The influence of family violence and child marriage on unmet need for family planning in Jordan

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ABSTRACT

Background Risk for unmet need for contraception is associated with men's perpetration of intimate partner violence (IPV) against women and may be influenced by violence perpetrated by other family members (family violence, FV). Women who married as minors may be most vulnerable to the potential compounding effect of IPV and FV on unmet need.

Aim Using nationally representative data from the 2012 Jordan Population and Family Health Survey we examined unmet need by exposure to IPV and FV by women's age at marriage (<18, 18+ years).

Design Logistic regression was used to test whether IPV and FV were independently associated with unmet need, by age at marriage. Interaction terms (IPV×FV) were tested in both models. Stratification by FV was employed to clarify the interpretation of significant interactions.

Results IPV increased the odds of unmet need by 87% [adjusted odds ratio (AOR) 1.87; 95% confidence interval (95% CI) 1.13-3.10] and 76% (AOR 1.76; 95% CI 1.30-2.38) among women who married prior to and after the age of 18 years, respectively. Women married as minors who experienced IPV and FV had a four-fold higher likelihood of having an unmet need (AOR 6.75; 95% CI 1.95-23.29) compared to those experiencing only IPV (AOR 1.49; 95% CI 0.84-2.38). No interaction between IPV and FV was detected for women married at or above majority. Conclusions Laws that prohibit child marriage should be strengthened and health sector screening for violence experience could help identify women at risk of unmet need and improve women's reproductive agency.



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INTRODUCTION

Intimate partner violence (IPV) has been associated with a host of reproductive

Key message points

- Experiencing family and partner violence has a compounding effect on unmet need for contraception among women who married as minors.
- Screening for intimate partner violence (IPV) and family violence in health services may identify women who are especially vulnerable to having an unmet need for contraception.
- Efforts to reduce gender inequality, including the experience of IPV, are warranted to bolster women's reproductive agency.

outcomes, such as sexually transmitted infections, unintended pregnancies, and induced abortions. 1 2 Underlying these associations is a lack of reproductive agency such that women who experience violence have less control over the choice of when or if to become pregnant, and the ability to effectively use, or negotiate the use of contraception.³ ⁴ Unmet need for contraception (i.e. the lack of use of any contraception method among fecund and sexually active women who report not wanting any more children or wanting to delay the next child) has been associated with IPV in countries throughout the world,⁵ including Jordan.⁶ Research conducted in Jordan has found that family members interfere with women's attempts to avert pregnancy, and violence experienced from natal family members and in-laws (family violence, FV) has been shown to increase the risk of IPV;8 therefore, experiencing FV may exacerbate women's risk of unmet need. Women who marry



minors are often more disempowered relative to women who marry as adults, making them more vulnerable to the potential compounding effect of IPV and FV on unmet need. Understanding these relationships is essential to providing effective healthcare for women and preventing the deleterious consequences associated with unmet need.⁹

In Jordan, most married women have relatively easy access to a range of contraceptive options from the public and private sector, although the quality of reproductive health services, the availability of female health providers and longer-term modern methods is not uniform across the country. 10 There is near universal knowledge of at least one form of birth control among ever-married women; however, 42% of currently married women use a modern contraceptive, 11 and 12% have an unmet need for contraception. 11 While Jordan's level of unmet need is moderate to low, 12 it represents a particularly vulnerable group of women who are on average less likely to participate in household decision-making¹¹ and more likely to live in communities in which tolerance for wife beating is more widespread.6 Women who were ever-married between the ages of 15 and 19 years old - approximately 6% of Jordanian women¹¹ – may be especially vulnerable to having an unmet need since women in this age group are least likely to use any form of contraception, exhibit lower autonomy within the marital relationship, and are more likely to experience IPV than women who marry as adults. 11 13-15

IPV and unmet need

Prevalence estimates of IPV in Jordan suggest that large numbers of women are affected. Estimates of lifetime exposure to physical IPV range from 45% among Palestinian refugee camp dwellers to 31% among reproductive health clinic attendees, ¹⁷ in studies conducted in the early 2000s, to 21% among respondents to the 2012 Demographic and Health Survey. 11 From these same studies, between 9% 11 and 19%¹⁷ of women report lifetime exposure to sexual IPV. Over the same time frame, Jordanian institutions and civil society, in cooperation with international donors, have improved the response of law enforcement, the judicial system, and the social and health sectors to IPV and, in 2008, the Jordanian Domestic Violence Law was codified into law. 18 Numerous actors are involved in the response to IPV survivors (e.g. civil society, specialised police force, national and international organisations); however, services are concentrated in the capital and major cities and are of disparate quality and level of development, leaving many without access to services. Further, help-seeking, especially from outside the family, remains a highly contentious strategy, which could bring serious repercussions on the woman and her family. 19 20

Although undergoing changes, Jordanian families are still by and large patriarchal and collectivist in

nature,²¹ ²² granting men greater economic and social power and placing the needs of the family over those of individual members, even in the case of domestic violence.²⁰ ²³ The collectivist nature of Jordