fights within their communities (Abrahams, Jewkes, Laubscher, & Hoffman, 2006). Additionally, violence intensifies in communities of political unrest (Jewkes, 2002). For

instance, more than 50% of women in the two national Palestinian surveys of 1995 and 1996 reported IPPVAW (N=3744) (Haj-Yahia, 2000b). However, the effect of a man's involvement in physical fights with other men as indicator of aggressive behavior towards women is not explored within the Middle Eastern studies.

Macrosystem/ societal factors. Macrosystem or societal factors refer to the broader cultural context and beliefs which affect and inform the personal, interpersonal, and community layers in the social ecology model. Male supremacy, for instance, affects the power structure in the community institutions and the decision-making in intimate relationships. Feminists have focused on patriarchy citing it as a major macrosystem factor that predisposes women to intimate partner violence. The ecological model acknowledges patriarchy as a main overarching factor but at the same time acknowledges the interplay between the macrosystem factors with other factors in the framework. Heise (1998) has hypothesized four major factors to be studied under the macrosystem, the linkage of masculinity to dominance, toughness, and honor, rigid gender roles, the sense of male ownership and entitlement of women, and approval of physical chastisement of women (Heise, 1998). For the purpose of this study, acceptance of physical chastisement of wives and gender attitudes were included as societal factors.

Acceptance of physical chastisement of wives is common in many cultures. Cultural boundaries are set to define the conditions under which physical chastisement is acceptable. In India for instance, two thirds of men in a population study approve with wife beatings if wives disobeyed their husbands or the elderly (Narayana, 1996). If violence occurs outside these culturally-defined boundaries, then others such as family members, neighbors, or police may intervene.

In the Eastern Mediterranean region, acceptance of physical chastisement of wives is justified under certain conditions. The majority of respondents from men and women in a Jordanian refugee camp justified wife beating under certain hypothetical conditions, including disobedience wives to husbands, lacking in household chores, and assertion of the women's autonomy (Khawaja, Linos, & El-Roueiheb, 2008). Women were more likely to accept wife beating if they married earlier in life (i.e. younger than 25 years), were from urban areas, were unemployed, or older than 35 years of age. Women older than 35 years of age were 1.73 times more likely to accept wife beating than younger wives, possibly reflecting a transition in cultural norms (Al-Nsour et al., 2009). Palestinian women in three different cities were less likely to accept wife beatings if they were educated, employed, had no children or one child, were married for more than 10 years and had a say in household decision-making. The most common justifications for acceptance of wife beating were situations of wife insulting her husband, disobeying her husband, neglecting her children, and going out without telling her husband. These findings were in concert with other research in the region, signaling cultural attitudes rather than individual acceptance of wife abuse (Dhaher, Mikolajczyk, Maxwell, & Krämer, 2010).

Diop-Sidibe et al. (2006) reported that 60% of Egyptian women in the 1995 DHS survey considered beating as a normal part of marriage. In the Egyptian 2005 DHS Survey, half of the women respondents justified wife beating for some reason. Mainly, women agreed that wife hitting was justified for acts of disobedience, and for failing in delivering expected domestic roles. Rural women were 37% more likely to justify wife beatings than urban women. Women with lower socioeconomic status or economically

dependent wives were more likely to justify wife abuse or hitting for any reason (Yount & Li, 2009). Haj-Yahia (1998a) conducted a study on Palestinian women to assess their acceptance and justification for wife beatings. More than half of the surveyed women expressed disapproval of wife beating. However, between 13% and 69% of surveyed women agreed with wife beating under certain situations, including sexual infidelity, insulting the husband in front of his friends, or constantly disobeying the husband. The study showed that a significant relationship existed between justifying wife beatings in surveyed women and having traditional attitudes toward women, higher level of religiosity, and more patriarchal and non-egalitarian expectations of marriage (Haj-Yahia, 1998a). A Palestinian survey on attitudes of women toward wife beating revealed that decision-making by wives was as important factor. Women with a final say on three or more household decisions were less likely to accept wife beating than women with fewer decisions (Dhaher, et al., 2010).

Haj-Yahia (1998b) evaluated attitudes towards wife beating in a survey of 600 married Palestinian men from four cities, four villages, and two refugees' camps in the West Bank and Gaza strip. He found a general disagreement about spousal abuse among 66% of respondents. Less than half of the respondents (44%) justified wife beating in certain situations. The strongest justification was in cases of wife sexual infidelity, if wife insults her husband in front of his friends, or if she challenges his manhood. A strong correlation was found between justifying wife beating and low levels of education and having a patriarchal ideology toward gender roles. Obeid and colleagues (2010) conducted a study on Lebanese college students to assess justifications for wife abuse. She found that although the majority did not support or justify wife beating, male

students were significantly more likely to justify wife beating (Obeid, Chang, & Ginges, 2010).

As regards to gender attitudes in Saudi society, Almosaed (2004) conducted a cross sectional survey of attitudes towards violence against women among 230 Saudi men and women. Approximately half the men (53%) supported physical violence as an effective way to deal with women's misconduct. Less than half of the women in the sample (36%) thought violence was an appropriate way to deal with women's misconduct. A total of 30% of men reported using violence against their wives. Reasons given were a) answering back (29%), b) family disagreements (17%), and/or c) immoral behavior (9%) (Almosaed, 2004).

Society rigid gender roles have been linked to violence against women. Sex or gender-roles rigidity was highly correlated with violence in a study of interpersonal violence among 17 cultures (McConahay & McConahay, 1977). A path analysis of sex-role egalitarianism, marital stress, alcoholism, self-esteem, and witnessing violence as a child was tested. Approval of marital violence and low sex-role egalitarianism were the strongest predictors of wife abuse, whereas low sex-role score indicated traditional and rigid gender-roles attitude (Stith & Farley, 1993).

In the Eastern Mediterranean region, research linked traditional, non-egalitarian gender attitudes with IPPVAW. Khawaja et al. (2008) documented contrasting attitudes of men and women from a Palestinian refugee camp towards women autonomy. Women did not have any restrictive beliefs about women autonomy. On the other hand, men who were un-supportive of female autonomy were supportive of wife beating (Khawaja, et al.,

2008). In Jordan, women subjected to physical violence during pregnancy were found to be supportive of women's duty to obey her husband (Clark et al., 2009).

Summary of the Literature

An overview of the literature on IPPVAW globally and in the Eastern Mediterranean region highlights several insights. Variations in IPPVAW incidence and prevalence across the region indicate that the problem is modifiable and grounded in specific cultural and national contexts.

Factors such as husband's alcohol and/ or drug use, marital conflicts, male dominance have been strongly associated with IPPVAW in both Western and Eastern Mediterranean studies. However, certain factors such as education, employment and physical involvement of husbands in physical fights, social isolation of women were not consistently related with IPPVAW. Several Eastern Mediterranean studies have documented the prevalence of patriarchy and traditional gender attitudes of both men and women. However, the nature of the relationship between these factors and IPPVAW was not well elucidated.

Most studies concluded that negative adverse health outcomes were associated with IPPVAW. Generally, women in the Eastern Mediterranean region did not seek help from healthcare professionals or reveal the real cause of their injuries. Further investigation into the why women hesitate to disclose IPPVAW to their health care providers is merited in order to sensitize health professional to the issues.

To date, Saudi studies have focused on the prevalence of different types of intimate partner violence and the association with adverse health outcomes. None have

investigated the personal, interpersonal, community, and societal factors associated with IPPVAW. Although, the WHO survey has been used in several countries and its psychometric properties have been validated across cultures, its use been quite limited in the Eastern Mediterranean region. For example in Egypt, investigators only focused on the types of violence experienced by women and adverse health outcomes, but did not look into protective and risk factors. The knowledge about protective and risk factors gained from this study will inform the development of much needed cultural relevant public policy and health care services for women who experience IPPVAW.

CHAPTER III

METHODS

This study aimed to obtain preliminary data on physical violence against women by a current or previous husband in Jeddah, Saudi Arabia. Additionally, it aimed to investigate adverse health outcomes as perceived by women who reported IPVAW and to compare these health outcomes with women who did not report IPVAW. The research questions were:

1. Is there an association between personal factors (woman's history of childhood abuse, husband's history of childhood abuse, woman witnessing marital violence as a child, husband witnessing marital violence as a child, husband's alcohol use, and husband's drug use) and reported IPPVAW in Saudi women?

2. Is there an association between interpersonal factors (marital conflicts, male dominance, and polygamous marriages) and reported IPPVAW in Saudi women?

3. Is there an association between community-related factors (employment status of women, employment status of husband, woman's educational level, husband's educational level, and social isolation of women, and husband's involvement in physical fights with other men) and reported IPPVAW in Saudi women?

4. Is there an association between societal-related factors (acceptance of physical chastisement of wives and gender attitudes) and reported IPPVAW in Saudi women?

5. Which factors are most predictive of risk for IPPVAW in Saudi women?

6. Which factors are most predictive of decreased risk for IPPVAW in Saudi women?

7. Is there an association between IPPVAW and reported adverse health outcomes?

Assumptions

This study has several assumptions. First, it assumes that the responses obtained participating women were accurate with little intentional or unintentional bias. Second, it assumes that using a cross-sectional design to explore IPPVAW in Saudi women is acceptable because of the little information available on the impact of IPPVAW on this population. Third, it assumes that the measures taken to protect women's confidentiality in the study reduced the retaliation and harm. Third, it assumes that women who were victims to IPPVAW would seek help through following the instructions given after the interviews on the referral cards.

Research Design

This exploratory study was cross-sectional in nature. The researchers used interviews for the purposes of describing a cross-section of a population at one point in time (Moser & Kalton, 1971). Structured-interviews were conducted using a 73-item adapted version of the WHO "Violence against Women" (VAW) structured questionnaire (version 10.0) (WHO, 2003) (see Appendix A).

This was the most suitable design for the type of information being obtained from the participants (i.e. their previous experience with or history of IPPVAW). Cross-sectional designs using standardized surveys are economical methods for obtaining needed information within limited time and resources. Participants can be surveyed

quickly on multiple topics and standardized data can be coded easily. Cross-sectional design studies cannot be used to imply causality, but to draw significant associations between variables of interest and to generate initial hypotheses. The generated hypotheses can then be tested using experimental or analytical designs (Bowling, 2002).

Protection of Human Subjects

Approval from the University Institutional Review Board (IRB) was obtained before implementing any study related procedures (see Appendix B). Permission to conduct the study in primary care settings in Jeddah was obtained from the research administration of the primary healthcare clinics at the Saudi Ministry of Health (MOH) (see Appendix C).

Ethical Considerations

The study followed the ethical and safety guidelines for research on domestic violence against women as set forth by the World Health Organization (Jansen, Watts, Ellsberg, Heise, & Garcia-Moreno, 2004). All the items on the questionnaire had an additional response of (Refused/ No answer) to allow women the option to refuse to respond to any question.

Risks and Benefits

There was a risk of retaliation by the perpetrator if IPPVAW was disclosed. Therefore, interviews were conducted in private areas in each selected PHC, with the title of the research publicized to the public and potential participants as "*Women's Health and Life Experience Survey*". During the notification statement process women were informed about the nature of the survey. During the interview process the study

investigator changed the topic to "women's general health" and referred to "section 2" (general health questions) of the structured questionnaire if anyone walked in during the interview.

Participants may have experienced psychological distress as a result of disclosing sensitive information. Therefore, all participants were given a referral card (see Appendix D) that listed contact information for women's shelters and social services for the purpose of seeking further assistance and counseling if needed.

There was a risk of disclosure of Protected Health Information (PHI). Hence, each participant was assigned a unique identification number that was used on all data collection instruments. All study data were de-identified. Participants' notification statement forms and study data were kept in separate locked files. There were no direct benefits to participating in the study.

Confidentiality

Participant confidentiality was maintained by instituting the following measures: (a) the study always referred to as "Women's Health and Life Experience Survey", (b) only one woman from each family was deemed eligible for participation, (c) if the woman wanted a copy of the notification form, then an unsigned copy of notification statement form was given to participants for their personal records, (d) interviews were conducted on a one to one basis in a private area in each of the selected PHCs, (e) during the interview debriefing, the study participants were asked not to divulge the nature of the study to their friends, family, or husbands, and (f) all study data were de-identified and all data collection instruments were assigned a unique number. All collected data were kept

in a locked file cabinet maintained by the study investigator. All data were entered into a password protected electronic database. In order to ensure confidentiality of PHI, only the study investigators had access to the study data. All data were reported in the aggregate.

Consent

Due to the very sensitive nature of this inquiry and the potential for harm coming to participants if the nature of the study was exposed, a notification statement form was used instead of a consent form. The notification statement form was approved by the IRB and was used to engage potential participants in the informed consent process (see Appendix E). The statement of notification form was translated into Arabic (see Appendix F).

Social and Cultural Context of the Study

Saudi Arabia is considered the cradle of Islam, home to the Islamic two holy cities, Mecca and Medina. The political system in Saudi Arabia has been based on an absolute monarchy since 1932. The king holds ultimate power over the legislative, executive and judiciary branches of the country. Saudi Arabia is classified into thirteen provinces. Each province is ruled by an appointed member of the royal family. A Supreme Council of Religious Scholars along with a government "Committee for the Promotion of Virtues and Prevention of Vice" enforces adherence to a strict Islamic tenets in social and civil life. The all-male Shura Council is an advisory council comprised of 150 appointed members. The Council acts as a consulting body providing the king with advice regarding public policy and social issues. In 2011, the king

announced that women would be appointed in the Council by 2013. The Council of Ministers, an all-male body, is headed by the king or the crown-prince. In Saudi Arabia the king appoints all ministers, deputy ministers, Shura Council members, governors, and individuals in key-positions. The basic system of governance specifies Qur'an and the prophet traditions (Sunnah) as the sources of governance according to the Basic System of Governance (1992).

Two Saudi policies limit women's autonomy and realization of full rights; guardianship and gender-segregation policies (Deif, 2008). Under the guardianship policy, women are required to obtain a guardian's permission to access education, employment, travel, marriage, or access any public service. Women are treated as legal minors, entitled to little authority over themselves or their children (Deif, 2008). The strict sex-segregation policy limits women's ability to participate in public offices, bans women from employment in most places which hire men, and prevents women from seeking redress or help in male-dominated police stations or courts (Deif, 2008). In addition, women are not allowed to drive in Saudi Arabia, and usually rely on a male-guardian or a private driver for transportation commute in the absence of an efficient and safe public transportation system.

The "World Gender Gap Report" placed Saudi Arabia at 131 out of 135 ranked countries based on four main indicators (Hausmann, Tyson, & Zahidi, 2012). Saudi Arabia ranked as 131 in economic participation and opportunities, 91 in educational attainment, 55 in health and survival, and 133 in political empowerment indicators. These ranks indicate the impact of the institutionalized guardianship and sex-segregation

policies on women's autonomy, ability to participate in the public arena, and ability to access resources.

At present, Saudi women graduates of universities and colleges outnumber men (Mobaraki and Söderfeldt, 2010). Education of women is mainly aimed at preparing women to become a successful housewife, an exemplary wife and a good mother according to the article 153 of Saudi education policy (Deif, 2008). The high rate of educational attainment of women is not translated into high employment numbers or economic independence. United Nations data show that Saudi Arabia is among the lowest countries as regards economic participation of women in the labor force, reaching a maximum of 16% only (United Nations Statistics Division, 2010). As a result of the enforced gender segregation policy, women cannot be employed in most sectors which employ men.

Access to universal healthcare is the right of every Saudi citizen. Approximately, 60% of healthcare services are administered via Ministry of Health hospitals and clinics, while 18% of care is administered by other governmental hospitals such as universities and military facilities. Private healthcare services are available for some citizen and these facilities provide the remaining 22% of healthcare services. Private health care is funded by medical companies and self-payment (Mobaraki and Söderfeldt, 2010). The primary healthcare setting in Saudi Arabia provides basic medical services for both sexes. However, separate waiting areas exist for men and women. In addition to having separate national identification card, each male citizen has another family card on which all dependent females and all male children under 18 years of age are listed. A woman can open a medical file to use the primary healthcare service by presenting her guardian's

family identification card. Although females can have their own national identification cards without a guardian's consent, a family identification card of a guardian is required to open a medical file (N. Aljoaid, personal communication, March 28, 2012). Abortion is only allowed only if a medical committee decides that continuing the pregnancy poses a risk to the mother. Additionally, contraceptive use is not advocated among Islamic scholars although they are accessible if a Saudi women requests contraception (Mobaraki and Söderfeldt, 2010).

Guardianship contributes to the risk of confronting IPPPVAW, nearly making seeking redress or help impossible for women who are under the guardianship provision, especially in cases where the guardian is the perpetrator of violence (Deif, 2008). Additionally, the primary healthcare clinics as first access of women to the healthcare services lack any meaningful tools to help women and children reporting violence. Women who address a physician in a primary healthcare clinic about domestic violence are usually referred to a social worker in the clinic, where she can get a referral letter for a specified hospital. Referral letters are written in English to evade women's guardian acknowledgement of the complaint. Yet the women reporting abuse must find a way to reach the specified hospital, collect an official report of her complaints, and report the case to police authorities (N. Aljoaid, personal communication, March 28, 2012). For women who lack social support of their families, filing a law suit to seek divorce or report abuse can jeopardize custody of her children or her living arrangements, especially if she was financially dependent on her husband. Additionally, the traditional teachings compel women to sacrifice their own wellbeing for the sake of their families and their children.

Setting

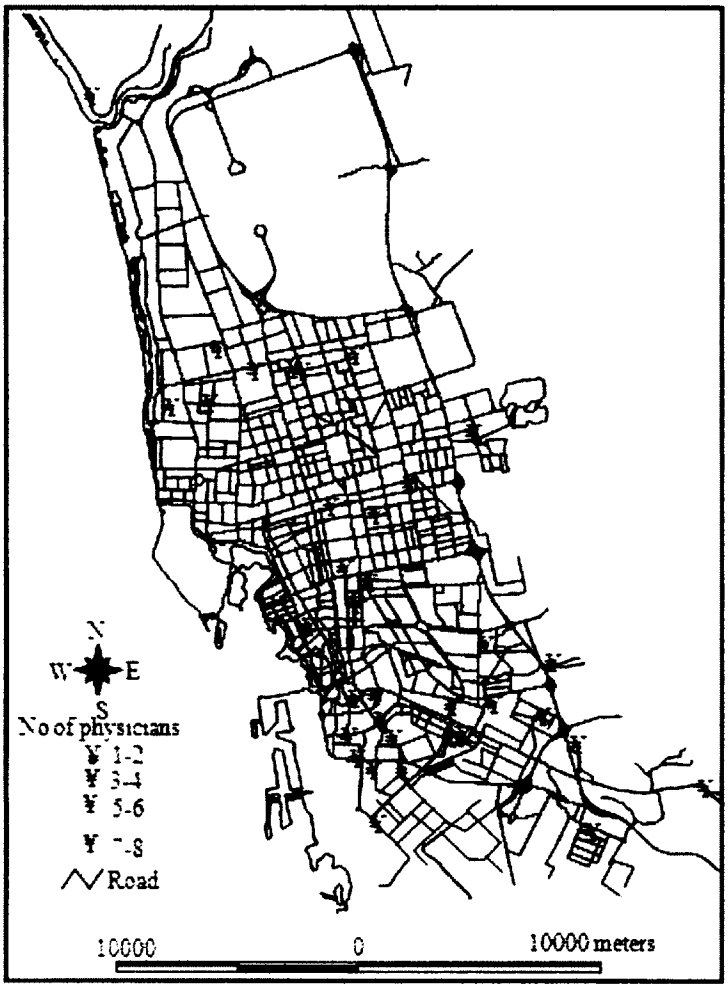
The study was conducted in selected primary healthcare clinics (PHC) in Jeddah, Saudi Arabia. Jeddah is the second largest city in Saudi Arabia after the capital, Riyadh. Historically, Jeddah residents are descendants of diverse and multi-ethnic population of pilgrims, laborers, or traders. The city still function as a port to millions of pilgrims to the nearby two Islam holy cities, Mecca and Medina, around the year. Jeddah is considered the trade capital for Saudi Arabia with a population of 3,456, 259 according to 2010 census, approximately half of them are females (Central department of Statistics and Information, 2007).

Jeddah is classified from an administrative point of view into four regions; North, South, West, and East, in a longitudinal fashion (see Figure 2). North of Jeddah residents live in somewhat higher socioeconomic conditions while South of Jeddah residents live in lower socioeconomic conditions. The eastern region is the most populous.

Each region is serviced by a number of healthcare clinics according to the number of districts. Healthcare services are free of charge and primary health care clinics (PHC) offers basic medical and dental services for citizens and legal residents. Referral services to specialized Public hospitals in Jeddah and elsewhere are available when needed. Some PHC clinics offer social services and more specialized care according to need. The administration of PHC is under a special department in the ministry of health called the Primary healthcare Administration Department. The study was conducted under the permission and supervision of the department. One or two PHCs were selected from each administrative region according to the following criteria; a) the PHC contained a

private area for conducting the interviews, and b) the PHC had adequate flow of patients for sampling purposes.

Figure 2. Jeddah PHC within Different Administrative Regions



Note. Adopted from "Creating a geographic information systems-based spatial profile for exploring health services supply and demand" by Murad A.A., 2011, *American Journal of Applied Sciences 8*(6), P. 648.

Sampling

Because there weren't any known reliable estimates of the number of women between 18-65 years of age who visit PHCs in Jeddah, an estimated minimum sample size was calculated using a power analysis table (Cohen, 1988). A minimum sample size of 132 was needed to achieve a power of 0.90 with an effect size of 0.4 and alpha set at .05. Ellsberg & Heise (2005) recommends increasing the minimum sample size by approximately 25% when studying intimate partner violence. Hence, a minimum sample size was set at 165 participants with an overall goal to reach 200 participants.

Convenience sampling is a useful method for sampling persons from vulnerable populations, the exploration of sensitive topics, and the evaluation of health needs. Generalization of results is not possible with this method. This sampling method is particularly useful for results aimed at guiding health policy and for generating hypotheses (Bowling, 2002). Convenience sampling was used to recruit 200 potential participants from a selected number of PHC centers in Jeddah, Saudi Arabia. All eligible women who attended the selected PHCs in Jeddah during the study period were invited to participate.

In Saudi culture, sexual relations customarily take place between married persons not "intimate partners". Thus, only ever-married women between the ages of 18-65 years were invited to participate. Intimate partner violence occurs across all socioeconomic strata (Ellsberg & Heise, 2005). Therefore, women were recruited across various socioeconomic strata.

Inclusion criteria for study participation were 1) Saudi nationality, 2) married, divorced, or widowed, 3) between the ages of 18 -65, and 4) being seen at the selected PHC. Women who were never married women or who had family members that had already participated in the study were excluded from participation (see Appendix G).

Threats to Validity

External validity threats can arise from several errors; from the selection of participants, places, and/or time of the study. In this particular study, the use of convenience sampling might have resulted in threats to the external validity or the ability to infer due to sampling bias. Internal validity threats can be expected from contamination effect or recall bias (Creswell, 2009). In our research setting, cross-over or a contamination between participants and potential participants had the potential to cause a pre-test sensitization (Creswell, 2009). Therefore, potential participants were interviewed after they completed their visits to PHC. Recall bias might have been introduced due to the nature of the post facto survey, and the fact that some participants might have been mentally and psychologically affected by the sensitive nature of the topic, thereby affecting the quality of data obtained (Bowling, 2002).

Measures

An adapted version of the WHO "Violence against Women" (VAW) structured survey (version 9.9) was used to collect data (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005) (See Appendix A). The VAW was specifically developed by the WHO for use in developing countries. The survey is made up of twelve sections, (a) section one: respondent and her community, (b) section two: general health, (c) section three:

reproductive health, (d) section four: children, (e) section five: current or most recent partner, (f) section six: attitudes toward gender roles, (g) section seven: respondent and her partner, (h) section eight: injuries, (i) section nine: impact and coping, (j) section ten: other (past) experiences, (k) section eleven: financial autonomy, (l) section twelve: completion of the interview (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005). Sections three, four, and nine on reproductive health, children, and impact and coping, respectively, were beyond the scope of this study and were therefore omitted. In Saudi Arabia, intimate relationships are customarily occurring only within legal marriage; therefore the term "intimate partner" has been replaced with "husband" for cultural-relevance. The questionnaire was translated into Arabic and then back translated to English. The accuracy of language including idiom was assessed by an expert of Arabic (see Appendix H).

The psychometric properties of the VAW survey have been established. Previously, the WHO conducted psychometric analyses in several countries (Garcia-Moreno et al., 2006). For all the sites of the study (i.e. the ten countries of the study), Crohnbach's alpha for the physical violence measure was 0.81 (Garcia-Moreno, et al., 2006). In two regions in Brazil, Cronbach alpha coefficients were 0.88 and 0.89. Crohnbach's alpha for physical violence was 0.83, similar to that of the multi-country study (Schraiber, Latorre, França Jr, Segri, & D'Oliveira, 2010). These results indicate the suitability of the instrument to measure physical violence against women across different cultures (Schraiber et al., 2010). For this study, Cronbach's alpha was used to measure the internal consistency of the physical violence construct ($\alpha = .82$).

Independent Variables

The independent variables for this study were derived from the ecological model:

Personal factors. Personal level factors included: (a) woman's history of childhood abuse (item 701), (b) woman witnessing parental violence during childhood (items 702-703), (c) husband's history of childhood abuse (item 706), (d) husband witnessing parental violence during childhood (704-705), (e) husband's history of alcohol use (items 309-311), and (f) husband's history of drug use (item 312).

Interpersonal factors. Interpersonal factors included (a) marital conflict (item 501), (b) male-dominance and decision-making in the family (items 803, 805-807), and (c) polygamy (items 115-117).

Community factors. Community level factors included (a) woman's educational level (items 104-106), (b) employment status of woman (items 802-804), (c) husband's educational level (items 303-305), (d) employment status of husband (items 306-308), (e) social isolation of women (items 107-109), and (f) husbands who were involved in physical fights with other men (items 313-314).

Societal factors. These were measured by; (a) attitudes toward wife beating (item 406) and (b) traditional gender roles (items 401-405). Attitudes toward wife beating were measured by item 406, and measures of positive traditional gender roles were measured by items 401-405.

Adverse health outcomes. The following items; (a) perceived overall health (item 201), (b) daily ability to walk in the past four weeks (item 202), (c) usual activities

in the past four weeks (item 203), (d) pain and/ or discomfort in the past four weeks (item 204), (e) memory or concentration problems in the past four weeks (item 205), (f) taking medications for sleep, pain, or depression in the past four weeks (item 206), (g) thinking of suicide in the past four weeks (item 208), and (h) ever tried to commit suicide (item 209) were used to measure adverse health outcomes.

Utilization of health services. Measures of healthcare utilization included (a) consulting a doctor or other professional healthcare worker because of injury or sickness in the past four weeks (item 207) and (b) spending nights in the hospital in the past twelve months because of sickness (other than giving birth) (item 210).

IPPVAW-related injuries. IPPVAW related injuries were measured by; (a) lifetime frequency of IPPCAW-related injuries (items 601-602a), (b) IPPVAW-related injuries in the past twelve months (item 602b), (c) types of physical injuries (item 603), (d) ever-loss of consciousness because of IPPVAW (item 604a), (e) loss of consciousness because of IPPVAW in the past twelve months (item 604b), (f) ever needed healthcare due to injuries, even if not received (item 605a), (g) needed a healthcare for injuries in the past twelve months even if not received (item 605b), (h) ever-received healthcare for IPPVAW-related injuries (item 606), (i) spending nights at hospital due to IPPVAW-related injuries (item 607), and (j) telling a healthcare worker the real cause of injuries (item 608).

Composite Independent Variables

Male dominance. This variable was used as a proxy for participant's autonomy. A composite variable of "male-dominance" was constructed from responses to four

questions: (a) women inability to spend her own money without giving all or part to her husband (item 803), (b) woman refusal of a job because of her husband (805), (c) husband taking money from his wife by force (item 806), & (d) husband's refusal to give wife money (item 807). If a participant answered yes to any of those 4 questions, male dominance was scored as yes (1=yes). If she answered "no" to all 4 questions, this variable was scored as no (2=no).

Social isolation of women. Social isolation (community level factor) is a composite variable. This variable was measured by responses to three questions; (a) proximity of the women to her family (item 107), (b) frequency of family visits (item 108), and (c) the woman's reliance on family in case of a problem (item 109). If the woman responded "no" or "never" to any of these questions, it was scored as yes (1=yes, 2=no).

Gender attitudes. Gender attitudes (societal-level factors) is a composite variable. This variable was measured by responses to five statements regarding husband and wife roles; (a) a good wife obeys husband even if she disagrees (item 401), (b) marital problems should only be discussed within family (item 402), (c) a man should show his wife he is the boss (item 403), (d) a wife should not choose a friend if her husband disapprove (item 404), and (e) if a man mistreats his wife others outside the family should not interfere (item 405). A positive response to any one of these five statements was scored as traditional (1=traditional, 2= progressive) gender attitudes.

Acceptance of physical chastisement of wives. Acceptance of physical chastisement of wives (societal level factor) is a composite variable. This variable was

measured by the responses to six hypothetical scenarios of a husband beating his wife; (a) if she didn't finish the house chores as he wishes (item 406a), (b) if she disobeys him (item 406b), (c) if she disapproves of having sex with him (item 406c), (d) if she asks him if he is having an affair (item 406d), (e) if he doubted the wife (item 406e), and (f) if he discovered infidelity (item 406f). A positive response to being asked if a husband has a right to beat his wife in any of the six scenarios was scored as acceptance of physical chastisement (1=yes, 2= no).

Dependent Variable

IPPVAW is defined as the intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes but is not limited to: scratching, pushing, shoving, throwing, grabbling, biting, choking, shaking, poking, hair-pulling, slapping, punching, hitting, burning, use of a weapon (gun, knife, or other object), and use of restraints or one's body, size, or strength against another person. Physical violence also includes coercing other people to commit any of the above acts (Saltzman, Fanslow, McMahon, & Shelley, 1999). IPPVAW was measured by answering yes to item 503 (1=yes, 2=no), and the acts of violence listed in item 502: 1-6 (1=yes, 2=no).

Study Procedures

Recruitment. PHCs were purposively selected from each geographic region in Jeddah (North, South, East, and West) to ensure equal geographic distribution, availability of private interview areas, and adequate numbers of female patients seen for health care services. Six Primary Healthcare Clinics (PHC) were chosen across Jeddah

City, one from the East (Al-Safa), one from the West (Al-Ruwais), two from the North (Al-Naem and Al-Salama), one from the South (Al-Balad) and one from the Center (Al-Azizeyyah). Potential participants were recruited from these selected PHCs.

When potential participants entered the registration area of the PHC the receptionist gave them a flyer (see Appendix I). The study flyer was translated to Arabic and reviewed by an expert in Arabic (see Appendix J). The flyer invited potential participants to participate in the study entitled "Women's Health and Life Experience Survey". The flyer stated the purpose of the study, emphasized the voluntary nature of participation, detailed the inclusion criteria, stressed confidentiality, and included contact information for the study investigator. Interested women were directed to the study investigator. In turn, the study investigator screened women for eligibility and invited them to participate. All potential participants who were deemed eligible engaged in the notification statement process.

Notification statement. Prior to participating in the study, a notification statement form was used to apprise all potential participants of; (a) the study's purpose, (b) the risks of participation, (c) the benefits of participation, (d) measures taken to ensure confidentiality, (e) measures taken to minimize release of Protected Health Information (PHI), and (f) the right to withdraw without penalty. All potential participants were assured that refusal to participate or withdraw from the study would not affect the services they expected to receive from the PHC. Notification forms included an optional signature line for participants. The notification statement form was in Arabic. The study investigator kept a record of the notification statements for all the study participants.

Potential participants who agreed to participate were then enrolled for study participation and asked to return for the interview after they finished their health care visit.

Data collection. After the potential participant completed their health care visit, they presented themselves to the study investigator. The study investigator then conducted the interview using an adapted version of the WHO "Violence against Women" (VAW) structured questionnaire (version 10 see Appendix A). VAW questionnaire was comprised of 73 closed-ended questions on personal characteristics of women, perception of women's health status, reported characteristics of husbands, attitudes, interpersonal dynamics, IPPVAW-related injuries, history of violence in childhood of women and their husbands, and the women's and husbands' employment status. Individual interviews ranged from 30-45 minutes per participant. After the interview was completed, all participants received a debriefing wherein they were asked not to divulge the nature of the study to anyone and were also given referral cards with the contact information for women's shelters and social services. This procedure was followed until 200 participants were interviewed (approximately 40 participants from each geographic region).

Data management. All participants were assigned a unique identification number for purpose of protecting confidentiality. This unique identification number was used on all data collection instruments. Collected data were entered into a password protected electronic database. All data were stored in a locked file cabinet in the PI's office. Data access was limited to study investigators.

Data analysis. SPSS software (version 17.0) was used to analyze the data. Frequencies and measures of central tendency were used to assess the data for omissions and/or outliers. Descriptive statistics (i.e. frequencies and proportions) were used to organize and describe the data. Table 4 lists the statistical tests which were used to analyze the data.

Due to the nature of the non-parametric nature of the data, the strength, direction, and significance of any correlation between independent variables and IPPVAW was explored using Spearman's Rho correlation coefficient ($\alpha = 0.05$). The Chi-Square Test of Independence was used to assess relationships between independent variables and IPPVAW. Pearson's correlation coefficient was used to assess the significance of the relationship. Cohen's guidelines on correlation coefficients was used to assess the strength of correlation as follows, small for r=0.10 to 0.29, medium for r=0.30-0.49 and large for r=0.50 to 1.0 (Cohen, 1988). The results of the cross tabulation was reported as the proportions of cases in each of the IPPVAW categories (Women with IPPVAW and women without IPPVAW).

Due to the nominal and ordinal nature of the collected data, non-parametric tests were used to analyze differences between women who reported IPPVAW and those who did not. Mann-Whitney test (α=0.05) was used to compare; woman's history of childhood abuse, husband's history of childhood abuse, woman witnessing parental violence as a child, husband witnessing parental violence as a child, effect of polygamy, male dominance, women's employment status, husbands' employment status, husband's involvement in physical fights with men, gender attitudes toward women, social isolation

Table 4

Statistical Tests Used for Analysis of Research Questions

RQ1. Is there an association between personal factors (women and husband's history of childhood abuse, women or husbands witnessing childhood abuse, and husband's alcohol or drugs use) and reported IPPVAW in Saudi women?	Chi-Square test, Kruskal-Wallis test, Mann-Whitney test
RQ2. Is there an association between interpersonal factors (marital violence, male dominance, and polygamous marriages) and reported IPPVAW in Saudi women?	Chi-Square test, Kruskal-Wallis test, Mann-Whitney,
RQ3. Is there an association between community-related factors (employment and income, education of both women and their husbands, and social isolation of the women and their families, husbands' physical involvement with other men) and reported IPPVAW in Saudi women?	Chi-Square test, Mann-Whitney Test, Kruskal-Wallis test
RQ4. Is there an association between societal-related factors and reported IPPVAW in Saudi women?	Chi-Square test, Mann-Whitney test
RQ5. Which factors are most predictive of risk for IPPVAW in Saudi women?	Binary logistic Regression
RQ6. Which factors are most predictive of decreased rick for IPPVAW in Saudi women?	Binary logistic Regression
RQ7. Is there an association between IPPVAW and reported adverse health outcomes?	Chi-Square test

of women, and acceptance of physical chastisement of wives between women who reported IPPVAW and those who didn't.

Kruskal-Wallis test was used to compare the woman's history of childhood abuse, husband's history of childhood abuse, husband's alcohol use, husband's drugs use, marital conflicts, woman's educational level, woman's employment status, husband's educational level, husband's employment status and the husband's type of profession. P-value ≤ 0.05 was considered statistically significant.

Chi-Square test for Independence was used for exploring the relationship between IPPVAW and the perceived health status and the use of health services ($\alpha = 0.05$).

CHAPTER IV

RESULTS

Six Primary Healthcare Clinics (PHC) were chosen across Jeddah City, one from the East (Al-Safa), one from the West (Al-Ruwais), two from the North (Al-Naem and Al-Salama), one from the South (Al-Balad) and one from the Center (Al-Azizeyyah). From each PHC, forty women were selected for interviews. In the Northern region, 16 interviews were conducted at Al-Naem PHC and 24 interviews were conducted at Al-Salama PHC. In total, data were collected from 200 ever-married women between 18 and 16 years of age. Thirteen women did not complete the interview process. Some women did not participate due their husbands' requests that they leave shortly after the completion of their health care visit.

This chapter presents demographics and background characteristics of participating women and their husbands, the frequency of IPPVAW last year and ever, and the IPPVAW-related injuries at first. Afterwards, the chapter outlines the findings related to the research questions i.e. associations between personal, interpersonal, community and the societal-related factors and IPPVAW. Finally, findings regarding associations between IPPVAW and adverse health outcomes are presented.

Background Characteristics of Participating Women

The mean age of participating women was 38 $\pm$ 10.7 years, with a range of 18 to 61 years of age. Nearly half of the women (46%) were between 31 and 50 years of age. Most were married (89.5%). The mean duration of marriages was 16 $\pm$ 11 years. The

majority of women (82%) were in monogamous marriages with 17% in polygamous marriages. Of those in polygamous marriages, 8% were second wives.

Twenty-eight percent had a university education and only 15% reported no education. Most women were not employed outside of the home (74%). Nearly half of women (45.5%) lived with their husband's families, while 15.5% of women lived with their own families (See Table 5).

Reported Background Characteristics of Husbands

The mean age of husbands as reported by the participating women was 46.34 years $\pm$ 14.2 years. More than half of the husbands (54.5%) were reportedly between 31 and 50 years of age. The majority of husbands were educated (91.5%); only 8% of husbands reportedly had no education. A significant number of husbands were either high school or college graduates (28.5% and 29.5% respectively). Most husbands were employed (69%) with 9.5 % being unemployed, and 2.5% with no response. Among husbands who were employed, 29% were professionals, 19.5% did labor and manual work, 17.5% were semi-skilled workers and 15% worked in police or military jobs (See Table 6).

Intimate Partner Physical Violence Against Women (IPPVAW) in the Study Participants

A total of 91 women (45.5%) reported IPPVAW. Frequencies and percentages for reported acts of IPPVAW during the last year and ever are shown in Table 7. Of those who reported IPPVAW, 79 (39.5%) reported IPPVAW during last year and 84 (42%) reported ever being subjected to IPPVAW.

Table 5

Background Characteristics of Women

Characteristics	Categories	n (%)
Age of women	18-30 Years	57 (28.5%)
	31-50 Years	92 (46%)
	51-65 Years	51 (25.5%)
Difference Between Wife & Husband's Age	Less Than 5 Years	79 (39.5%)
	6-10 Years	62 (31%)
	11-20 Years	42 (21%)
	More Than 20 Years	15 (7.5%)
Marital Status	Married	179 (89.5%)
	Divorced	13 (6.5%)
	Widowed	10 (5%)
Times of Marriage	Once	178 (89%)
	Twice	21 (10.5%)
	Three Times	1 (0.5%)
Duration of Marriage	Less than 5 Years	35 (17.5%)
	6-15 Years	69 (34.5%)
	16-25 Years	57 (28.5%)
	More Than 25 Years	38 (19%)
Co-wives	Yes	34 (17%)
	No	164 (82%)
Order of Wife in Polygamous Marriages	First	12 (6%)
	Second	16 (8%)
	Third	6 (3%)
	Fourth	1 (0.5%)
Education	No Education	30 (15%)
	Elementary	19 (9.5%)
	Intermediate	42 (21%)
	High School	53 (26.5%)
	Higher Education	56 (28%)
Working Status	No Job/ No Income	148 (74%)
	Employed/ Earns Money	52 (26%)
Woman's Living Arrangements	With Husband's Families	91 (45.5%)
	With Own Families	31 (15.5%)
	Near Own Families	150 (75%)

Table 6

Reported Background Characteristics of Husbands

Characteristics	Categories	n (%)
Age of Husbands	18-30 Years	23 (11.5%)
	31-50 Years	109 (54.5%)
	51-65 Years	64 (32%)
Literacy	Yes	183 (91.5%)
	No	17 (8.5%)
Education	No Education	16 (8%)
	Elementary	32 (16%)
	Intermediate	31 (15.5%)
	High School	57 (28.5%)
	Higher Education	59 (29.5%)
Working Status	Working	137 (68.5%)
	Not Working	19 (9.5%)
	Retired	32 (16%)
	Students	1 (0.5%)
	Disabled/ Chronic Illness	6 (3%)
Type of work	Professional Work	58 (29%)
	Semi-Skilled Work	35 (17.5%)
	Manual Work	39 (19.5%)
	Police/ Military Work	38 (15%)

Acts of IPPVAW varied from slapping to choking/burning to being threatened with a weapon (see Table 7). Slapping (33.5%), shoving or pushing (32%) or hitting with fists (25%) were more common than kicking or dragging (13%), choking or burning (10%) or threatening with a weapon or actual use of a weapon (8.5%).

IPPVAW-Related Injuries in the Study Participants

Table 8 lists the frequencies of IPPVAW-related injuries. Nearly 20 percent of women (18.5%) of those who reported IPPVAW cited IPPVAW-related injuries; 17.5% reported injuries once or twice, 5.5% reported 3-5 times incidents, and 5% of women reported injuries more than five times. IPPVAW-related injuries were mostly scratches and bruises (10.5%), followed by dislocations and sprains (8.5%), then by cuts, abrasions and bites (7.5%). Burns, deep cuts and wounds, broken ear drums and eye injury, fractures, broken teeth and internal injuries, were reported in similar proportions (3% to 5%). A small number of women (4%) reported other injuries including hair being pulled out of scalp and abortions. Nearly seven percent of women reportedly lost consciousness due to IPPVAW.

Among women reporting IPPVAW-related injuries, 16% required medical attention for their injuries, 12.5% required medical attention once or twice, 2% required medical attention for 3-5 times, and 1.5% required medical attention more than five times. During the last year, 7% of women were hospitalized for 1-3 nights due to IPPVAW-related injuries, 3% were hospitalized for 4-7 nights and 3% were hospitalized for more than 7 nights. Only 6.5% of women who were injured due to IPPVAW told healthcare professionals about the real cause of their injuries.

Table 7

Frequency of IPPVAW Acts: During Last Year and Ever (n=91)

IPPVAW Acts	Ever n (%)	Last Year n (%)
Slapped or Thrown at With Something That Could Hurt	67(33.5%)	27 (13.5%)
Shoved or Pushed	64 (32%)	30 (15%)
Hit With Fists or Something Else That Could Hurt	50 (25%)	21 (10.5%)
Kicked, Dragged, or Beaten Up	26 (13%)	11 (5.5%)
Choked or Burned on Purpose	20 (10%)	4 (2%)
Threatened With a Gun, Knife or Weapon or Were Victims of Weapon Use	17 (8.5%)	7 (3.5%
Women Reported Physical Violence	84 (42%)	79 (39.5%)

Research Questions

Spearman's Rho correlation coefficient was used as an initial step to assess the strength and direction of correlations between personal, interpersonal, community, and societal factors and IPPVAW. Cohen (1988) was used to guide the assessment of the strength of correlations (i.e. small for r=0.10 to 0.29, medium for r=0.30-0.49 and large for r=0.50 to 1.0).

Table 8

IPPVAW-Related Injuries

Characteristics	n (%)
IPPVAW-Injuries	
Yes	37 (18.5%)
No	59 (29.5%)
Frequency of Injuries	
Once or Twice	15 (7.5%)
Few Times (3-5 Times)	11 (5.5%)
Several Times (> 5 times)	10 (5%)
IPPVAW- Injuries Last Year:	
Yes	14 (7%)
No	23 (11%)
Type of IPPVAW-Related Injury:	
Cuts, Abrasions, Bites	15 (7.5%)
Scratches & Bruises	21 (10.5%)
Dislocations, Sprains	17 (8.5%)
Burns	7 (3.5%)
Deep Cuts & Wounds	8 (4%)
Broken Ear Drums, Eye Injury	10 (5%)
Fractures	10 (5%)
Broken Teeth	8 (4%)
Internal Injuries	6 (3%)
Others (Abortion, Hair Pulled)	8 (4%)
Ever Lost Consciousness due to IPPVAW:	
Yes	13 (6.5%)
No	52 (26%)
Ever Lost Consciousness due to IPPVAW Last Year:	
Yes	4 (2%)
No	26 (13%)
Times Needed Medical Attention for IPPVAW-Injuries:	
1-2 Times	25 (12.5%)
3-5 Times	4 (2%)
More than 5 Times	3 (1.5%)
Needed Medical Attention for IPPVAW-Injuries Last Year:	
Yes	12 (6%)
No	19 (9.5%)
Received Medical Attention for IPPVAW-Related Injuries:	
Yes, Sometimes	15 (7.5%)
Yes, Always	4 (2%)
Never	29 (14.5%)
Nights at a Hospital Last Year Due to IPPVAW-Injury:	
1-3 Nights	14 (7%)
4-7 Nights	6 (3%)
>7 Nights	6 (3%)
Told a Healthcare Professional the real reason of Injury:	
Yes	13 (6.5%)
No	43 (21.5%)

Correlations for personal factors and IPPVAW are listed in Table 9. Husband's witnessing parental violence in childhood (($p \leq 0.040$), husbands' alcohol use ($p \leq 0.000$), and husband's drug use ($p \leq 0.000$) were significantly correlated with IPPVAW. Woman's or husband's history of childhood abuse, and woman witnessing parental violence as a child were not significantly correlated with IPPVAW (see Table 9).

Regarding interpersonal factors, marital conflict ($p< 0.000$) and male dominance ($p= 0.000$) showed significant correlations with IPPVAW. Polygamous marriages were not significantly correlated with IPPVAW (see Table 10).

When analyzing community factors, positive correlations were found between wife's educational level, wife's employment status, husband's educational level, husband's years of schooling, and husband's involvement in physical fights with other men and IPPVAW. These correlations were not significant except for husband's years of schooling ($p=0.030$) and husband's involvement in physical fights with other men ($p= 0.012$) (see Table 11).

Neither acceptance of physical chastisement of wives nor gender attitudes were significantly correlated with IPPVAW ($p=0.191$, and $p=0.37$ respectively) (see Table 12).

RQ1.

Is there an association between personal factors (woman's history of childhood abuse, husband's history of childhood abuse, woman witnessing parental violence as a child, husband witnessing parental violence as a child, husband's alcohol use, and husband's drug use) and reported IPPVAW in Saudi women?

Table 9

Correlation of Personal Factors and IPPVAW

Variable	n	Spearman's Rho	Significance
Woman's History of Childhood Abuse	200	0.033	0.645
Woman Witnessing Parental Violence in Childhood	194	0.038	0.600
Husband 's History of Childhood Abuse	129	0.162	0.067
Husband Witnessing Parental Violence in Childhood	125	0.184	0.040*
Husband's Alcohol Use	195	0.288	0.000**
Husband's Drug Use	195	0.322	0.000**

Note. *$p \leq 0.05$, two-tailed. **$p \leq 0.001$, two-tailed.

Table 10

Correlation of Interpersonal Factors and IPPVAW

Variable	n	Spearman's Rho	Significance
Marital Conflict	200	0.343	0.000*
Male Dominance	200	0.248	0.000*
Polygamous Relationship	198	0.064	0.372

Note. *$p \leq 0.001$, two-tailed.

Table 11

Correlation of Community Factors and IPPVAW

Variable	n	Spearman's Rho	Significance
Employment Status of Women	199	0.031	0.666
Employment Status of Husbands	195	-0.094	0.193
Woman's Educational Level	200	0.076	0.282
Husband's Educational Level	195	0.138	0.055
Husband's Years of Schooling	200	0.158	0.030*
Social Isolation of a Woman	200	-0.10	0.883
Husband's Involvement in Physical Fights With Other Men	198	0.178	0.012*

Note. *$p \leq 0.05$, two-tailed.

Table 12

Correlation of Societal Factors and IPPVAW

Variable	n	Spearman's Rho	Significance
Acceptance of Physical Chastisement of Wives	200	0.093	0.191
Gender Attitudes	200	-0.064	0.367

Chi-square Test was use to assess associations between each variable and IPPVAW (see Table 13). No significant association was found between woman's history of childhood violence, woman's witnessing parental violence in childhood, and husband witnessing parental violence in childhood and IPPVAW. The Chi-Square indicated significant association between husband's history of childhood abuse and IPPVAW ($p = 0.048$), husband's alcohol use ($p \leq 0.000$), and husband's drug use ($p \leq 0.001$).

Non-parametric tests were used to assess differences between women who reported IPPVAW and those who didn't. Kruskal-Wallis test revealed no significant difference in IPPVAW between those women who reported childhood abuse as once or twice, sometimes, or several times.

Mann-Whitney test revealed no significant difference in IPPVAW between women of husbands who witnessed childhood abuse and women of husbands who did not. Moreover, Mann-Whitney test revealed no significant differences in IPPVAW between women who witnessed parental violence in childhood and those who didn't. Mann-Whitney test revealed no significant differences in IPPVAW between women of husbands had history of childhood abuse and women of husbands without history of childhood abuse. Kruskal-Wallis test showed significant differences ($p=0.001$) in IPPVAW between women who had husbands who used alcohol once ($Md=3.5$, $n=2$), once or twice a week ($Md=43.5$, $n=5$), 1-3 times a week ($Md=75.83$, $n=3$), less than once a month ($Md=43.5$, $n=7$), or never used alcohol ($Md=102.14$, $n=177$).

Table 13

Chi-Square Test of Association of Personal Factors and IPPVAW

Variable associated with IPPVAW	IPPVAW	No IPPVAW	X^2	P
	n (%)			
Woman's History of Childhood Abuse:				
Once or Twice	8 (9.3%)	4(7.4%)		
Sometimes	10 (11.6%)	21(24.4%)	5.775	0.056
Several Times	24 (27.9%)	19 (22.1%)		
Total	42 (48.8%)	44 (51.2%)		
Husband's History of Childhood Abuse:				
Yes	40 (60.6%)	28 (44.4%)	3.378	0.048*
No	26 (39.4%)	35 (55.6%)		
Woman Witnessing Parental Violence as a Child:				
Yes	15 (75%)	16 (84.2%)	0.507	0.378
No	5 (25%)	3 (15.8%)		
Husband Witnessing Parental Violence as a Child:				
Yes	8 (61.5%)	2 (28.6%)	1.978	0.175
No	5 (38.5%)	5 (71.4%)		
Husband' Alcohol Use:				
Almost Everyday	2 (1%)	0		
Once or Twice a Week	5 (2.6%)	0	22.259	0.000**
1-3 Times a week	2 (1%)	1 (0.5%)		
Less than once a month	7 (3.6%)	0		
Never	70 (35.7%)	107(54.6%)		
Husband's Drug Use:				
Almost once a day	8 (4.1%)	0		
Once or Twice a day	1 (0.5%)	0	21.637	0.001**
1-3 times a month	5 (2.6%)	0		
Less than once a month	1 (0.5%)	0		
Never	71 (36.4%)	108(55.4%)		

Note. *$p \leq 0.05$, two-tailed. **$p \leq 0.001$, two-tailed.

Kruskal-Wallis test showed significant difference (p=0.001) in IPPVAW between women who had husbands who used alcohol once (Md=3.5, n=2), once or twice a week

(Md=43.5, n=5), 1-3 times a week (Md=75.83, n=3), less than once a month (Md=43.5, n=7), or never used alcohol (Md=102.14, n=177). Kruskal-Wallis test showed significant difference in IPPVAW between women who had husbands who used drug almost once a day (Md=44, n=8), 1-2 a day (Md=44, n=1), 1-3 times a month (Md=44, n=5), less than once a month (Md=44, n=1), never (Md=102.83, n=179), and who previously used drug (Md=44, n=1) (see Table 14).

Table 14

Non-Parametric Tests of Personal Factors

Variable	Statistic	P
Wife History of Childhood Abuse	5.707	0.58
Husband History of Childhood Abuse	1738	0.067
Wife Witnessed a Parental Violence as a Child	106.5	0.55
Husband Witnessing a Parental Violence as a Child	350	0.28
Husband's Alcohol Use	19.726	0.001*
Husband's Drug Use	21.526	0.001*

Note. *$p \leq 0.001$, two-tailed.

RQ2.

Is there an association between interpersonal factors (marital conflicts, male dominance, and polygamy) and reported IPPVAW in Saudi women?

Chi-Square test showed that marital conflict was significantly associated with IPPVAW (p=0.000). Likewise, male dominance was significantly associated with IPPVAW (p=0.000): wife refusing a job because of a husband (p=0.004), husband taking money by force from wife (p=0.002), and husband refusing to give money to his wife (p =0.000) were all significantly associated with IPPVAW. Polygamy was not significantly associated with IPPVAW (see Table 15).

The Kruskal-Wallis showed significant differences in IPPVAW (p= 0.000) between women who reported marital conflicts as rare (Md=119, n=67), those who reported it as sometimes (Md=103.33, n=75), and those who reported marital conflicts as often (Md=75.31, n=58). Mann-Whitney test revealed a significant difference (p= =0.000) in IPPVAW between women with dominant husbands (Md=85.24, n=79) and women with non-dominant husbands (Md=110.46, n=121). Mann-Whitney test didn't show significant difference in IPPVAW between women in polygamous marriages and those in monogamous marriages (see Table 16).

RQ3.

Is there an association between community factors (employment status of women, employment status of husband, woman's educational level, husband's educational level, social isolation of woman, and husband's involvement in physical fights with other men) and reported IPPVAW in Saudi women?

Chi-Square test did not reveal significant associations between employment status of women, woman's educational level, and husband's educational level and IPPVAW.

Table 15

Chi-Square Test of Association of Interpersonal Factors and IPPVAW

Variable associated with IPPVAW	IPPVAW	No IPPVAW	χ^2	P
	n (%)			
Marital Conflict				
Rarely	18 (9%)	49 (24.5%)	24.466	0.000**
Sometimes	32 (16%)	43 (21.5%)		
Often	41 (20.5%)	17 (8.5%)		
Wife Ability to Spend Own Money:	17 (68%)	22 (84.6%)		
Yes	5 (20%)	4 (15.4%)	3.734	0.155
Give Husband Some Money	3 (12%)	0		
Give Husband All Money				
Wife Refused a Job Because of Husband:	41 (45.1%)	28 (25.7%)	8.232	0.004*
Yes	50 (54.9%)	81 (74.3%)		
No				
Husband Took Money From Wife By Force:	59 (64.8%)	93 (85.3%)		
Never	5 (5.5%)	4 (3.7%)		
Once or Twice	7 (7.7%)	4 (3.7%)	17.277	0.002*
Few Times	10 (11%)	0		
Many Times	10 (11%)	8 (7.3%)		
Wife Doesn't Have Money				
Husband Refused to Give Wife Money:	45 (49.5%)	95 (87.2%)		
Never	4 (4.4%)	2 (1.8%)		
Once or Twice	14 (15.4%)	9 (8.3%)	38.589	0.000**
Few Times	25 (27.5%)	3 (2.8%)		
Many Times	3 (3.3%)	0		
Husband Doesn't Earn Money				
Male Dominance	48 (24%)	31 (15.5%)	12.262	0.000**
Yes	43 (21.5%)	78 (39%)		
No				
Polygamy	18 (9.1%)	16 (8.1%)	0.806	0.450
Yes	73 (36.9%)	91 (46%)		
No				

Note. *$p \leq 0.05$, two-tailed. **$p \leq 0.001$, two-tailed.

Table 16

Non-Parametric Tests of Interpersonal Factors

Variable	Statistic	Significance
Marital Conflict	24.3	0.000*
Male Dominance	3574	0.000*
Polygamy	2553	0.371

Note. *$p \leq 0.001$, two-tailed.

However, significant associations were found between husband's employment status (p= 0.008), husband's involvement in physical fights with other men (p= 0.012) and IPPVAW (see Table 17). No significant association was found between social isolation and IPPVAW.

Mann-Whitney test for difference in IPPVAW was not significant for women who were employed and women who were not employed. However, Kruskal-Wallis showed significant difference in IPPVAW (p=0.008) between women whose husbands were working (Md=102, n=137), looking for a job/ doesn't work (Md=59.9, n=19), retired (Md=102.39, n=32), student (Md=142, n=1), or disabled/ chronic illness (Md=93.25, n=6). Kruskal-Wallis test for difference in IPPVAW was not significant in women with elementary, intermediate, high school, higher education, or no education.

Table 17

Chi-Square Test of Associations of Community Factors and IPPVAW

Variable associated with IPPVAW	IPPVAW	No IPPVAW	χ^2	P
	n (%)			
Women's Employment Status:				
Yes	26 (13.1%)	27 (13.6%)	1.571	0.456
No	64 (32.2%)	81 (40.7%)		
Woman's Educational Level:				
No Education	12 (6%)	18 (9%)		
Elementary	9 (4.5%)	10 (5%)	4.474	0.346
Intermediate	19 (9.5%)	23 (11.5%)		
High School	30 (15%)	23 (11.5%)		
Higher Education	21 (10.5%)	35 (17.5%)		
Husband's Employment Status:				
Working	56 (28.7%)	81 (41.5%)		
Looking For a Job/ Unemployed	16 (8.2%)	3 (1.5%)		
Retired	13 (6.7%)	19 (9.7%)	13.862	0.008*
Student	0	1 (0.5%)		
Disabled/ Chronic Illness	3 (1.5%)	3 (1.5%)		
Total	88 (45.1%)	107 (54.9%)		
Husbands' Education:				
No Education	8 (4.1%)	8 (4.1%)		
Elementary	19 (9.7%)	13 (6.7%)	8.50	0.075
Intermediate	14 (7.2%)	17 (8.7%)		
High School	31 (15.9%)	26 (13.3%)		
Higher Education	19 (9.7%)	40 (20.5%)		
Husband Involved in Physical Fights with Others:	25 (28.1%)	15 (13.8%)	6.24	0.012*
Yes	64 (71.9%)	94 (86.2%)		
No				
Woman Living Near Her family:				
Yes	68 (74.7%)	82 (75.2%)	0.007	0.935
No	23 (25.3%)	27 (24.8%)		
Frequency of a Woman's Communication with a Family:				
At Least Once a Week	68 (74.7%)	78 (71.6%)	1.387	0.709
At Least Once a Month	13 (14.3%)	16 (14.7%)		
At Least Once a Year	7 (7.7%)	13 (11.9%)		
Never	3 (3.3%)	2 (1.8%)		
Woman Can Rely on Her Family If Needed:				
Yes	36 (39.6%)	43 (39.4%)	0.000	0.987
No	55 (60.4%)	66 (60.6%)		
Social Isolation Of a Woman				
Yes	55 (27.5%)	67 (33.5%)	0.022	0.885
No	36 (18%)	42 (21%)		

Note. *$p \leq 0.05$, two tailed.

Likewise, Kruskal-Wallis test did not reveal significant difference between women with educated husbands and women with non-educated husbands. Mann-Whitney test for difference in IPPVAW was not significant for women who were socially isolated and those who were not. Mann-Whitney test showed significant difference in IPPVAW (p= 0.013) for women whose husbands were involved in physical fights with other men (Md=82.13, n=40) and women whose husbands were not involved (Md=103.9, n=158) (see Table 18).

Table 18

Non-Parametric Tests of Community Factors

Variable	Statistic	Significance
Woman's Educational Level	4.452	0.348
Husband's Educational Level	8.456	0.76
Employment Status of a Woman	3693.5	0.571
Employment Status of Husband	13.791	0.008*
Social Isolation of a Wife	4707	0.882
Husband's Involvement in Physical Fights With Other Men	2465	0.013*

Note. *$p \leq 0.05$, two -tailed.

RQ4.

The majority of women held traditional views (93%), agreeing on at least one or more statements on traditional attitudes. Chi-Square test did not expose any significant association between gender attitudes (see Table 19) or acceptance of physical chastisement of wives and IPPVAW (see Table 20).

Mann-Whitney test showed no significant differences in IPPVAW between women who accepted physical chastisement of wives under at least one hypothetical scenario and women who didn't accept physical chastisement of wives under any scenario. Additionally, Mann-Whitney test showed no significant difference in IPPVAW between women who held traditional gender attitudes and women who held progressive gender attitudes (see Table 21).

RQ5.

Which factors are most predictive of increased risk for IPPVAW?

RQ6.

Which factors are most predictive of decreased risk for IPPVAW in Saudi women?

Binary logistic regression was used to test a model for predicting IPPVAW from the study factors. The full model containing all independent predictors was statistically significant, $\chi^2 = 48.6$, $p < 0.000$, indicating that the model was able to distinguish between participants who reported IPPVAW and those who didn't. The model as a whole explained between 45% to 60% of the variance in IPPVAW, and correctly classified 81.7% of cases (see Table 22).

Table 19

Chi-Square Test of Associations of Gender Attitudes and IPPVAW

Variable associated with IPPVAW	IPPVAW	No IPPVAW	χ^2	P
	n (%)			
Good Wife Obeys Husband:				
Agree	40 (20%)	58 (29%)	1.70	0.204
Disagree	51 (25.5%)	51 (25.5%)		
Marital Problems Should Be Discussed Within Family:				
Agree	70 (35%)	91 ((45.5%)	1.361	0.284
Disagree	21 (10.5%)	18 (9%)		
Husband Should Show He is The Boss:				
Agree	51 (25.5%)	67 (33.5%)	0.603	0.392
Disagree	40 (20%)	42 (21%)		
Wife Should Choose Her Own Friends Even If Husband Disapproves:				
Agree	49 (24.7%)	50 (25.3%)	0.996	0.392
Disagree	42 (21.2%)	57 (28.8%)		
Others Outside The Family Should Interfere If a Husband Mistreats His Wife:				
Agree	58 (29%)	53 (26.5%)	6.201	0.45
Disagree	32 (16%)	56 (28%)		
Gender Attitudes:				
Traditional	83 (41.5%)	103 (51.5%)	0.823	0.264
Progressive	8 (4%)	6 (3%)		

Table 20

Chi-Square Test for Association of Acceptances of Physical Chastisement of Wives with IPPVAW

Variable Associated with IPPVAW	IPPVAW	No IPPVAW	χ^2	P
	n (%)			
Husband Can Hit a Wife If She Fails To Do House Chores as He Wished:			3.648	0.092
Yes	3 (1.5%)	0		
No	88 (44%)	109 (54.5%)		
Husband Can Hit His Wife For Disobedience:			0.507	0.543
Yes	11 (5.5%)	17 (8.5%)		
No	80 (40%)	92 (46%)		
Husband Can Hit His Wife If She Refuses To Have Sex With Him:			0.014	1.00
Yes	7 (3.5%)	8 (4%)		
No	83 (41.7%)	101 (50.8%)		
Husband Can Hit His Wife For Asking Him About If He Has An Affair:			3.585	0.167
Yes	5 (2.5%)	2 (1%)		
No	86 (43%)	105 (52.5%)		
Husband Can Hit His Wife For Doubts:				
Yes	18 (9.1%)	13 (6.6%)	2.357	0.169
No	72 (36.4%)	95 (48%)		
Husband can hit his wife for adultery:				
Yes	51 (25.8%)	51 (25.8%)	2.169	0.155
No	38 (19.2%)	58 (29.3%)		
Acceptance of Physical Chastisement of Wives:				
Accepting	56 (28%)	35 (17.5%)	1.725	0.201
Non-accepting	57 (28.5%)	52 (26%)		

As regards personal factors; husband's alcohol use (p=0.018), was the most predictive factor for IPPVAW in the study population, resulting in an odds ratio (OR) of 42.

Table 21

Non-Parametric Tests of Societal Factors

Variable	Statistic	Significance
Gender Attitudes Of Women	1139	0.366
Approval Of Physical Chastisement Of Women	4457	0.19

Women's history of childhood abuse, husband's history of childhood abuse, woman's witnessing childhood violence, and husband's witnessing childhood violence did not significantly predict IPPVAW. However, woman's witnessing childhood violence resulted in an OR of 15, and husband's witnessing childhood violence recorded an OR of 8.6, both were non-significant.

Of the interpersonal factors, marital conflict (p=0.004) was the most predictive for IPPVAW. Women who reported frequent marital conflicts were 3.8 times more likely to report IPPVAW than women who reported rare marital conflicts. Male dominance and polygamy were not predictive.

Of the community and societal factors only husband's employment status (OR 0.04) showed significance (p=0.021).

RQ7.

Is there an association between IPPVAW and reported adverse health outcomes?

Table 22

Binary logistic Regression for the Ecological Model Factors

Variable associated with IPPVAW	B	P	OR	95% CI
Woman's History Of Childhood Violence	-0.54	0.091	0.58	0.32-1.09
Husband's History Of Childhood Violence	0.797	0.307	2.22	0.48-10.24
Woman Witnessing Parental Violence As A Child	2.71	0.052	15.1	0.97-234.6
Husband Witnessing Parental Violence As A Child	2.15	0.093	8.55	0.70-105
Husband's Alcohol Use	3.74	0.018*	42	1.9-918
Husband's Drug Use	N/A^	-	-	-
Marital Conflict	1.35	0.004*	3.84	1.54-9.58
Male Dominance	1.35	0.11	3.87	0.73-20.5
Polygamy	1.37	0.16	1.37	0.33-5.7
Employment Status Of Women	0.36	0.64	1.43	0.32-6.41
Employment Status Of Husbands	-3.11	0.021*	0.04	0.003-0.63
Women's Educational Levels	0.039	0.961	1.04	0.22-4.9
Husband's Educational Level	-0.85	0.388	0.43	0.06-2.96
Social Isolation Of Women	0.312	0.67	1.37	0.33-5.7
Husband's Involvement In Physical Fights With Other Men	-0.401	0.70	0.67	0.09-5.3
Acceptance Of Physical Chastisement Of Wives	1.07	0.19	2.92	0.59-14.3
Gender Attitudes	0.40	0.73	1.49	0.16-13.7

Note. ^ = Variable removed from model. OR = Odds Ratio; CI = Confidence Intervals; *p ≤ 0.05, two tailed.

Chi-Square test was used to explore associations between health perceptions and IPPVAW (see Table 23). Significant associations were found (p=0.046) between women's perception of increased pain or discomfort in the past 4 weeks, taking sadness medication in the past 4 weeks (p=0.009), and ever thinking about suicide (p<0.000) and

IPPVAW. No significant associations were found between overall health perception, movements in the past 4 weeks, memory or concentration problems in the past 4 weeks, taking sleep or pain medications in the past 4 weeks and IPPVAW. Chi-Square test was used to explore associations between health services utilization and IPPVAW (see Table 24). No significant association was found between consultations with healthcare professionals in the past 4 weeks or hospitalizations and IPPVAW.

Table 23

Chi-Square Test of Associations of Health Perceptions and IPPVAW

Variable associated with IPPVAW	IPPVAW n (%)	No IPPVAW	χ^2	p
Overall Health Perception:				
Excellent	16 (8%)	32 (16%)		
Very Good	28 (14%)	40 (20%)	7.088	0.069
Good	39 (19.5%)	31 (15.5%)		
Poor	8 (4%)	6 (3%)		
Movement in Past 4 Weeks:				
No Problems	45 (22.5%)	64 (32%)		
Few Problems	18 (9%)	19 (9.5%)	2.456	0.483
Some Problems	20 (10%)	21 (10.5%)		
Many Problems	8 (4%)	5 (2.5%)		
Daily Function in Past 4 Weeks:				
No Problems	56 (28%)	71 (35.5%)		
Few Problems	18 (9%)	19 (9.5%)	0.324	0.955
Some Problems	13 (6.5%)	15 (7.5%)		
Many Problems	4 (2%)	4 (2%)		
Pain or Discomfort in Past 4 Weeks:				
No Pain or Discomfort	24 (12%)	49 (24.5%)		
Mild Pain or Discomfort	21 (10.5%)	26 (13%)	9.664	0.046*
Moderate Pain or Discomfort	26 (13%)	21 (10.5%)		
Severe Pain or Discomfort	19 (9.5%)	12(6%)		
Very Severe Pain or Discomfort	1 (0.5%)	1 (0.5%)		
Memory of Concentration Problems in Past 4 Weeks:				
No Problems	47 (51.6%)	61 (56%)	6.744	0.081
Few Problems	12 (13.2%)	19 (17.4%)		
Some Problems	12 (13.2%)	19 (17.4%)		
Many Problems	20 (22%)	10 (9.2%)		
Sleep Medications in Past 4 Weeks:				
No Medications	83 (41.5%)	103 (51.5%)		
Once or Twice	1 (0.5%)	0	1.879	0.598
Some Times	2 (1%)	1 (0.5%)		
Many Times	5 (2.5%)	5 (2.5%)		
Pain Medications in Past 4 Weeks:				
No Medications	23 (11.5%)	32 (16%)		
Once or Twice	10 (5%)	12 (6%)	1.043	0.791
Some Times	21 (10.5%)	28 (14%)		
Many Times	37 (18.5%)	37 (18.5%)		
Sadness Medications in Past 4 Weeks:				
No Medications	82 (41%)	108 (54%)		
Once or Twice	0	0	9.347	0.009*
Some Times	2 (1%)	1 (0.5%)		
Many Times	7 (3.5%)	0		
Ever Thought of Suicide:				
Yes	22 (24.2%)	6 (5.5%)	14.360	0.000**
No	69 (75.8%)	103 (94.5%)		
Ever Tried Suicide:				
Yes	8 (4%)	3 (1.5%)	3.48	0.060
No	83 (41.5%)	106 (53%)		

Note. *$p \leq 0.05$, two tailed. $p \leq 0.001$, two tailed

Table 24

Health Care Utilization and IPPVAW

Variable associated with IPPVAW	IPPVAW	No IPPVAW	χ^2	p
	n (%)			
Consulted a Healthcare Professional in the Past 4 Weeks:			0.095	0.181
Yes	34 (37.4%)	51 (46.8%)		
No	57 (62.6%)	58 (53.2%)		
Type of Healthcare Professional Consulted:				
Doctor	28 (30.8%)	44 (40.4%)		
Nurse	0	1 (0.9%)	4.068	0.397
Pharmacist	6 (6.6%)	5 (4.6%)		
Traditional Healer	0	1 (0.9%)		
Total	45.5%	54.5%		
Nights Spent at a Hospital Last Year:				
None	77 (84.6%)	97 (89%)	3.661	0.30
1-3 Nights	6 (6.6%)	8 (7.3%)		
4-7 Nights	5 (5.5%)	1 (0.9%)		
> 7 Nights	3 (3.3%)	3 (2.8%)		

CHAPTER V

DISCUSSION

This study investigated IPPVAW in a sample of 200 Saudi women n in primary health care settings in Jeddah, Saudi Arabia. A cross-sectional survey design was used to explore personal, interpersonal, community and societal factors and their association with IPPVAW. The approach was framed by the Ecological Model. An adapted WHO questionnaire was used to conduct one to one structured and private interviews with participating women.

Demographics of Women and Their Husbands

The age of our sample varied between 18 and 61 years, most women were between 31 and 50 years. Additionally, differences in age between participating women and their husbands varied, ranged between few years to more than 20 years. The mean reported age of husbands was generally ten years more than the mean age of the women.

Most women in this sample were married, with a smaller proportion of divorced or widowed women. The majority of women were married once; smaller numbers were married two or three times. A considerable proportion of women were in polygamous marriages (17%), mostly as first or second wives. Approximately 55% of women finished 12 years or more of education compared with 58% of men. Most of the women lived with their husbands' families and/or in close proximity to their family of origin.

Reported IPPVAW

Nearly 50 percent of the women in the current study reported IPPVAW. Of those who reported IPPVAW, 39% had been subjected to IPPVAW last year and 42% had been subjected to IPPVAW ever. The proportion of IPPVAW in our research sample (45.5%)

was higher than that observed in most other single country or regional studies. However, IPPVAW ranged from a low of 13 % to a high of 61% in the WHO multicounty study. The variation in prevalence was attributed to differences in cultural norms pertaining to toleration of violence in various countries (Garcia-Moreno, 2006). The frequency of women ever subjected to IPPVAW in Eastern Mediterranean studies ranged from 20% to 45% (Boy & Kulczycki, 2008; Usta, 2007; Vakili, 2010; Khawaja, 2004). In Saudi studies, IPPVAW ranged from 13% to 34% (Afifi, 2011; Tashkandi, 2009; Almosaed, 2004). The higher frequency of IPPVAW in our study is similar to that observed in Eastern Mediterranean studies conducted on areas of lower socioeconomic status such as in Syria and in refugee camps (Hammoury, et al., 2009; Maziak & Asfar, 2003). The high frequency rate underscores a need to develop IPPVAW policies and services that are culturally relevant within the context of Saudi society.

In the literature, moderate physical violence referred to being slapped, pushed, shoved, or pulled by hair. Severe acts of IPPVAW include being hit with a fist or something else that could hurt, being kicked, dragged, beaten up, choked, or burned on purpose (Ellsberg, et al., 2001). In our study, women reported being subjected to moderate acts of violence as well as severe acts. Notably more than 2 thirds reported ever being subjected to moderate as well as severe violent acts. The high incidence of violent acts reported may explain the frequency of IPPVAW-related injuries (18%). However, minor injuries were more common than severe injuries. Our work corresponds to what others have reported about IPPVAW acts and related injuries in the Eastern Mediterranean region. For example, Tashkandi & Rasheed (2009) documented severe incidents in 63% of women who reported IPPVAW, while Afifi et.al. (2011) documented

that approximately 25% of women who reported IPPVAW had related injuries, ranging from scratches/ bruises to ear and eye injuries.

A total of 32 women (16%) who reported IPPVAW-related injuries needed medical attention for their injuries, and only 19 women (9.5%) actually received it. In addition, 6.5 % of injured women disclosed the real reason of their injuries to a healthcare professional. These findings paralleled the findings of other Saudi studies. Afifi et al. (2011) found that 41.4% of the surveyed women tolerated violence without seeking help. Likewise, only 36.7% of surveyed Saudi women in PHC's in Medina informed primary healthcare physicians about their abuse (Tashkandi & Rasheed, 2009). The hesitancy of women to accurately report IPPVAW-related injuries impede proper detection, surveillance, and management of IPPVAW cases by the healthcare sector. Likewise, women may continue to be hesitant to report IPPVAW to Saudi health care providers that they perceive as holding traditional Saudi attitudes about gender equity and uninformed about the complexity of IPPVAW.

Personal Factors and IPPVAW

Significant associations were found between husband's alcohol use and husband's drug use with IPPVAW. The correlation between alcohol use and IPPVAW was small ($r \leq 0.29$) yet significant. This finding is in agreement with conclusions from several studies (Leonard, 1985; Coker, 2000; Usta, 2007; Clark, 2009; Keenan, 1998). However, an association between alcohol use and IPPVAW has not held consistent across Eastern Mediterranean studies. Ammar (2006) reviewed Egyptian studies on spousal violence and alcohol use and did not find conclusive evidence of association. Our

finding of a significant association between husband's drug use and IPPVAW is consistent with the findings of other studies (Coker, 2000; Habib, 2011).

We did not find any significant correlations between other personal factors (e.g. woman's history of childhood abuse, woman witnessing parental violence in childhood, and husband witnessing parental violence in childhood) and IPPVAW in our study of Saudi women. Similarly, Clark, et al. (2009) did not find a significant association between women witnessing parental violence in childhood and IPPVAW. In contrast, Maziak & Asfar (2003) found a significant association between women witnessing parental violence in childhood and IPPVAW. Interestingly, husband's history of childhood abuse was significantly associated with IPPVAW in our study. Our finding is in accord with Clarks' finding of fourfold increased risk of IPPVAW in women whose husbands witnessed childhood violence. In our study, an OR of 8.6 times increased risk for IPPVAW was found in women whose husbands witnessed childhood violence, yet the relationship was not significant. The lack of a significant association may have been a result of the low response rate to the question about the husband's childhood history of violence. Only 63% of women answered this question. Moreover, our logistic regression model showed that the likelihood of IPPVAW is 15 times more likely in women who witnessed childhood violence, though the relationship was not significant. Only 16% of women reported witnessing parental violence in childhood. It may indicate that women were hesitant to disclose past experiences with violence. Cross-cultural examination of IPPAVAW has shown that a wife's history of family violence was one of the strongest predictors (Hotaling & Sugarman, 1986). To date no other Saudi studies have explored the effect of personal history and report of IPPVAW.

Interpersonal Factors and IPPVAW

We found a significant correlation between frequent marital conflicts and IPPVAW. This finding is consistent with results obtained in a U.S. national family violence survey (N= 6,002) (Straus, et.al, 1980). Clark (2009), Haj-Yahia (2002), and Ardabily (2011) documented the impact of increased marital conflict and reports of IPPVAW in Jordanian, Palestinian and Iranian women respectively. Tashkandi and Rasheed (2009) reported similar findings in Saudi women with poor marital relationships.

In our study male dominance was used as a proxy for participant autonomy (e.g. in women who refused a job because of their husband, women whose husbands took their money by force, and women whose husbands who refused to give them money). A significant association was found between IPPVAW and male dominance. These findings confirm the results of Levinson's cross-cultural study (1989). Levinson found that male dominance and the control of wealth in the family were strong predictors of IPPVAW. Eastern Mediterranean studies which explored the impact of male dominance and patriarchal structure of the family on IPPVAW confirmed this association. Husbands who justified a tendency to beat their wives were also supportive of non-egalitarian roles within the family (Haj-Yahia, 1998). Our findings are in harmony with other studies that found an association between wife beating and residing in Egyptian governorates with patriarchal structures (Diop-Sidibé, 2006; Yount, 2009). This finding has special relevance for Saudi women whose access to resources and services are usually constrained by the will of their guardians (Deif, 2008). With the institutionalized guardianship system, access to services and resources for IPPVAW is limited.

The practice of polygamy was not associated with IPPVAW in our study. Our results confirmed the lack of a direct association between polygamy and IPPVAW as reported by a previous study on Jordanian women (Al-Nsour, 2009). The smaller proportion of women in polygamous relationships (17%) in our study may have impacted our efforts to accurately detect any association. Although, it has been posited that polygamy may have an indirect effect on IPPVAW, through increased family stress, poor family functioning, and lower self-esteem in women; the link between polygamy and IPPVAW has not been consistent. Nonetheless, polygamy has been linked to adverse health outcomes in women, (Al-Krenawi, 2010).

Community Factors and IPPVAW

Our study was the first effort to investigate community factors and IPPVAW in Saudi Arabia. We did not find a significant association between employment status of women and IPPVAW. This finding may be explained by the patriarchal structure of Saudi society, in which women do not have egalitarian roles in the family regardless of employment status or educational level. In addition, the majority of the women in the sample (74%) were not employed. This finding is not consistent with other Eastern Mediterranean studies that found women's employment to be protective against IPPVAW (Habib, 2011; Al-Nsour, 2009; Vakili, 2010). The small number of employed women in our sample may have limited our ability to effectively assess the relationship between women's employment status and IPPVAW.

In our study, men and women generally had equal levels of education (85%); only 15% of women and 8% of husbands were uneducated. We did not find any association between educational level and IPPVAW. This mirrors what has been learned about

women's educational level and IPPVAW in other Eastern Mediterranean studies (Cwikel, 2000; Akmatov, 2008; Al-Nsour, 2009). The lack of association between woman's educational level and IPPVAW may be attributed to the effect of the patriarchal structure of families in Saudi Arabia. The patriarchal structure may contribute to the inferior status of women in the family regardless of their educational level (Al-Nsour, 2009; Khawaja, 2008).

We also did not find any association between the husband's educational level and the frequency of IPPVAW. This is in contrast to other Eastern Mediterranean regional studies that found a protective effect against IPPVAW when both partners were educated, or when the differences between husbands and wives' educational levels were minimal (Clark, 2009; Akmatov, 2008; Cwikel, 2003; Haj-Yahia, 2000). The lack of a protective effect of education on IPPVAW may indicate that Saudi traditional cultural norms neutralize the effect of education.

We found that unemployment in the husband was significantly associated with IPPVAW. Moreover, we found that there is a significant difference in husband's employment status between women who reported IPPVAW and those who didn't. This finding is supported by some Eastern Mediterranean studies. Husband's unemployment has been associated with IPPVAW in Iranian, Palestinian, and Egyptian women (Ardabily, 2011; Vakili, 2010; Habib, 2011; Khawaja, 2008). Yet, in our study, husband's employment status was not predictive of IPPVAW, but this may be attributed to chance since 45 % of women who reported IPPVAW also had unemployed husbands.

We did not find a significant association between social isolation of women and IPPVAW. This contradicts the findings of other global and regional studies on IPPVAW

and social support (El-Zanaty, 2006; Cwikel, 2003; Ammar, 2006; Heise, 1998). For example, Egyptian women who were not permitted to go outside their homes reported higher rates of IPPVAW (Diop-Sidibé, 2006). Clark and colleagues (2009) also documented the protective effect of women's family support on the prevalence of IPPVAW. The differences between our findings and other studies may be attributable to the importance placed on maintaining marital links and the cultural norms that consider family a private sphere in Saudi communities.

We found that husband's involvement in physical fights with other men was significantly associated with IPPVAW. There was a significant difference in husband's involvement in physical fights with other men in women who reported IPPVAW and those who didn't. This finding is in agreement with that of several studies, indicating the harmful impact of males' interpersonal violence in propagating violence against women (Sanday, 1981; Malamuth, 1991; Koss, 1989). Eastern Mediterranean and other Saudi studies have not explored the effect of male interpersonal violence on IPPVAW.

Societal Factors and IPPVAW

Acceptance of physical chastisement of wives was scored as positive if a respondent agreed with at least one scenario justifying wife beating from a list of six hypothetical scenarios. We found that the majority of participating women did not agree with most of the justifications of wife beating. However, almost half of respondents agreed with the right of a husband to hit his wife in at least one scenario, particularly adultery. In general, acceptance of physical chastisement of wives was not significantly associated with IPPVAW. Our results paralleled several findings in Eastern

Mediterranean studies. In a national survey of Egyptian women, half of the respondents justified wife beating for some reason (Yount & Li, 2009). Haj-Yahia (1989a) found that more than half of Palestine women did not agree with traditional justifications for wife beating. However, Almosaed (2004) found that 36% of Saudi women in her study were supportive of wife beating in cases of misconduct. In general, our results may indicate that the risk for IPPVAW is not directly related to the attitudes of women towards wife beating but rather to men's attitudes, taking into consideration the patriarchal family structure of Saudi families and the domination of men over women.

Gender attitudes were assessed as a function of women's views on several gender roles of husband and wife. Most women held traditional attitudes (93%) rather than progressive ones (7%). We did not find a significant association between gender attitudes of women and IPPVAW. In turn, this may explain that although women did not agree with most justifications for wife beating, the majority believed in male dominance and superiority of husbands in the household. However, in contrast to our findings, Clark (2009) found significant association between physical violence and women's belief in obedience to their husbands in a study of pregnant Jordanian women. The lack of association reflects the possibility that a woman's attitudes about gender roles may be irrelevant in determining her risk for IPPVAW. In turn, this may warrant investigating the relationship between men's attitudes about gender and IPPVAW. In her study of Saudi society attitudes regarding using violence against women, Almosaed (2004) found that half of the men were supportive of physical violence as means to discipline women. Similarly, Khawaja et al. (2008) found that Palestinian men who were unsupportive of women's autonomy were supportive of wife beating.

Health Perception and IPPVAW

An array of adverse health outcomes have been reported in women who have been subjected to IPPVAW (Campbell, 2002; Plichta, 2004). We found significant associations between recent perceptions of pain and discomfort, recent use of medications for sadness, thoughts of suicide and IPPVAW. Problems with overall health, movement, daily function, memory, concentration, and suicide attempts were more frequently reported by women who reported IPPVAW when compared to women who did not report IPPVAW. However, these differences in health perceptions were not significant. Our results were consistent the WHO multicounty study on women, in which women with IPPVAW reported worse health perceptions (Ellsberg, 2008). In Lebanon and Syria, women who were subjected to IPPVAW reported depression, suicidal thoughts, somatization, and more frequent health complaints than women who were not exposed to IPPVAW (Usta et al., 2007; Maziak et al., 2002). Nonetheless we did not find any association between healthcare utilization and IPPVAW was not found in this study. These results may reflect the women's reluctance to seek help for IPPVAW.

Limitations

This study has several limitations. Convenience sampling was used and thus may have introduced a selection bias. Additionally, the sample size was modest. Hence, it is difficult to generalize the findings to other settings and populations. Despite these limitations, we sampled from PHC's extending over all regions of Jeddah in an effort to present diverse women's experience (North, South, West, East, and Central regions). Consequently the wide geographic net that was cast may have enhanced our probability of sampling women across socioeconomic strata. Nevertheless, the selection of women

from the free primary healthcare setting may have restricted our findings to women from middle to lower socioeconomic strata. In Saudi Arabia more affluent women are more likely to use private health care services. Additionally, recall bias may have impacted the data that we collected due to the questions being based on women's past experiences. Moreover, the data we collected about husband's childhood experiences with violence were obtained indirectly from their wives, possibly limiting the accuracy of the data.

The Ecological Model framework was used to explore relationships between personal, interpersonal, community and societal levels factors and IPPVAW. The Ecological Model posits that measures of individual income levels and educational levels are indicative of aggregate income levels. Therefore, we measured individual indicators of income under community level factors in accord with the "WHO Violence against Women" survey. However, there are more direct measures of the community level socioeconomic indicators such as the average income of the populations, total unemployment rate, and average educational attainment.

Additionally, our findings regarding perceptions of adverse health outcomes or IPPVAW-related injuries in participating women were not verified by cross-checking medical records or official documentations of abuse. The study results are therefore limited by the constraints of self-report.

We must consider that social desirability may have also resulted in under or over reporting of findings. For example, many women saw the Saudi interviewer as an influential figure that had the power to assist them with redressing their complaints. Therefore, most women seemed quite willing to divulge sensitive information about their

experiences with violence. This willingness may have affected the reporting of IPPVAW.

Finally, although we used the standard WHO definition and survey method for IPPVAW which has been validated across several cultures and countries, the limitations of this study must be considered when assessing its contributions to knowledge about intimate partner physical violence against women.

Implications

Clinical implications. The high proportion of women reported IPPVAW in our Jeddah-based PHC's (45.5%) is alarming. The primary healthcare clinics in Jeddah do not provide on-site services for abused women; rather they provide referrals only for social counseling. Healthcare professionals tend to provide women with English-written referral letter to avoid having husbands confiscating the letter or recognizing the real reason for referral according to N. Aljoaid, a social worker at AL-Safa PHC (personal communication, March 28, 2012). Adding referral services to specific hospitals or to police stations would facilitate the documentation of domestic violence cases and institution of legal protective measures. Nonetheless, the effectiveness of referrals depends on a woman's ability to find a way to evade her husband/abuser and to reach the hospital or police station. Therefore, extending the provision of medical and legal services to women subjected to domestic violence to PHC settings is vital.

As we have discussed earlier, the official restrictions on women's autonomy in Saudi may prevent her from accessing needed services (Deif, 2008). The health care setting may be one of the few places that she is free to openly talk to someone outside her family setting. Hence, well-trained healthcare professionals in documentation and

reporting of cases of abuse would improve surveillance and investigation of IPPVAW. Therefore, the integration of educational content regarding IPPVAW into all health care provider curricula; with goals of promoting an increased awareness of the prevalence, identification of at risk women and encouraging non-judgmental attitudes may contribute to a better prepared health care workforce (Tufts, Clements, & Karlowicz, 2009). Additionally helping health care students to develop specific skills for screening for IPPVAW and the knowledge needed to develop effective interventions is essential. Providing women with hotlines to report domestic violence cases is also an important step to mobilizing access to needed services without a woman having to reach medical or legal facilities on her own. Although hotlines have been established by the Ministry of Social Affairs for domestic violence cases, the services provided are limited to counseling and referral without taking any direct legal measures (Al Eissa, 2010).

Policy implications. Twenty one percent of the women who reported IPPVAW-related injuries to us did not report the real causes of their injuries to healthcare professionals. Women may be cautious about reporting IPPVAW to Saudi health care providers that they perceive as possessing traditional Saudi outlooks on gender equity and who are uninformed about IPPVAW. Public policies that mandate a) confidentiality between women and providers regarding any report of violence and b) provider education about effective intervention with IPPVAW may create an environment that is more supportive of reporting by women. A national strategy to prepare the healthcare system to deal with cases of abuse would ensure not only effective detection, prevention and management but also a reduction of the costs related to increased health care utilization due to the short and long term effects of IPPVAW.

To date, there are no punitive laws against domestic violence in Saudi Arabia. Enacting laws addressing domestic violence and providing women with legal services and protection would encourage reporting and obtaining help. Currently, in the patriarchal and family-oriented Saudi society, women hesitate to seek help for problems outside of the family. Public policy that implies a zero tolerance for IPPVAW may help to create an environment wherein women are more comfortable with seeking help outside the family.

More than half of the women in our sample agreed that others outside the family should not interfere if a husband mistreats his wife. A total of 44% of women in our sample disagreed with the interference of others outside the family if a husband mistreats his wife, 16% of those reported IPPVAW. The silence surrounding domestic violence and toleration of domestic violence as a family private matter serves to intensify the harmful impact of violence. Public service campaigns must be instituted by the healthcare, legal, police, and social services sectors to sensitize the public about the consequences of domestic violence and to create an effective response to women in abusive relationships.

Research implications. While the Ecological Model provided a platform for studying several factors related to IPPVAW at the same time, several previously recognized factors for IPPVAW were not significantly associated with it in our study. In part, this may indicate the influence of mediating variables such as husbands' gender attitudes and beliefs about the acceptability of using violence on the incidence of IPPVAW. It is possible that protective influence of a woman's financial independence was not well elucidated because of the low number of employed women who were

recruited in our sample. Traditionally, Saudi wives are often not employed outside the home. Consequently, investigating a women's financial capacity (i.e. her financial ability to feed and house her household, having her own savings) may prove more useful as regards learning more about protective factors for IPPVAW rather than women's employment status.

We did not find any correlation between social isolation of women and IPPVAW. However, we did not directly investigate social support and its impact on coping with IPPVAW. Previous research has shown that women do rely on their families of origin to deal with abusive husbands (Afifi et al., 2011; Clark et al., 2009). Clark et al. (2009) also documented the protective effect of women's family support on the prevalence of IPPVAW. However, the lack of association found in our study between social isolation of women and IPPVAW may be attributable to the importance placed on maintaining marital links and the cultural norms encouraging women to be more committed to the family and marriage more than to their personal needs (Haj-Yahia & Sadan, 2008).

Future Directions

Our research provided a preliminary overview of IPPVAW within Saudi culture. However, important factors related to IPPVAW were not explored. For instance, the effects of IPPVAW on children and women's reproductive health were not investigated. In a patriarchal and traditional culture like that of Saudi Arabia, women tend to place a great importance on maintain the marital link for the sake of their children and this in turn may prevent proper response and action in cases of IPPVAW. Additionally, husband's gender attitudes and acceptance of violence for resolving conflicts were not explored. In the patriarchal culture of the Saudi family, a husband's gender attitudes may be more

important in determining a wife's exposure to IPPVAW. Therefore, future studies must explore IPPVAW from the male perspective.

Assessing Saudi health care provider preparedness for intervention with and attitudes about IPPVAW is an important area for future research. During our interviews, it seemed that women did not hesitate to disclose details on IPPVAW when the right questions were asked. This was documented before by a Lebanese study (Usta et al., 2007). Information about healthcare professionals' attitudes and beliefs would inform public health policy and provide data to support the need to design health education curricula that adequately prepares providers for working with IPPVAW.

Future studies might include both qualitative and quantitative methodologies and cast a wider net for study participation. Randomly selecting the sample and sampling beyond the healthcare setting would add rigor. Studies that include women who are in institutions, have disabilities, and reside in rural areas are also important to understanding the full impact of the problem in Saudi Arabia.

Conclusion

Our study revealed a high frequency of IPPVAW in PHC settings, similar to that observed in other Eastern Mediterranean populations. In addition, the study highlighted the significance of several factors. Husband's alcohol and/or drug use, marital conflict, male dominance, employment status of the husband, and the husband's involvement in physical fights with other men were significantly associated with reports of IPPVAW. Most of the factors associated with IPPVAW in our sample were related to husbands rather than to wives. Therefore, it is safe to assume that in male dominated, non-egalitarian cultures like that of Saudi Arabia, factors related to husbands are more

significantly associated with risk for IPPVAW rather than those related to wives. Consequently, future work must also explore these factors from the husband's perspective.

Focusing further research on clarifying relationships between each factor and IPPVAW and the effects of mediating factors may further contribute to our understanding of the problem. This approach will add to the body of knowledge about regional and cultural influences on IPPVAW, thereby enhancing our ability to mount culturally-specific community responses and to inform policy development.

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APPENDICES

APPENDIX A

WHO QUESTIONNAIRE (IN ENGLISH)

Survey on women's health and life experiences

in Jeddah PHC, Saudi Arabia

IPPVAWJED

Study conducted by

Halah M. Eldoseri

PhD Candidate in Health Services Research

Old Dominion University

College of Health science

2011

Confidential upon completion

DATE OF INTERVIEW: day [ ][ ] month [ ][ ] year [ ][ ][ ][ ] ID ____ [ ][ ][ ]

100. RECORD THE TIME	Hour [ ][ ] (24 h) Minutes [ ][ ]	

IDENTIFICATION	
PHC Location/ NUMBER	[ ] [ ][ ]

SECTION 1 RESPONDENT AND HER COMMUNITY

	QUESTIONS & FILTERS	CODING CATEGORIES	SKIP TO
	If you don't mind, I would like to start by asking you a little about <Jeddah (Administrative region)>. *INSERT NAME OF ADMINISTRATIVE Region ABOVE AND IN QUESTIONS BELOW.* *IF NO NAME, SAY "IN THIS COMMUNITY/ AREA" AS APPROPRIATE.*		
101	I would now like to ask you some questions about yourself. What is your date of birth (day, month and year that you were born)?	DAY .....[ ][ ] MONTH .....[ ][ ] YEAR .....[ ][ ][ ][ ] DON'T KNOW YEAR.....9998 REFUSED/NO ANSWER.....9999	
102	How old were you on your last birthday? (MORE OR LESS)	AGE (YEARS) .....[ ][ ]	
103	How long have you been living continuously in COMMUNITY NAME?	NUMBER OF YEARS .....[ ][ ] LESS THAN 1 YEAR ..... 00 LIVED ALL HER LIFE ..... 95 VISITOR (AT LEAST 4 WEEKS IN HOUSEHOLD) 96 DON'T KNOW/DON'T REMEMBER..... 98 REFUSED/NO ANSWER 99	
104	Can you read and write?	YES..... 1 NO 2	

		DON'T KNOW/DON'T REMEMBER ..... 8 REFUSED/NO ANSWER 9	
105	Have you ever attended school?	YES ..... 1 NO ..... 2 DON'T KNOW/DON'T REMEMBER ..... 8 REFUSED/NO ANSWER 9	⇒**107**
106	What is the highest level of education that you achieved? MARK HIGHEST LEVEL. *CONVERT YEARS IN SCHOOL, LOCALLY-SPECIFIC CODING*	PRIMARY _____ year ..... 1 SECONDARY _____ year ..... 2 HIGHER _____ year ..... 3 NUMBER OF YEARS SCHOOLING .....[ ][ ] DON'T KNOW/DON'T REMEMBER .....98 REFUSED/NO ANSWER 99	
107	Do any of your family of birth live close enough by that you can easily see/visit them?	YES .....1 NO .....2 LIVING WITH FAMILY OF BIRTH .....**3** DON'T KNOW/DON'T REMEMBER .....8 REFUSED/NO ANSWER 9	⇒ **109**
108	How often do you see or talk to a member of your family of birth? Would you say at least once a week, once a month, once a year, or never?	AT LEAST ONCE A WEEK .....1 AT LEAST ONCE A MONTH .....2 AT LEAST ONCE A YEAR .....3 NEVER (HARDLY EVER) .....4 DON'T KNOW/DON'T REMEMBER .....8 REFUSED/NO ANSWER 9	
109	When you need help or have a problem, can you usually count on members of your family of birth for support?	YES .....1 NO .....2 DON'T KNOW/DON'T REMEMBER 8	

		REFUSED/NO ANSWER.....9	
110	Are you currently married ?	CURRENTLY MARRIED.....1 MARRIED BEFORE, NOT CURRENTLY MARRIED.....5	⇒112 ⇒111
111	Did the last marriage end in divorce or separation, or did your husband die?	DIVORCED .....1 SEPARATED/BROKEN UP.....2 WIDOWED.....3 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
112	How many times in your life have you been married? (INCLUDE CURRENT HUSBAND)	NUMBER OF TIMES MARRIED.....[ ][ ] DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
113	The 30next few questions are about your current or most recent husband. Do/did you live with your husband's parents or any of his relatives?	YES ..... NO..... DON'T KNOW/DON'T REMEMBER..... REFUSED/NO ANSWER	
114	IF CURRENTLY WITH HUSBAND: Do you currently live with your parents or any of your relatives? IF NOT CURRENTLY WITH HUSBAND: Were you living with your parents or relatives during your last relationship?	YES ..... NO..... DON'T KNOW/DON'T REMEMBER..... REFUSED/NO ANSWER	
115	Does/did your husband have any other wives while being married (having a relationship) with you?	YES ..... NO ..... DON'T KNOW/DON'T REMEMBER..... REFUSED/NO ANSWER	

116	How many wives does/did he have (including yourself)?	NUMBER OF WIVES ..... [ ][DON'T KNOW.....**98** REFUSED/NO ANSWER.....99	
117	Are/were you the first, second..... wife? *ADAPT WORDING LOCALLY, CHECK THAT THIS REFERS TO THE OTHER WIVES HE HAD AT SAME TIME WHILE BEING WITH RESPONDENT*	NUMBER /POSITION .....[ ][ ] DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
118	In what year was the (first) ceremony performed? (THIS REFERS TO CURRENT/LAST RELATIONSHIP)	YEAR ..... [ ][ ][ ][DON'T KNOW.....98 REFUSED/NO ANSWER.....99	

SECTION 2: GENERAL HEALTH			
201	I would now like to ask a few questions about your health and use of health services. In general, would you describe your overall health as excellent, good, fair, poor or very poor?	EXCELLENT .....1 GOOD.....2 FAIR.....3 POOR.....4 VERY POOR.....5 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	
202	Now I would like to ask you about your health in the past 4 weeks. How would you describe your ability to walk around? I will give 5 options, which one best describes your situation: Would you say that you have no problems, very few problems, some problems, many problems or that you are unable to walk at all?	NO PROBLEMS.....1 VERY FEW PROBLEMS.....2 SOME PROBLEMS.....3 MANY PROBLEMS.....4 UNABLE TO WALK AT ALL.....5 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	
203	In the past 4 weeks did you have problems with performing usual activities, such as work, study, household, family or social activities? Please choose from the following 5 options. Would you say no problems, very few problems, some problems, many problems or unable to perform usual activities?	NO PROBLEMS.....1 VERY FEW PROBLEMS.....2 SOME PROBLEMS.....3 MANY PROBLEMS.....4 UNABLE TO PERFORM USUAL ACTIVITIE.....5 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	

204	In the past 4 weeks have you been in pain or discomfort? Please choose from the following 5 options. Would you say not at all, slight pain or discomfort, moderate, severe or extreme pain or discomfort?	NO PAIN OR DISCOMFORT.....1 SLIGHT PAIN OR DISCOMFORT.....2 MODERATE PAIN OR DISCOMFORT.....3 SEVERE PAIN OR DISCOMFORT.....4 EXTREME PAIN OR DISCOMFOR.....5 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
205	In the past 4 weeks have you had problems with your memory or concentration? Please choose from the following 5 options. Would you say no problems, very few problems, some problems, many problems or extreme memory or concentration problems?	NO PROBLEMS.....1 VERY FEW PROBLEMS.....2 SOME PROBLEM.....3 MANY PROBLEMS.....4 EXTREME MEMORY PROBLEMS.....5 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
206	In the past 4 weeks, have you taken medication: a) To help you calm down or sleep? b) To relieve pain? c) To help you not feel sad or depressed? FOR EACH, IF YES PROBE: How often? Once or twice, a few times or many times?	NO / ONCE OR TWICE / A FEW TIMES / MANY TIMES a) FOR SLEEP 1 2 3 4 b) FOR PAIN 1 2 3 4 c) FOR SADNESS 1 2 3 4	

207	In the <u>past 4 weeks</u>, did you consult a doctor or other professional or traditional health worker because you yourself were sick? IF YES: Whom did you consult? PROBE: Did you also see anyone else?	NO ONE CONSULTED.....A DOCTOR B NURSE (AUXILIARY) .....C MIDWIFE .....D COUNSELLOR.....E PHARMACIST.....F TRADITIONAL HEALER .....G TRADITIONAL BIRTH ATTENDANT .....H OTHER: _____.....X	
208	Just now we talked about problems that may have bothered you in the past 4 weeks. I would like to ask you now: In your life, have you <u>ever</u> thought about ending your life?	YES .....1 NO .....**2** DON'T KNOW/DON'T REMEMBE.....98 REFUSED/NO ANSWER.....99	**⇒210**
209	Have you <u>ever</u> tried to take your life?	YES .....1 NO .....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
210	In the <u>past 12 months</u>, did you have to spend any nights in a hospital because you were sick (other than to give birth)? IF YES: How many nights in the past 12 months?	NIGHTS IN HOSPITAL .....[ ][ ] NONE .....00 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

SECTION 3 CURRENT OR MOST RECENT HUSBAND			
301	I would now like you to tell me a little about your current/most recent husband. How old was your husband on his last birthday? PROBE: MORE OR LESS IF MOST RECENT PARTNER DIED: How old would he be now if he were alive?	AGE (YEARS) .....[ ][ ]	
302	In what year was he born?	YEAR .....[ ][ ][ ][ ] DON'T KNOW/DON'T REMEMBER .....99 REFUSED/NO ANSWER 99	
303	Can (could) he read and write?	YES.....1 NO .....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
304	Did he ever attend school?	YES .....1 NO .....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	⇒306
305	What is the highest level of education that he achieved? MARK HIGHEST LEVEL. *CONVERT YEARS IN SCHOOL, LOCALLY-SPECIFIC CODING*	PRIMARY _____ year .....1 SECONDARY _____ year.....2 HIGHER _____ year.....3 DON'T KNOW.....98 NUMBER OF YEARS SCHOOLING.....[ ][ ] DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

306	IF CURRENTLY MARRIED: Is he currently working, looking for work or unemployed, retired or studying? IF NOT CURRENTLY MARRIED: Towards the end of your relationship was he working, looking for work or unemployed, retired or studying?	WORKING .....**1** LOOKING FOR WORK/UNEMPLOYED.....2 RETIRED .....**3** STUDENT .....**4** DISABLED/LONG TERM SICK.....5 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	⇒**308** ⇒**308** ⇒**309**
307	When did his last job finish? Was it in the past 4 weeks, between 4 weeks and 12 months ago, or before that? (FOR MOST RECENT HUSBAND/PARTNER: in the last 4 weeks or in the last 12 months of your relationship?)	IN THE PAST 4 WEEKS.....1 4 WKS - 12 MONTHS AGO.....2 MORE THAN 12 MONTHS AGO.....3 NEVER HAD A JOB.....**4** DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	⇒**309**
308	What kind of work does/did he normally do? SPECIFY KIND OF WORK *CAN ADD COUNTRY-SPECIFIC CODES*	PROFESSIONAL: _____.....01 SEMI-SKILLED: _____.....02 UNSKILLED/MANUAL: _____ 03 MILITARY/POLICE: _____04 OTHER: _____96 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

309	How often does/did your husband drink alcohol? 1. Every day or nearly every day 2. Once or twice a week 3. 1–3 times a month 4. Occasionally, less than once a month 5. Never	EVERY DAY OR NEARLY EVERY DAY.....1 ONCE OR TWICE A WEEK.....2 1–3 TIMES IN A MONTH.....3 LESS THAN ONCE A MONTH.....4 NEVER .....**5** DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	**⇒312**
310	In the <u>past 12 months</u> (<u>In the last 12 months of your last relationship</u>), how often have you seen (did you see) your husband drunk? Would you say most days, weekly, once a month, less than once a month, or never?	MOST DAYS.....1 WEEKLY.....2 ONCE A MONTH.....3 LESS THAN ONCE A MONTH.....4 NEVER .....5 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9	
311	In the <u>past 12 months</u> (In the <u>last 12 months</u> of your relationship), have you experienced any of the following problems, related to your husband's drinking? a) Money problems b) Family problems x) Any other problems, specify.	YES NO a) MONEY PROBLEMS 1 2 b) FAMILY PROBLEMS 1 2 x) OTHER: 1 2 _____	

312	Does/did your husband ever use drugs? Would you say: 1. Every day or nearly every day 2. Once or twice a week 3. 1 – 3 times a month 4. Occasionally, less than once a month 5. Never *IN COUNTRIES WHERE APPROPRIATE TO ASK ABOUT DRUG USE*	EVERY DAY OR NEARLY EVERY DAY.....1 ONCE OR TWICE A WEEK.....2 1 – 3 TIMES IN A MONTH.....3 LESS THAN ONCE A MONTH.....4 NEVER .....5 IN THE PAST, NOT NOW.....6 DON'T KNOW /DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
313	Since you have known him, has he ever been involved in a physical fight with another man?	YES .....1 NO .....2 DON'T KNOW /DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	⇒**314**
314	In the past 12 months (In the last 12 months of the relationship), has this happened never, once or twice, a few times or many times?	NEVER.....1 ONCE OR TWICE.....2 A FEW (3-5) TIMES.....3 MANY (MORE THAN 5) TIMES.....4 DON'T KNOW /DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

SECTION 4 ATTITUDES			
	In this community and elsewhere, people have different ideas about families and what is acceptable behaviour for men and women in the home. I am going to read you a list of statements, and I would like you to tell me whether you generally agree or disagree with the statement. There are no right or wrong answers.		
401	A good wife obeys her husband even if she disagrees	AGREE.....1 DISAGREE.....2 DON'T KNOW.....98 REFUSED/NO ANSWER.....99	
402	Family problems should only be discussed with people in the family	AGREE.....1 DISAGREE.....2 DON'T KNOW.....98 REFUSED/NO ANSWER.....99	
403	It is important for a man to show his wife who is the boss	AGREE.....1 DISAGREE.....2 DON'T KNOW.....98 REFUSED/NO ANSWER.....99	
404	A woman should be able to choose her own friends even if her husband disapproves	AGREE.....1 DISAGREE.....2 DON'T KNOW.....98 REFUSED/NO ANSWER.....99	

405	If a man mistreats his wife, others outside of the family should intervene	AGREE.....1 DISAGREE.....2 DON'T KNOW.....98 REFUSED/NO ANSWER.....99	
406	In your opinion, does a man have a good reason to hit his wife if: a) She does not complete her household work to his satisfaction b) She disobeys him c) She refuses to have sexual relations with him d) She asks him whether he has other girlfriends e) He suspects that she is unfaithful f) He finds out that she has been unfaithful		

	YES	NO	DK
a) HOUSEHOLD	1	2	8
b) DISOBEYS			
c) NO SEX	1	2	8
d) GIRLFRIENDS			
e) SUSPECTS	1	2	8
f) UNFAITHFUL			
	1	2	8
	1	2	8
	1	2	8

SECTION 5 RESPONDENT AND HER PARTNER

When two people marry or live together, they usually share both good and bad moments. I would now like to ask you some questions about your current and past relationships and how your husband treats (treated) you. If anyone interrupts us I will change the topic of conversation. I would again like to assure you that your answers will be kept secret, and that you do not have to answer any questions that you do not want to. May I continue?

501	In your relationship with your (current or most recent) husband, how often would you say that you quarrelled? Would you say rarely, sometimes or often?	RARELY .....1 SOMETIMES.....2 OFTEN.....3 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

502	Has he or any other husband ever....	A) (If YES continue with B. If NO skip to next item) YES NO	B) Has this happened in the past 12 months? (If YES ask C only. If NO ask D only) YES NO	C) In the past 12 months would you say that this has happened once, a few times or many times? (after answering C, go to next item) One Few Many	D) Before the past 12 months would you say that this has happened once, a few times or many times? One Few Many
	a) Slapped you or thrown something at you that could hurt you?	1 2	1 2	1 2 3	1 2 3
	b) Pushed you or shoved you or pulled your hair?	1 2	1 2	1 2 3	1 2 3
	c) Hit you with his fist or with something else that could hurt you?	1 2	1 2	1 2 3	1 2 3
	d) Kicked you, dragged you or beaten you up?	1 2	1 2	1 2 3	1 2 3
	e) Choked or burnt you on purpose?	1 2	1 2	1 2 3	1 2 3
	f) Threatened to use or actually used a gun, knife or other weapon against you?	1 2	1 2	1 2 3	1 2 3

503	VERIFY WHETHER ANSWERED YES TO ANY QUESTION ON PHYSICAL VIOLENCE	YES, PHYSICAL VIOLENCE .....1 NO PHYSICAL VIOLENCE 2	

SECTION 6 INJURIES				
	I would now like to learn more about the injuries that you experienced from (any of) your husband's acts that we have talked about (MAY NEED TO REFER TO SPECIFIC ACTS RESPONDENT MENTIONED IN SECTION 7). By injury, I mean any form of physical harm, including cuts, sprains, burns, broken bones or broken teeth, or other things like this.			
601	Have you ever been injured as a result of these acts by (any of) your husband (s). Please think of the acts that we talked about before.	YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....8 REFUSED/NO ANSWER.....9		⇒604a
602a	In your life, how many times were you injured by (any of) your husband(s)? Would you say once or twice, several times or many times?	ONCE/TWICE .....1 SEVERAL (3-5) TIMES.....2 MANY (MORE THAN 5) TIMES.....3 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99		
602 b	Has this happened in the past 12 months?	YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99		
603	What type of injury did you have? Please		b) ONLY ASK FOR RESPONSES MARKED IN 603a: Has this happened in the past 12 months? YES NO DK	

	mention any injury due to (any of) your husband acts, no matter how long ago it happened . MARK ALL PROBE: Any other injury?	CUTS, PUNCTURES, BITES.....A SCRATCH, ABRASION, BRUISES.....B SPRAINS, DISLOCATIONS.....C BURNS.....D PENETRATING INJURY, DEEP CUTS, GASHES.....E BROKEN EARDRUM, EYE INJURIES.....F FRACTURES, BROKEN BONES.....G BROKEN TEETH.....H INTERNAL INJURIES.....I OTHER (specify): _____..... X	1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2	8 8 8 8 8 8 8 8 8	
604a	In your life, did you ever lose consciousness because of what (any of your) your husband (s) did to you?	YES 1 NO **3** DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99			**⇒605a** **⇒605a**	
604 b	Has this happened in the past 12 months?	YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99				

605a	In your life, were you ever hurt badly enough by (any of) your husband (s) that you needed health care (even if you did not receive it)? IF YES: How many times? IF NOT SURE: More or less?	TIMES NEEDED HEALTH CARE.....[ ][ ] REFUSED/NO ANSWER.....99 NOT NEEDED.....**00**	
605 b	Has this happened in the past 12 months?	YES..... 1 NO.....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
606	In your life, did you ever receive health care for this injury (these injuries)? Would you say, sometimes or always or never?	YES, SOMETIMES.....1 YES, ALWAYS.....2 NO, NEVER.....**3** DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
607	In your life, have you ever had to spend any nights in a hospital due to the injury/injuries? IF YES: How many nights? (MORE OR LESS)	NUMBER OF NIGHTS IN HOSPITAL.....[ ][ ] IF NONE ENTER '00' DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
608	Did you tell a health worker the real cause of your injury?	YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	

SECTION 7 OTHER EXPERIENCES			
	In their lives, many women experience different forms of violence from relatives, other people that they know, and/or from strangers. If you don't mind, I would like to briefly ask you about some of these situations. Everything that you say will be kept private. May I continue?		
701		NO ONE A	⇒ 702
	Since the age of 15 years, has anyone (FOR WOMEN WITH CURRENT OR PAST HUSBAND: other than your husband) ever beaten or physically mistreated you in any way? IF YES: Who did this to you? PROBE: How about a relative? How about someone at school or work? How about a friend or neighbor? A stranger or anyone else?	FATHER B STEPFATHER C OTHER MALE FAMILY MEMBER D FEMALE FAMILY MEMBER: _____ E TEACHER F POLICE/ SOLDIER G MALE FRIEND OF FAMILY H FEMALE FRIEND OF FAMILY I STRANGER J SOMEONE AT WORK K RELIGIOUS LEADER L OTHER (specify): _____ X	b) ASK ONLY FOR THOSE MARKED. How many times did this happen? Once or twice, a few times, or many times Once or twice / A few times / Many times 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 1 2 3 1 2 3 1 2 3 1 2 3

702	When you were a child, was your mother hit by your father (or her husband)?	YES 1 NO **2** PARENTS DID NOT LIVE TOGETHER.....**3** DON'T KNOW **8** REFUSED/NO ANSWER 9	
703	As a child, did you see or hear this violence?	YES 1 NO 2 DON'T KNOW 8 REFUSED/NO ANSWER 9	
704	As far as you know, was your (most recent) husband's mother hit or beaten by her husband?	YES 1 NO 2 PARENTS DID NOT LIVE TOGETHER 3 DON'T KNOW 8 REFUSED/NO ANSWER 9	⇒**706** ⇒**706** ⇒**706**
705	Did your (most recent) husband see or hear this violence?	YES 1 NO 2 DON'T KNOW 8 REFUSED/NO ANSWER 9	
706	As far as you know, was your (most recent) husband himself hit or beaten regularly by someone in his family?	YES 1 NO 2 DON'T KNOW 8 REFUSED/NO ANSWER 9	

SECTION 8 FINANCIAL AUTONOMY

Now I would like to ask you some questions about things that you own and your earnings. We need this information to understand the financial position of women nowadays.

801	Please tell me if you own any of the following, either by yourself or with someone else: a) Land b) Your house c) A company or business d) Large animals (cows, horses, etc.) e) Small animals (chickens, goats, etc.) f) Produce or crops from certain fields or trees g) Large household items (TV, bed, cooker) h) Jewellery, gold or other valuables j) Motor car k) Savings in the bank? x) Other property, specify FOR EACH, PROBE: Do you own this on your own, or do you own it with others?		YES Own by self	YES Own with others	NO Don't own	
		a) LAND	1	2	3	
		b) HOUSE				
		c) COMPANY	1	2	3	
		d) LARGE ANIMALS	1	2	3	
		e) SMALL ANIMALS				
		f) PRODUCE				
		g) HOUSEHOLD ITEMS	1	2	3	
		h) JEWELLERY	1	2	3	
		j) MOTOR CAR				
		k) SAVINGS IN BANK				
		x) OTHER PROPERTY:				
		_____	1	2	3	
			1	2	3	
			1	2	3	
			1	2	3	
802	a) Do you earn money by yourself? IF YES: What exactly do you do to earn money?	NO.....			⇒	**805**

	ASK ALL. SPECIFY: b) Job c) Selling things, trading d) Doing seasonal work x) Any other activity, specify	b) JOB: _ c)SELLING/TRADING: _____ d)SEASONAL WORK: _____ x)OTHER: _____	YES NO 1 2 1 2 1 2 1 2	
803	Are you able to spend the money you earn how you want yourself, or do you have to give all or part of the money to your husband?	SELF/OWN CHOICE.....1 GIVE PART TO HUSBAND/PARTNER.....2 GIVE ALL TO HUSBAND/PARTNER.....3 DON'T KNOW.....98 REFUSED/NO ANSWER.....99		
804	Would you say that the money that you bring into the family is more than what your husband contributes, less than what he contributes, or about the same as he contributes?	MORE THAN HUSBAND/PARTNER.....1 LESS THAN HUSBAND/PARTNER.....2 ABOUT THE SAME.....3 DO NOT KNOW.....98 REFUSED/NO ANSWER.....99		
805	Have you ever given up/refused a job for money because your husband did not want you to work?	YES.....1 NO.....2 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99		

806	Has your husband ever taken your earnings or savings from you against your will? IF YES: Has he done this once or twice, several times or many times?	NEVER.....1 ONCE OR TWICE.....2 SEVERAL TIMES.....3 MANY TIMES/ALL OF THE TIME.....4 N/A (DOES NOT HAVE SAVINGS/EARNINGS).....7 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
807	Does your husband ever refuse to give you money for household expenses, even when he has money for other things? IF YES: Has he done this once or twice, several times or many times?	NEVER.....1 ONCE OR TWICE.....2 SEVERAL TIMES.....3 MANY TIMES/ALL OF THE TIME.....4 N/A (PARTNER DOES NOT EARN MONEY)7 DON'T KNOW/DON'T REMEMBER.....98 REFUSED/NO ANSWER.....99	
808	In case of emergency, do you think that you alone could raise enough money to house and feed your family for 4 weeks? This could be for example by selling things that you own, or by borrowing money from people you know, or from a bank or moneylender?	YES.....1 NO.....2 DON'T KNOW .....98 REFUSED/NO ANSWER.....99	

SECTION 9 COMPLETION OF INTERVIEW			
901	I would now like to give you a card. On this card are two pictures. No other information is written on the card. The first picture is of a sad face, the second is of a happy face. No matter what you have already told me, I would like you to put a mark below the sad picture if someone has ever touched you sexually, or made you do something sexual that you didn't want to, before you were 15 years old. Please put a mark below the happy face if this has never happened to you. Once you have marked the card, please fold it over and put it in this envelope. This will ensure that I do not know your answer. GIVE RESPONDENT CARD AND PEN. MAKE SURE THAT THE RESPONDENT FOLDS THE CARD; PUTS IT IN THE ENVELOPE; AND SEALS THE ENVELOPE BEFORE GIVING IT BACK TO YOU. ON LEAVING THE INTERVIEW SECURELY ATTACH THE ENVELOPE TO THE QUESTIONNAIRE (OR WRITE THE QUESTIONNAIRE CODE ON THE ENVELOPE).	CARD GIVEN FOR COMPLETION....1 CARD NOT GIVEN FOR COMPLETION...2	
903	RECORD TIME OF END OF INTERVIEW: Hour [ ][ ] (24 h) Minutes [ ][ ]		
904	ASK THE RESPONDENT. How long did you think the interview lasted ? Hours [ ] Minutes [ ][ ]		
INTERVIEWER COMMENTS TO BE COMPLETED AFTER INTERVIEW			
_____ _____ _____			

APPENDIX B

IRB APPROVAL AT OLD DOMINION UNIVERSITY

No.: 11-172

OLD DOMINION UNIVERSITY
HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD
RESEARCH PROPOSAL REVIEW NOTIFICATION FORM

TO: Kimberly Adams-Tufts
Responsible Project Investigator

DATE: October 20, 2011
IRB Decision Date

Women's Health and Life Experience in Jeddah City, Saudi Arabia
Name of Project

Please be informed that your research protocol has received approval by the Institutional Review Board. Your research protocol is:

Approved
Tabled Disapproved
X Approved, (Progress report) contingent on making the changes below*

IRB Chairperson's Signature **October 20, 2011** *Date*

Contact the IRB for clarification of the terms of your research, or if you wish to make ANY change to your research protocol.

The approval expires one year from the IRB decision date. You must submit a Progress Report and seek re-approval if you wish to continue data collection or analysis beyond that date, or a Close-out report. You must report adverse events experienced by subjects to the IRB chair in a timely manner (see university policy).

---

* Approval of your research is CONTINGENT upon the satisfactory completion of the following changes and attestation to those changes by the chairperson of the Institutional Review Board. Research may not begin until after this attestation.

*** In Informed Consent**:

- Recommend that the Informed consent document presented be changed to a "Notification Statement' document instead In this manner, the potential subjects may read/ or have read to them the content of the document, but not be required to sign it. This act would increase the confidentiality of potential subjects and decrease the risk of exposure of participation in the research study. Subjects should be offered a copy of the notification form if they wish, but do not have to be given one for approval of full participation in the study. The list/names and corresponding code numbers of the subjects will be kept as a separate record by investigator and stored in a secured place. Upon completion

of the data analysis of the subjects' responses, the subjects' names should be destroyed.

In the Participant Notification Form

- Remove 'attachment D' from the header.
- Under Exclusionary Criteria, include the statement of exclusion if any other members of family are already in study. Reword the statement in positive voice that the study will only be conducted in primary care centers that have private, secured interview areas.
- Need to add investigator signature and date.
- In the Description of the Research Study, state the number of subjects participating in the study will be 165. State that findings will only be published as a whole (aggregate), with no individual findings being stated.
- Under Risks, add that there is a risk of potential violence to the subjects and then describe how the investigators intend to minimize this risk through the detailed steps to assure confidentiality of participation and data reporting in the study.

Questionnaire.

- The #902 -904 question levels that address qualitative comments will be removed from the questionnaire so as to decrease potential risk of public exposure of the subjects' participation.
- Dr. Maihafer recommends that the investigators pilot the amount of time it takes to reasonably complete the questionnaire. If the time exceeds that estimated amount that is stated in the Description of Research section, the investigators are instructed to request an expedited review of questionnaire as to time; reporting back to Dr Maihafer for review and approval, before starting the study.

Attestation

As directed by the Institutional Review Board, the Responsible Project Investigator made the above changes. Research may begin.

IRB Chairperson's Signature

November 30, 2011

Date

APPENDIX C
SAUDI ARABIAN MINISTRY OF HEALTH IRB Approval

المملكة العربية السعودية
وزارة الصحة
المديرية العامة للشئون الصحية بمنطقة مكة المكرمة
إدارة الرعاية الصحية الأولية بمحافظة جدة
الدراسات والبحوث

وزارة الصحة
Ministry of Health

الرقم : .....
التاريخ :.....
المشفوعات :.....

سعادة مدير قطاع الشمال بالربوة / شمال غرب بالشاطئ/ قطاع الوسط بالبلد / جنوب غرب بالمحجر/ قطاع الجنوب بمدائن الفهد / جنوب شرق الأمير عبد المجيد/ قطاع شمال شرق بريمان

المحترمين

السلام عليكم ورحمة الله وبركاته وبعد،،،،

إشارة إلى مذكرة الاحاله المشار إليها من رئيس أقسام التطوير والبحوث رقم (بدون) تاريخ ١٤٣٣/٣/٢٧هـ بخصوص :-

إجراء بحث هالة الدوسري حيث إن عنوان البحث هو:

Women's health and life experience

نأمل من سعادتكم تسهيل مهمة الباحثة في إجراء بحثها في مراكز القطاع لديكم مع مراعاة عدم تأثر الخدمة في المرافق المعنية والمحافظة على حقوق الأشخاص الخاضعين للبحث وخصوصياتهم واستخدام المعلومات لأغراض البحث العلمي فقط.

شاكرين لكم حسن تعاونكم معنا،،،

وتقبلوا تحياتي،،،

رئيس أقسام التطوير والبحوث

٢/٢٨

د/ازدهار هدني

ص/د/ ~ /١٦٩

ت.أمل
تليفون ٦٨٧٠٥٩٥ – تحويله ٤١٢
فاكس ٦٨٧٠٥٩٥ تحويله ٤١٢

APPENDIX D

CONSENT NOTIFICATION STATEMENT (IN ENGLISH)

Project Title: Women's Health and Life Experience in Jeddah city, Saudi Arabia

Introduction: The purpose of this form is to give you information that may affect your decision whether to say YES or NO to participation in this research, you may take a copy of this form if you wish. This study will take place in this Primary Health Care Center and is designed to assess women's health and life experiences.

Researchers:
Kimberly Adams Tufts, DNP, WHNP-BC, FAAN, Associate Professor, Old Dominion University is the responsible project investigator. The co-investigator is Ms. Halah Eldoseri, MSc. She is a candidate for the PhD degree in Health Services research, at Old Dominion University. Ms. Eldoseri is conducting this study in partial fulfillment of the requirements for doctoral study.

Description of Research Study: The purpose of this project is to assess women's health and life experiences in Jeddah, Saudi Arabia. You will be asked questions in a one-to-one private interview. I will ask you questions about your experience with violence. The study will have a total of 165 participants. All interview forms will be assigned a unique identification number in order to protect your confidentiality and the confidentiality of your Personal Health Information (PHI). This number will be used on all information collection tools. All collected information will be kept in a locked file in the co- investigator's office. All information will be entered into a password protected computer file. In order to ensure your confidentiality and the confidentiality of all PHI, only the study investigators will have access to the study data.

If you say Yes, the interview will take about 45 minutes. All data collected in this interview will be reported as aggregates in the final reporting, with no individual findings being stated. Upon completion of the data analysis of the subject's responses, the subjects' names will be destroyed.

Exclusionary Criteria: The study will only be conducted in Primary Heath Care Centers that have a private, secure area to conduct the interviews with women. If you have never been married before or if you were older than 65 years or younger than 18 years you cannot participate. If any member of your family has participated in this study before, then you cannot participate.

Risks and Benefits:
Risks: This study has the potential risk of causing stress to some participating women by disclosing sensitive personal information. There is also a risk for potential violence to you. In order to protect your safety, I will take the following safety measures: 1) the study will always be publicized to others as "Women's Health and Life Experience Survey", 2) The interviews will be conducted in a private, secure area, if anyone walks in during the interview, the study investigator will change the topic to "women's general health" and refer to section two of the questionnaire, 3) only one woman from each family will be allowed to participate, 4) all information obtained in this interview will be de-identified and given a specific unique number, 5) the list of participants' names with corresponding identification numbers will be placed in a separate place from all the study questionnaires and materials, the list will be destroyed after the analysis is completed , 6) you will be given a referral card that lists contact information for women's shelters and social services (See Attachments I & J), 7) you can have a copy of this statement notification

form for your records if you like but you are not required to sign it, and 8) for your safety and others, I will ask you not to divulge the nature or the content of this interview to anyone.

Benefits: There are no direct benefits for participating in this study. However, women in Saudi Arabia may benefit from the information collected in the study. The results may help healthcare providers and country's officials in designing intervention and training programs to help women in vulnerable situations.

Costs and Payments: There is no cost to participate in the study. You will not receive any payment or compensation for participating in this study.

New Information: If the researchers find any new information during this study that would reasonably change your decision about participating in this study, then they will provide this information to you.

Confidentiality: The researchers will take reasonable steps to keep all personal information and responses to questionnaires confidential. All data will be protected by the researchers and located in a locked file cabinet only accessible by the co-investigator. The results of this study may be used in reports, presentations, and publications. Records may be subpoenaed by court orders or inspected by government bodies with oversight authority.

Withdrawal Privilege: You can say NO to participation in the study. Even if you say YES now you are free to say NO at any time and walk away or withdraw from the study. There is no penalty associated with withdrawing or refusing to participate in the study. Your decision will not affect the health care you receive at this Primary Health Care Center.

Compensation for Illness and Injury: If you say YES to participate in this study, your consent does not waive any of your legal rights. However, in the event of an adverse circumstance arising from this study, neither Old Dominion University nor the researchers are able to provide any financial or other compensation for this circumstance. In the event you suffer any adverse effects as a result of participation in any research project, you may contact:

Dr. Kimberly Adams Tufts, Responsible Project Investigator, at 757-683-5011, ktufts@odu.edu
Ms. Halah Eldoseri, Co-investigator, at (USA +1 757 339 8669) (KSA +966 555 616 832), heldo001@odu.edu
Dr. George Maihafer, Chair of the Old Dominion University IRB, at 757-683-4520, gmaihafe@odu.edu
Old Dominion Office of Research at 757-683-3460

Voluntary Consent: By assenting this form, you are saying Yes on several things, you are saying that you have read this form or have had this form read to you, that you are satisfied and understand this form, the research study and its risks and benefits. The researchers have answered any questions you have had about the study. If you have questions at any time, the researchers should be able to answer them:

Dr. Kimberly Adams Tufts: ktufts@odu.edu 757-683-5011
Ms. Halah Eldoseri: heldo001@odu.edu 757-339-8669 (KSA +966 555 616 832)
If you at any time feel pressured to participate, you have questions about your rights or this form; you should call Dr. George Maihafer, current IRB chairperson at gmaihafe@odu.edu, 757-683-4520; or Old Dominion Office of Research at 757-683-3460.

By understanding and approving on this form, you are telling the researcher YES, that you agree to participate in this study. The researcher should give you a copy of this form for your records if you wish.

Researcher's Printed Name and Signature	**Date**
	_____
Participant's Printed Name and Signature (Optional)	**Date**
	_____

APPENDIX E

CONSENT NOTIFICATION STATEMENT (IN ARABIC)

نموذج التبليغ للمشاركة بالبحث

عنوان البحث: صحة المرأة و خبراتها الحياتية في مدينة جدة، المملكة العربية السعودية

مقدمة: هدف هذا البحث هو إعطاءك معلومات حتى تقرري الإجابة بنعم أو لا على المشاركة في هذا البحث يمكن لك أخذ نسخة من هذا النموذج إن أحببت. ستتم هذه الدراسة في مقر مركز الرعاية الصحية الأولية و هي معدّة لتقييم صحة المرأة و خبراتها الحياتية.

الباحثات: كمبرلي أدامز تفت: أستاذ مشارك في جامعة أولد دومينيون هي الشخص المشرف على هذا البحث

هالة الدوسري، طالبة دكتوراه في الخدمات الصحية هي الباحثة المشاركة. وهي طالبة مرشّحة للدكتوراه في مجال أبحاث الخدمات الصحيّة. هالة الدوسري تقوم بإجراء البحث كإجراء جزئي لإكمال متطلبات درجة الدكتوراه

وصف هذا البحث: الهدف من البحث هو تقييم صحة النساء و خبراتهن الحياتية في مدينة جدة بالسعودية. سيتم سؤالك بشكل شخصي في مقابلة فردية خاصة. ستسألك مقدمة المقابلة أسئلة عن تجربتك مع العنف. هذه الدراسة ستحوي مقابلات مع 165 سيدة. سيتم إعطاء رقم معرف لكل نموذج للمقابلة لحماية خصوصيتك و خصوصية معلوماتك الصحية الخاصة. سيتم استخدام الرقم على كل وسائل جمع المعلومات. كل المعلومات المجمّعة ستحفظ في خزانة محكمة الإغلاق في مكتب الباحثة و سيتم إدخالها في قاعدة بيانات محمية بكلمة سر. حتى يتم التأكد من خصوصيتك و خصوصية كل المعلومات الصحيّة الخاصّة، لن يسمح سوى للباحثات المعنيات بهذه الدراسة بالوصول لهذه المعلومات.

إن أجبت بنعم، ستستغرق المقابلة 45 دقيقة تقريبا. كل المعلومات المأخوذة خلال المقابلة سيتم عرضها في الدراسة النهائية على شكل مجموعات و لن يتم عرض أي أجوبة فردية من أي مقابلة. بعد إكمال تحليل المعلومات المأخوذة من إجابات المشاركات، سيتم التخلص من أسماء المشاركات بشكل كامل

الإقصاء من المشاركة : هذه الدراسة سيتم عملها فقط في المراكز الصحية الأولية التي تحوي مناطق خاصة و آمنة لعمل المقابلات مع النساء. إن لم تتزوجي من قبل أو كنت في الفئة العمرية أكبر من 65 سنة و أقل من 18 سنة لا يمكن لك المشاركة. إن كانت سيدة أخرى من أفراد عائلتك شاركت في هذه الدراسة من قبل فلا يمكن لك المشاركة.

المخاطر و المنافع:

المخاطر: تحمل الدراسة احتمال خطر التسبب ببعض الضيق لدى بعض المشاركات كنتيجة لإفشاء ببعض المعلومات الخاصة الحسّاسة. تحمل الدراسة خطر احتمال العنف مستقبلا لك. لحمايتك من هذه المخاطر سأقوم بعمل الاحتياطات التالية: 1) سيتم الإعلان عن الدراسة دوما بأنها "دراسة حول صحة النساء و خبراتهن الحياتية"، 2) سيتم عمل المقابلات بشكل فردي مع النساء في أماكن خاصة و آمنة و إن اعترض أحد المقابلة أثناء إتمامها ستقوم الباحثة بتغيير الموضوع إلى "صحة النساء العامة" و سؤالك حول القسم الثاني من الاستبيان، 3) امرأة واحدة فقط من كل أسرة يمكن لها المشاركة، 4) كل المعلومات المأخوذة في المقابلة سيتم إعطاؤها رقما تعريفيا خاصا و إزالة معرفاتك الخاصّة منها، 5) قائمة أسماء المشاركات و أرقامهن التعريفية ستحفظ في مكان منفصل عن استبيانات البحث و وثائقه و سيتم إتلافها فور انتهاء التحليل، 6) سيتم إعطاءك بطاقة بها معلومات عن دور الإيواء و خدمات الرعاية الاجتماعية عند انتهاء المقابلة، 7) يمكن لك الاحتفاظ بنسخة من هذا النموذج التبليغي و لكن لا يلزمك التوقيع عليه، 8) لسلامتك و لسلامة غيرك سأطلب منك عدم الإفشاء بطبيعة هذه المقابلة لأي شخص آخر.

المنافع: لا يوجد منافع مباشرة للمشاركة، و لكن على أي حال ربما تفيد المعلومات الناتجة عن هذا البحث النساء عموما في السعودية و المسؤولين عن الصحة في تصميم برامج الرعاية الأولية المناسبة لمساعدة النساء في أوضاع مشابهة.

التكلفة و التعويض المادي: لا يوجد كلفة نتيجة للمشاركة في هذا البحث. و لن تأخذي أي مكافأة مادية أو تعويض أيضا عن المشاركة في هذه الدراسة.

المعلومات الجديدة: لو وجدت الباحثات أي معلومات جديدة خلال الدراسة يمكن منطقيا بسببها تغيير رأيك في المشاركة فسيتم تزويدك بهذه المعلومات.

الخصوصية: ستأخذ الباحثات كل الخطوات المعقولة للحفاظ على خصوصية كافة المعلومات الخاصّة و الإجابات على الاستبيان. كل البيانات سيتم حمايتها بواسطة الباحثات عبر حفظها في خزانات محكمة لا يمكن لغير الباحثات الوصول إليها. نتائج هذا البحث ربما تستخدم في تقارير، عروض بيانيّة، أو أعمال منشورة. يمكن للوثائق أن تستدعى بحكم قضائي أو أن يتم فحصها بواسطة مؤسسات حكومية تملك الصلاحية الرقابية.

الانسحاب من الدراسة: يمكنك أن تقولي لا للمشاركة في هذا البحث. حتى إن قلت نعم في البداية يمكنك أن تقولي لا في أي وقت بعد ذلك و الخروج و الانسحاب من المشاركة في هذه الدراسة. لا يوجد أي عقوبة على رفض المشاركة أو الانسحاب من الدراسة. لن يؤثر قرارك على تلقيك الرعاية الصحية اللازمة في هذا المركز الصحي للرعاية الأولية.

التعويض عن المرض أو الإصابة: إن أجبت بنعم على المشاركة في هذه الدراسة، فإن موافقتك لا تعني التنازل عن حقوقك القانونية. على أي حال، و في حال حدوث عوارض سيئة نتيجة لهذه الدراسة فلن تكون جامعة أولد دومينيون أو الباحثات قادرين على توفير أي تعويض مالي أو غيره في مثل تلك الظروف. في حال معاناتك من أي عوارض غير مرغوبة نتيجة مشاركتك في هذا البحث، يمكن لك الاتصال:

د. كمبرلي تفتس آدامز، الباحثة المسؤولة على (امريكا: 0017576838669)، ktufts@odu.edu

هالة الدوسري، الباحثة المشاركة، (امريكا: 0017573398669، السعودية 0555616832)، heldo001@gmail.co

د. جورج مايهافر، المسؤول عن لجنة مراجعات البحوث في جامعة أولد دومينيون (امريكا 0017576834520)، gmaihafer@odu.edu

مكتب جامعة أولد دومينيون للأبحاث (أمريكا: 0017576833460)

الموافقة الطوعية: بمعرفتك بهذا النموذج، أنت تقولين نعم على عدة أشياء. أنت تقولين بأنك قرأت هذا النموذج أو أن أحدا قرأه لك، و أنك مطمئنة و متفهمة للنموذج، و لبحث الدراسة و مخاطره و منافعه. أن الباحثة قد أجابت على أي أسئلة لديك حول هذه الدراسة. إن كان لديك أسئلة في أي وقت يمكن للباحثات أن يجيبوا عنها:

د. كمبرلي تفتس آدامز، (امريكا: 0017576838669)، ktufts@odu.edu

هالة الدوسري، (امريكا: 0017573398669، السعودية 0555616832)، heldo001@gmail.co

إن شعرت بأي ضغط للمشاركة، أو كان لديك أسئلة حول حقوقك أو حول هذا النموذج يجب أن تتواصلي مع:

د. جورج مايهافر، المسؤول عن لجنة مراجعات البحوث في جامعة أولد دومينيون (امريكا 0017576834520)، gmaihafer@odu.edu

مكتب جامعة أولد دومينيون للأبحاث (أمريكا: 0017576833460)

بموافقتك على هذا النموذج أنت تخبرين الباحثة بأنك تقولين نعم على المشاركة في هذه الدراسة. يمكن للباحثة أن تعطيك نسخة من هذا النموذج لسجلاتك الخاصة.

اسم الباحثة و توقيعها	التوقيع
_____	
اسم المشاركة و توقيعها	**التوقيع (اختياري وغير مطلوب)**
_____	_____

APPENDIX F

ELIGIBILITY FORM

This form is used as a screening form for recruitment of potential participants in the study titled "women's health and life experience study". Participants must meet the inclusion criteria for the research study. Research assistant/ PI must ensure participants' eligibility by checking that the following conditions are answered as yes:

- Participant is a female Yes_____ No_____
- Ever been married Yes_____ No_____
- Age is between 18-65 years of age Yes_____ No_____
- Participant or any of her family members never participated before in the study

---

Yes_____ No_____

If participant meets the inclusion criteria, schedule her for a statement notification process by the end of her visit.

APPENDIX G

REFERRAL CARDS (IN ENGLISH & ARABIC)

Numbers to call if needed

8001245005

The protection committee in Mecca region
Tel 026641815/ Fax 02661688

The Social affairs office in Jeddah
026616688
026641815

أرقام للاتصال حين الحاجة

8001245005

لجنة الحماية بمنطقة مكة المكرمة
ت 026641815/ فاكس 02661688

مكتب الشؤون الاجتماعية بجدة
026616688
026641815

APPENDIX H

STUDY FLYER (IN ENGLISH)

OLD DOMINION UNIVERSITY Flyer

وزارة الصحة
Ministry of Health

Opportunity for Volunteers to Participate in a Research Study

What?

Volunteers are needed to participate in a research study. The purpose of this research study is to investigate factors affecting women's health and their life experience.

Why?

Your life experiences are important. Information gained during the study will be used to design programs that may improve women's health and life experiences.

Who?

If you are a woman aged 18-65 and have ever been married (currently, divorced, separated, or widow) you may be eligible to participate.

How?

You will be asked to participate by engaging in a 30-45 minute interview. These interviews will be conducted in a private area in this health care center after your visit. All information will be kept confidential.

Interested?

If you are interested in participating in this study and would like more information, please let the receptionist at the registration desk or the research assistant know of your interest. You may also contact the principal investigator, Halah Eldoseri in Saudi Arabia: 0555616832 or heldo001@gmail.com

APPENDIX I

STUDY FLYER (IN ARABIC)

نشرة إعلانية

فرصة للمشاركة التطوعية في بحث علمي

ماهو ؟

نحن بحاجة لمتطوعات للمشاركة في هذا البحث. يهدف البحث إلى استقصاء العوامل المؤثرة في صحة النساء و فحص خبراتهن الحياتية.

لماذا؟

تجاربك الحياتية هامة لصحتك. المعلومات المستقاة من البحث سيتم استخدامها لاقتراح برامج لتحسين صحة النساء و خبراتهن الحياتيّة.

من؟

إن كنت سيدة في 18 و حتى 65 من العمر، متزوجة حاليا أو مطلقة، منفصلة عن زوجك، أو أرملة فيمكن لك المشاركة في البحث.

كيف؟

سيتم قبول مشاركتك في البحث بعمل مقابلة خاصّة معك لتعبئة استبيان في ظرف 30-45 دقيقة. ستتم المقابلة في خصوصية تامّة في هذا المركز الصحي بعد انتهاء زيارتك. كل المعلومات ستبقى سريّة.

مهتمّة بالمشاركة؟

إن كنت مهتمّة بالمشاركة و ترغبين بمعلومات إضافيّة، رجاء أعلمي موظفة الاستقبال في مكتب التسجيل أو مساعدة الباحثة برغبتك. يمكن لك التواصل مباشرة مع الباحثة الرئيسية هالة الدوسري في السعودية: 0555616832 أو على البريد الإلكتروني:

Heldo001@gmail.com

APPENDIX J

WHO QUESTIONNAIRE (IN ARABIC)

استبيان عن صحة النساء و تجاربهن الحياتية في جدة، المملكة العربية السعودية

دراسة معدّة بواسطة

هالة الدوسري

مرشّحة لدرجة الدكتوراه في أبحاث الخدمات الصحيّة

جامعة أولد دومينين

كلية العلوم الصحيّة

2011

خاص بمجرد إكماله

تاريخ المقابلة: اليوم ( )( ) الشهر ( )( ) السنة ( )( )( )( )

	(24 س) [ ][ ] الساعة [ ][ ] الشهر	100. سجّل التاريخ

التعريف	
[ ] [ ][ ]	.....رقم مركز الرعاية الأولي/ مكانه

القسم الأول: المشاركة و مجتمعها المباشر

اذهب إلى	كود التصنيف	الأسئلة و الأسئلة الدقيقة

إن لم تمانعي أريد أن أبدأ بسؤالك قليلا عن مدينة جدة و الحي الذي تسكنين فيه: جدة المنطقة السكانية

أدخل اسم المنطقة السكانية في الأعلى و في كل من الأسئلة بالأسفل

إن لم يكن للمنطقة اسم اذكر "المنطقة السكنية" كما هو مناسب للمكان

	101	أريد أن أسألك بعض الأسئلة عن نفسك ماهو تاريخ ميلادك؟ (اليوم و الشهر و السنة التي ولدت فيها)	[ ][ ].....اليوم [ ][ ].....الشهر [ ][ ][ ][ ].....السنة 9998.....لا أعرف السنة 9999..... لا إجابة/ رفضت الإجابة
	102	كم كان عمرك في عيد مولدك الأخير (على الأكثر أو على الأقل)	[ ][ ]..... العمر بالسنوات
	103	كم المدة التي عشت فيها بشكل مستمر في هذ المنطقة؟	[ ][ ]..... عدد السنوات 00.....أقل من سنة 95 كل حياتها 96.....زائرة للمنطقة (على الأقل لأربعة أسابيع) 98.....أدري/لا أتذكر 99.....رفضت الإجابة/ لا إجابة
	104	هل يمكنك الكتابة و القراءة	1..... نعم 2.....لا

		8.....لاأدري/لا أتذكر... 9.....رفضت الإجابة/ لا إجابة	
105	هل درست في مدرسة أبدا؟	1.....نعم 2.....لا 8.....لاأدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	⇒107
106	ماهو أعلى مستوى دراسي حصلت عليه؟ ضع علامة على أعلى مستوى قم بتحويل السنوات في المدرسة بالكود المخصص	1.....الابتدائية سنة _____ 2.....المتوسطة سنة _____ 3.....الثانوية سنة _____ عدد السنوات في المدرسة..... [ ][ ] 98.....لا أدري/ لا أتذكر 99.....لا إجابة/ رفضت الإجابة	
107	هل يعيش أي فرد من عائلتك المباشرة قريبا بما يكفي لك لتتمكني من زيارتهم؟	1.....نعم 2.....لا **3**.....أعيش مع عائلتي المباشرة 8.....لا أدري/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	
108	ماهي في العادة الفترات التي يتاح لك فيها أن تتحدثي أو تري أحد أفراد عائلتك المباشرة؟ هل تقولي مرة في الأسبوع؟ مرة في الشهر؟ أو مرة في السنة؟ أو لا يتاح لك مطلقا؟	1.....على الأقل مرة أسبوعيا 2.....على الأقل مرة شهريا 3.....على الأقل مرة سنويا 4.....أبدا (لا يتاح مطلقا) 8.....لا أدري/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	
109	عندما تحتاجين لمساعدة أو يكون لديك مشكلة، هل من المعتاد أن تعتمدي على أحد أفراد عائلتك المباشرة لمساعدتك؟	1.....نعم 2.....لا	

		8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	
110	هل أنت متزوجة حاليا.	1 ..... متزوجة حاليا 5 ..... غير متزوجة حاليا	⇒112 ⇒111
111	هل انتهت زيجتك السابقة بالطلاق، الانفصال أو توفي زوجك؟	1.....مطلقة 2 ..... منفصلة بلا طلاق 3.....أرملة توفي زوجها 8 ..... لا أدري/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	
112	كم مرة في حياتك تزوجت؟ (بمافيهم الزوج الحالي)	[ ][ ].....عدد مرات الزواج 98 ..... لا أدري/ لا أتذكر 99.....لا إجابة/ رفضت الإجابة	
113	الأسئلة القليلة القادمة هي عن زوجك الحالي أو السابق مباشرة. هل عشتما مع والدي زوجك أو أي من عائلته؟	1.....نعم 2.....لا 8 ..... لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	
114	إن كنت مع زوج حاليا: هل تعيشين حاليا مع والديك أو أي من أفراد أسرتك؟ <u>إن لم تكن تعيش حاليا مع زوج: هل كنت تعيشين مع زوجك السابق مع والديك أو أحد أفراد أسرتك؟</u>	1.....نعم 2.....لا 8 ..... لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	

115	هل زوجك لديه أو كان لديه أي زوجات غيرك أثناء زواجك منه؟	1 ..... نعم 2 ..... لا 8 ..... لا أدري/ لا أتذكر 9 ..... لا إجابة/ رفضت الإجابة	
116	كم زوجة لزوجك بمافيهم أنت؟	[ ][ ] ..... عدد الزوجات 98 ..... لا أدري 99 ..... لا إجابة/ رفضت الإجابة	
117	هل أنت/ كنت الزوجة الأولى، الثانية....؟	[ ][ ] ..... العدد/ المكان 98 ..... لا أدري/ لا أتذكر 99 ..... لا إجابة/ رفضت الإجابة	
118	في أي سنة تم زواجك؟ يعود ذلك للزوج الحالي أو السابق مباشرة	[ ][ ][ ][ ] ..... العام 9998 ..... لا أدري 9999 ..... لا إجابة/ رفضت الإجابة	

القسم الثاني: الصحة العامة			
2	أريد الآن أن أسألك بعض الأسئلة حول صحتك و استخدامك للخدمات الصحية. عموما هل تصفين صحتك العامة بأنها ممتازة، جيدة جدا، جيدة، سيئة، أو سيئة للغاية؟	1..... ممتازة جيدة جدا..... جيدة..... سيئة..... سيئة للغاية..... لا أدري/ لا أتذكر..... لا إجابة/ رفضت الإجابة.....	
2	الآن أحب أن أسألك عن صحتك في الأسابيع الأربعة الماضية. كيف تصفين قدرتك على التحرك عموما؟ سأعطيك 5 اختيارات، أي منها يصف بشكل أفضل وضعك العام: هل تقولين أنه لا مشاكل لديك، او لديك مشاكل قليلة،بعض المشاكل، مشاكل كثيرة، أو أنك غير قادرة على المشي إطلاقا؟	لا مشاكل..... مشكلات قليلة..... بعض المشكلات..... مشكلات متعددة..... لا أستطيع المشي مطلقا..... لا أدري/ لا أتذكر..... لا إجابة/ رفضت الإجابة.....	
2	في الأسابيع الأربعة الماضية، هل كانت لديك مشكلات في إتمام مهامك المعتادة، مثل العمل أو الدراسة أو مهام البيت أو النشاطات العائلية أو الاجتماعية؟ هل تقولين أنه لا مشاكل لديك، او لديك مشاكل قليلة،بعض المشاكل، مشاكل كثيرة، أو أنك غير قادرة على إتمام أي نشاط مطلقا؟	لا مشاكل..... مشكلات قليلة..... بعض المشكلات..... مشكلات كثيرة..... لا أستطيع إتمام أي نشاط معتاد..... لا أدري/ لا أتذكر..... لا إجابة/ رفضت الإجابة.....	

2	في الأسابيع الأربعة الماضية هل كنت تتألمين أو تشعرين بعدم الراحة؟ أرج أن تختاري أحد الخيارات الخمسة: هل تقولين أنك كنت لا تشعرين بأي ألم إطلاقا، أو ألم بسيط أو عدم راحة، أو ألم معتدل، أو ألم أو عدم راحة شديدة أو قوية	لا ألم أو عدم راحة.. ألم أو عدم راحة بسيط.. ألم أو عدم راحة معتدل.. ألم أو عدم راحة شديدة .... ألم أو عدم راحة قوية.. لا أدري/ لا أتذكر .... لا إجابة/ رفضت الإجابة..	
2	في الأسابيع4 السابقة هل عانيت من مشاكل في الذاكرة أو التركيز؟ رجاء اختاري من أحد الخيارات الخمسة التالية: هل تقولين أنه لم تكن هناك أية مشاكل، مشكلات قليلة، بعض المشكلات، مشكلات كثيرة، مشكلات مفرطة في الذاكرة أو التركيز؟	لا مشاكل.. مشكلات قليلة .... بعض المشكلات.. مشكلات كثيرة.. مشكلات مفرطة.. لا أعلم/ لا أتذكر.. لا إجابة/ رفضت الإجابة..	
2	في الأسابيع 4 الماضية هل تناولت أدوية؟ أ) لمساعدتك على الاسترخاء أو النوم؟ ب) لتخفيف الألم؟ ت) لمساعدتك على التغلب على الحزن أو الاكتئاب؟ كم مرة حدث ذلك؟ مرة أو اثنتين؟ بعض المرات، أو مرات متعددة؟	لا / مرة أو اثنتان / بعض المرات / مرات متعددة a. للنوم 1 2 3 4 b. للألم 1 2 3 4 c. للحزن 1 2 3 4	

2	في الأسابيع 4 السابقة، هل استشرت طبيبا أو معالجا صحيا أو شعبيا لأنك كنت مريضة؟ إن أجبت بنعم: من استشرت؟ استكشف: هل استشرت شخصا آخر؟	A ..... لم تستشر أحدا NO ONE CONSULTED B..... طبيب C..... ممرضة D..... قابلة E.....معالج نفسي F..... صيدلاني G.....معالج شعبي H.....قابلة شعبية X.....شخص آخر_____	
2	تحدثنا الآن عن المشاكل التي أزعجتك في الأسابيع 4 الماضية. أود سؤالك الآن: طيلة حياتك هل فكرت بالانتحار؟	1 ..... نعم 2 ..... لا 8 ..... لا أدري/ لا أتذكر 9 .....رفضت الإجابة/ لا إجابة	⇒210
2	هل حاولت أبدا إنهاء حياتك؟	1 ..... نعم 2 .....لا 8 ..... لا أدري/ لا أتذكر 9 .....رفضت الإجابة/ لا إجابة	
2	في الشهور 12 السابقة، هل قضيت أي ليلة في المستشفى بسبب مرضك (سوى للولادة)؟ إن أجبت بنعم: كم ليلة قضيتها في المستشفى في الأشهر 12 الماضية؟	[ ][ ] ..... عدد الليال في المستشفى 00 .....ولا ليلة 98 .....لا أعلم/ لا أتذكر 99 .....لا إجابة/ رفضت الإجابة	

القسم 3: الزوج الحالي أو السابق مباشرة			
301	أود أن تخبريني الآن قليلا عن زوجك الحالي أو السابق مباشرة. كم كان عمر زوجك في عيد مولده الأخير؟ استكشف: أقل من أو أكثر من إن كان الزوج السابق مباشرة متوف: كم كان سيكون عمره الآن لو كان حيا؟	[ ][ ] ..... العمر بالسنوات	
302	في أي سنة ولد زوجك؟	[ ][ ][ ][ ] ..... السنة 9998..... لا أعلم/ لا أتذكر 9999..... لا إجابة/ رفضت الإجابة	
303	هل يستطيع أن يكتب و يقرأ؟	1.....نعم 2.....لا 8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	
304	هل التحق بمدرسة أبدا؟	1.....نعم 2.....لا 8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	⇒306
305	ماهو أعلى مستوى تعليمي حصل عليه؟ ضع علامة لى المستوى الأعلى قم بتحويل السنوات في المدرسة، إلى الرموز المستخدمة محليا	1..... ابتدائية _____ سنة 2.....متوسطة _____ سنة 3..... ثانوية _____ سنة لا أعلم ..... 8 [ ][ ] ..... عدد السنوات في المدرسة 98..... لا أعلم/ لا أتذكر 99..... لا إجابة/ رفضت الإجابة	

306	للمتزوجة حاليا: هل زوجك يعمل حاليا؟ يبحث عن عمل؟ أو لا يعمل؟ هل هو متقاعد؟ أو يدرس؟ إن لم تكن متزوجة حاليا: في نهاية زواجك السابق هل كان الزوج يعمل، يبحث عن عمل، لا يعمل، متقاعد، أو يدرس	1..... يعمل 2..... يبحث عن عمل/ لا يعمل 3..... متقاعد 4..... طالب 5..... عاجز/ مصاب بمرض مزمن 8..... لا أعلم/ لا أتذكر 9..... لا إجابة/ رفضت الإجابة	⇒308 ⇒308 ⇒309
307	متى انتهى عمل زوجك الأخير؟ هل انتهى في الأسابيع 4 الماضية؟ بين 4 أسابيع و 12 شهرا الماضية؟ أو قبل 12 شهرا؟ للمتزوجة سابقا: في الأسابيع 4 الأخيرة أو 12 شهرا في نهاية زواجك السابق؟	1.....في الأسابيع 4 الماضية؟ 2..... بين4 أسابيع و 12 شهرا مضى 3.....أكثر من 12 شهرا 4.....لم يكن له عمل أبدا 8..... لا أعلم/ لا أتذكر 9..... لا إجابة/ رفضت الإجابة	 ⇒309
308	أي نوع من العمل يمارسه أو كان يمارسه زوجك؟ حدد نوع العمل	01.....محترف_____ 02..... _____شبه مهني_____ : 03 ..... _____ :غير محترف/ يدوي 04._في العسكرية أو الشرطة_____ 96_____آخر_____ 98لا أعلم/ لا أتذكر..... 99..... لا إجابة/ رفضت الإجابة	

309	كم مرة اعتاد زوجك الحالي أو السابق على شرب الخمر؟ 1. كل يوم أو غالبا كل يوم 2. مرة أو اثنتين أسبوعيا 3. 3-1 مرات شهريا 4. أحيانا، أقل من مرة بالشهر 5. لم يشرب أبدا	1 ..... كل يوم أو غالبا كل يوم 2 ..... مرة أو اثنتين أسبوعيا 3 ..... 3-1 مرات أسبوعيا 4 ..... اقل من مرة شهريا 5 ..... لم يشرب أبدا 8 ..... لا أعلم/ لا أتذكر 9 ..... لا إجابة/ رفضت الإجابة	⇒312
310	في الشهور 12 الماضية أو الشهور 12 الأخيرة في علاقتك السابقة مباشرة، كم مرة رأيت زوجك سكيرا؟ هل تقولين معظم الأيام؟ أسبوعيا؟ أقل من مرة شهريا؟ أو أبدا؟	1 ..... معظم الأيام 2 ..... أسبوعيا 3 ..... مرة أسبوعيا 4 ..... أقل من مرة شهريا 5 ..... أبدا 8 ..... لا أعلم/ لا أتذكر 9 ..... لا إجابة/ رفضت الإجابة	
311	في الأشهر 12 الماضية (أو الأشهر 12 الأخيرة في زواجك الأخير) هل واجهت أيا من المشكلات التالية المتعلقة بشرب زوجك للخمر؟ 1. مشكلات مالية 2. مشكلات أسرية 3. مشكلات أخرى، حددي	لا نعم a) مشكلات مالية 1 2 b) مشكلات أسرية 1 2 x): أخرى _____ 1 2	

312	هل يتعاطى أو كان يتعاطى زوجك المخدرات ؟ هل تقولين: 1. كل يوم أو على الأغلب كل يوم؟ 2. *مرة أو اثنتين اسبوعيا؟* 3. 3-1 مرات شهريا؟ 4. أحيانا، أقل من مرة شهريا؟ 5. مطلقا؟	1.....كل يوم أو على الأغلب كل يوم 2.....مرة أو اثنتين يوميا 3.....3-1 مرات شهريا 4.....أقل من مرة شهريا 5.....مطلقا 6.....كان يتعاطى مسبقا و ليس الآن 8.....لا أعلم/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	
313	منذ عرفت زوجك، هل تورط في عراك جسدي مع رجل آخر؟	1.....نعم 2.....لا 8.....لا أعلم/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	
314	في الأشهر 12 الماضية (أو الأشهر 12 الأخيرة في زواجك السابق) هل لم يحدث عراك جسدي أبدا، أو حدث مرة واحدة، مرة أو اثنتين، أو بعض المرات، أو عدد من المرات؟	1.....أبدا 2.....مرة أو اثنتين 3.....مرات قليلة (1-3 مرات) 4.....مرات متعددة (أكثر من 5 مرات) 8.....لا أعلم/ لا أتذكر 9.....لا إجابة/ رفضت الإجابة	

	القسم 4 : المواقف		
	في هذا المجتمع كما في غيره، يحمل الناس أفكارا مختلفة حول العائلة و ماهو التصرف المناسب من الرجال و النساء بداخل البيت. سأقرأ عليك الآن مجموعة من العبارات، و أطلب منك أن تخبريني إن كنت تتفقين أو لا تتفقين مع كل منها. ليس هناك إجابة صحيحة أو خاطئة.		
	أتفق لا أتفق لا أعلم لا إجابة/ رفضت الإجابة	الزوجة الصالحة تطيع زوجها حتى لو لم توافقه	401
	أتفق لا أتفق لا أعلم لا إجابة/ رفضت الإجابة	المشكلات العائلية يجب مناقشتها فقط مع أفراد العائلة	402
	أتفق لا أتفق لا أعلم لا إجابة/ رفضت الإجابة	من المهم أن يظهر الرجل لزوجته من هو سيد البيت	403
	أتفق لا أتفق لا أعلم لا إجابة/ رفضت الإجابة	على المرأة أن تختار صديقاتها حتى ولو لم يوافق زوجها عليهن	404
	أتفق لا أتفق لا أعلم لا إجابة/ رفضت الإجابة	أن أساء الرجل معاملة زوجته على الآخرين من خارج العائلة التدخل	405

لا أعلم	لا	نعم		في رأيك، هل مع الرجل حق في ضرب زوجته إذا:	406
8	2	1	g) أعمل البيت	ا) لم تنهي أعمال المنزل كما يرغب	
8	2	1	h) عدم الطاعة	ب) لم تطيعه	
8	2	1	i) لاجنس	ت) لم توافق على ممارسة الجنس معه	
8	2	1	j) علاقات نسائية	ث) إن سألته عن علاقاته النسائية	
8	2	1	k) شك بسكلوك الزوجة	ج) إن شك بسلوكها	
8	2	1	l) اكتشف أنها تخونه	ح) إن اكتشف أنها تخونه	

القسم 5: المشاركة و زوجها					
عندما يتزوج شخصين، يتشاركا في العادة في اللحظات السعيدة و السيئة. أريد أن أسألك الآن بعض الأسئلة عن علاقة زواجك الحالي أو السابقة مباشرة و كيف يعاملك أو كان يعاملك زوجك. لو قاطعنا أحد سأغير موضوع الحديث. و أريد أن أطمئنك مرة ثانية أن كل أجوبتك ستبقى سرية، و أنك لست مضطرة للإجابة عن أي أسئلة لا ترغبين بالإجابة عنها. هل يمكن لي أن أكمل المقابلة؟					
501	في علاقة زواجك (الحالية أو السابقة مباشرة)، كم مرة تقولين أنكما تخاصمتما؟ هل تقولين نادرا، أو بعض المرات، أو غالبا؟	نادرا..... بعض المرات..... غالبا..... لا أعلم/ لا أتذكر..... لا إجابة/ رفضت الإجابة.....			
502	هل قام زوجك الحالي أو أيا من أزواجك السابقين:	A) أ إن كان نعم استمر في ب إن كان لا اسأل عن الفقرة التالية لا نعم	B) ب هل حدث ذلك في الشهور 12 الماضية؟ إن كان نعم اسأل ج. إن كان لا اسأل د فقط لا نعم	C) ج في الأشهر 12 الماضية هل تقولين أن ذلك حدث مرة، بعض المرات، أو مرات عديدة (بعد إجابة ج اسأل عن الفقرة التالية) متعددة قليلة مرة	D) د قبل 12 شهرا الماضية، هل تقولين أن ذلك حدث مرة واحدة، بعض المرات، أو مرات عديدة؟ متعددة قليلة مرة

	أ) بضربك أو رمي شيء باتجاهك يمكن أن تتأذي به؟ ب) دفعك أو أزاحك أو شدّ شعرك؟ ت) ضربك بقبضته أو بشيء يمكن أن تتأذي به؟ ث) ركلك أو سحبك أو ضربك؟ ج) خنقك أو أحرقك عمدا؟ ح) هددك باستخدام أو استخدم ضدك مسدس أو سكين أو اي سلاح آخر؟	1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 2 1 2 1 2 1 2 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3
503	تأكد من أن هناك اي إجابة بنعم على سؤال العنف الجسدي		نعم عنف جسدي..... لا عنف جسدي		

القسم 6: الإصابات			
	أود أن أسألك الآن عن الإصابات التي تعرضت لها من (أي من أزواجك) بسبب تصرفات العنف التي تحدثنا عنها (يمكن العودة لسرد التصرفات السابقة في القسم 7). أعني بالإصابة أي شكل من أشكال الأذى الجسدي بما فيه القطع، الشد العضلي، الحروق، العظام أو الأسنان المكسورة، أو اي شيء يشبه ذلك.		
601	هل تعرضت من قبل للإصابة كنتيجة لأي تصرف عنف من زوجك (أزواجك). أرجوك فكري في التصرفات التي تحدثنا عنها قبلا.	نعم.....1 لا.....2 لا أدري/ لا أتذكر.....8 رفضت الإجابة/ لا إجابة.....9	⇒604a
602a	في حياتك، كم مرة أصبت بسبب زوجك (أزواجك)؟ هل تقولين مرة أو اثنتين، عدة مرات، أو كثيرا من المرات؟	مرة أو اثنتين..... عدة مرات (3-5)..... مرات عديدة (أكثر من 5)..... لا أعلم/ لا أتذكر..... لا إجابة/ رفضت الإجابة.....	
602b	هل حدث ذلك في الأشهر 12 السابقة؟	نعم.....1 لا.....2 لا أدري/ لا أتذكر.....8 رفضت الإجابة/ لا إجابة.....9	

603	ماهي أنواع الإصابات التي لحقت بك بسبب زوجك (أزواجك)، كم مضى على تلك الحوادث؟ ضع علامة على كل الحوادث استكشف: أي إصابات أخرى؟		b) اسأل عن الإجابات في 603 هل حدث ذلك في الأشهر 12 الماضية لا أعلم / لا / نعم	
		قطوع، جروح، عضات	1 2 8	
		خدوش قطوع أو كدمات	1 2 8	
		الالتواء أو الخلع	1 2 8	
		حروق	1 2 8	
		جروح نافذة، قطع عميق، جرح بليغ		
		طبلة أذن مكسورة، جروح عين	1 2 8	
		كسور، أو عظام مكسورة	1 2 8	
		أسنان مكسورة	1 2 8	
		جروح داخلية	1 2 8	
		أخرى (حددي) _____		
		.....	1 2 8	

604a	في حياتك، هل فقدت الوعي أبدا بسبب ما فعله زوجك أو ايا من أزواجك بك؟	نعم 1	⇒605a
		لا ..... لا اعلم/ لا أتذكر ..... لا إجابة/ رفضت الإجابة	⇒605a

604 b	هل حدث ذلك في الأشهر 12 الماضية؟	.....ذ 1عم ..... 2.لا .....لا أدري/ لا 8أتذكر .....رفضت الإجابة/ لا 9إجابة	
605 a	في حياتك هل تأذيت بشكل سيء من زوجك أو أي من أزواجك بحيث احتجت تدخل طبي (حتى لم لم تحصلي عليه)؟ في حالة نعم: كم مرة؟ إن لم تكوني متأكدة، على الأغلب أو الأقل؟	[ ] المرات التي احتجت فيها علاج طبي ....لا إجابة/ رفضت الإجابة ..... لم أحتج	
605 b	هل حدث ذلك في الأشهر 12 الماضية؟	.....ذ 1عم ..... 2.لا .....لا أدري/ لا 8أتذكر .....رفضت الإجابة/ لا 9إجابة	
606	في حياتك، هل تلقيت رعاية طبية بسبب أي من إصاباتك؟ هل تقولين بعض المرات أو دائما أو أبدا؟	..... نعم بعض المرات 2نعم، دائما .....لا أبدا .....لا أعلم/ لا أتذكر .....لا إجابة/ رفضت الإجابة	

607	في حياتك، هل اضطريت لقضاء أي ليلة في المستشفى بسبب أي من الإصابات؟ في حالة نعم: كم عدد الليالي (على الأغلب أو الأقل؟)	[ ] ..... عدد مرات الليالي في المستشفى '00'إن لم يكن أدخل .....لا أعلم/ لا أتذكر .....لا إجابة/ رفضت الإجابة	
608	هل أخبرت أحد العاملين بالرعاية الطبية بالسبب الحقيقي لإصابتك؟	.....ذ 1عم ..... 2.لا .....لا أدري/ لا 8أتذكر .....رفضت الإجابة/ لا 9إجابة	

القسم 7: تجارب أخرى

في حياة النساء، توجد تجارب أخرى بسبب العنف من الأقارب و الأشخاص الآخرين من المعارف أو الغرباء. إن لم تمانعي، أود أن أسألك عن بعض هذه المواقف. كل ما تقولينه سيبقى سريا. هل يمكن لي إكمال المقابلة؟

701

منذ أن كنت في 15 هل قام شخص (للمتزوجات حاليا أو سابقا) سوى زوجك بضربك أو تسبب في أذى جسدي أو سوء معاملة لك بأي شكل؟

استكشف: ماذا عن الأقارب؟ أو شخص من المدرسة أو العمل؟ أو صديق أو جار؟ غريب أو شخص آخر؟

A	.....	لا أحد	⇒ 702		
B	.....	أب	b) اسأل عن الأشخاص المذكورين فقط كم مرة حدث ذلك؟ مرة أو مرتين، بضعة مرات/ أو مرات متعددة؟	مرة أو اثنتين	بعض المرات	مرات متعددة
C	.....	زوج أم		1	2	3
D	.....	قريب ذكر		1	2	3
E	.....	أنثى قريبة: _____		1		
F	.....	مدرسة		1	2	3
G	.....	شرطي؟ عسكري		1	2	3
H	.....	صديق للعائلة		1	2	3
I	.....	صديقة للعائلة		1	2	3
K	.....	غريب		1	2	3
L	.....	شخص بالعمل		1	2	3
M	.....	شيخ		1	2	3
X	.....	آخر (حددي) : _____		1	2	3

702	في طفولتك هل كانت والدتك تتعرض للضرب من والدك؟	نعم..... لا ..... والداي منفصلان..... لا أعلم..... لا إجابة/ رفضت الإجابة.....	
703	في طفولتك، هل سمعت أو شاهدت هذا العنف الجسدي؟	1.....نعم 2.....لا 8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	
704	بحد علمك هل تعرضت والدة زوجك الحالي أو السابق مباشرة للضرب من زوجها؟	نعم..... لا ..... والداه منفصلان..... لا أعلم..... لا إجابة/ رفضت الإجابة.....	
705	هل سمع أو شاهد زوجك الحالي أو السابق مباشرة هذا العنف الجسدي؟	1.....نعم 2.....لا 8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	
706	بحد علمك هل تعرض زوجك الحالي أو السابق مباشرة للضرب باستمرار من أحد أفراد عائلته؟	1.....نعم 2.....لا 8.....لا أدري/ لا أتذكر 9.....رفضت الإجابة/ لا إجابة	

القسم 8: الاستقلال المالي

أود الآن أن أسألك بعض الأسئلة عن الشياء التي تملكينها أو تكسبيها. نحتاج هذه المعلومات لنفهم الوضع المادي للسيدات في هذه الأيام

801

أرجو إخباري إن كنت تمتلكين أيا من التالي، إما لوحدك أو بالشراكة مع أحد:

i) أرض
j) منزل
k) عمل خاص أو شركة
l) حيوانات كبيرة(بقر، أحصنة، غيرها)
m) حيوانات صغيرة (دجاج، ماعز، غيرها)
n) نباتات أو محصولات زراعية
o) أدوات منزلية (تلفزيون، سري، أو فرن طبخ)
p) مجوهرات ثمينة
l) سيارة
m) مدخرات بنكية
y) أخرى، حددي

لكل سؤال استكشف: هل تملكيه وحدك مع آخرين؟

	أملك بنفسي	أملك مع آخرين	لا أملك
i) أرض j) منزل	1	2	3
k) شركة	1	2	3
l) حيوانت كبيرة حيوانات صغيرة	1	2	3
m) مزروعات	1	2	3
n) أدوات منزلية o) مجوهرات l) سيارة m) مدخرات بنكية	1	2	3
y) أملاك أخرى: _____	1	2	3
	1	2	3
	1	2	3
	1	2	3
	1	2	3

802

هل تكسبين المال بنفسك؟

A ..... لا ⇒ **805**

في حالة نعم: ما الذي تفعلينه حتى تكسبي المال؟

اسأل عن الجميع/ حدد:

e) عمل
f) بيع و شراء/ تجارة
g) عمل موسمي
y) نشاط آخر، حدد

	YES	NO
b) العمل _____	نعم	لا
c) بيع و شراء/ تجارة: _____	1	2
d) عمل موسمي: _____	1	2
x) آخر (حددي) _____	1	2
	1	2

803	هل أنت قادرة على إنفاق المال الذي تكسبينه كما تشائين؟ أو أنك مضطرة لإعطاءه كاملا أو جزئيا لزوجك؟	1 ..... أتصرف بنفسي 2 ..... أعط زوجي جزء 3 ..... أعط زوجي كله 8 ..... لا أعلم 9 ..... لا إجابة/ رفضت الإجابة	
804	هل تقولي أنك تكسبين مالا أكثر من زوجك، أو أقل أو نفس المال؟	1 ..... أكثر من الزوج 2 ..... أقل من الزوج 3 ..... نفس المال 8 ..... لا أعلم 9 ..... رفضت الإجابة	
805	هل رفضت أي عمل بسبب أن زوجك رفض أن تعملي؟	1 ..... نعم 2 ..... لا 8 ..... لا أعلم/ لا أتذكر 9 ..... لا إجابة/ رفضت الإجابة	
806	هل أخذ منك زوجك أبدا مكسبك أو مدخراتك بالرغم عنك؟ في حالة نعم: هل حدث ذلك مرة او مرتين، بعض المرات، أو مرات متعددة	1 ..... أبدا 2 ..... مرة أو مرتين 3 ..... بضعة مرات 4 ..... 7 ..... مرات متعددة (لا أملك مدخرات أو مكاسب)(8 ..... لا أعلم/ لا اتذكر 9 ..... لا إجابة/ رفضت الإجابة	

807	هل رفض زوجك إعطاءك المال لمصروفات البيت حتى و هو يملك المال لأشياء أخرى؟ في حال نعم: هل حدث ذلك مرة أو مرتين؟ عدة مرات، أو مرات متعددة؟	1 ..... أبدا 2 ..... مرة أو مرتين 3 ..... بعض المرات 4 ..... مرات عديدة/ كل الوقت 7 ..... لا يكسب زوجي المال 8 ..... لا اعلم/ لا أتذكر 9 ..... لا إجابة/ رفضت الإجابة	
808	في حال الطوارىء، هل تعتقدي أن باستطاعتك وحدك كسب ما يكفي لشؤن البيت و لإطعام أسرتك 4 أساابيع؟ ربما ببيع بعض أغراضك أو استدانة مال من معارفك أو من من البنك أو قروض؟	1 ..... نعم 2 ..... لا 8 ..... لا أعلم 9 ..... لا إجابة/ رفضت الإجابة	

القسم 9: اكمال المقابلة

901	أود أن أعطيك الآن كرتا عليه صورتين. بلا أي معلومات أخرى، الصورة الأولى لوجه سعيد و الأخرى لوجه حزين. بغض النظر عن ما ذكرته لي أريدك أن تضعي علامة على الوجه الحزين إن تعرض لك أحد قبل أن يكون عمرك 15 عاما جنسيا أو أجبرك على فعل جنسي لا ترغبين به ضعي الآن علامة على الوجه السعيد إن لم يحدث لك هذا ابدا بمجرد إكمال الكرت اطويه و ضعيه في الظرف المرفق حتى لا يعلم أحد إجابتك.	تم إعطاء الكرت لإنهاء المقابلة..... لم يتم أعطاء الكرت لإنهاء المقابلة.....	

905 دوّن وقت المقابلة: الساعة [ ][ ] الدقيقة (24)[ ][ ]

906 اسألي المشاركة: كم تعتقدين استغرقت المقابلة؟

[ ][ ] دقائق [ ] ساعة

تعليقات القائم بالمقابلة بعد انتهاء المقابلة

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PAPERS & PRESENTATIONS

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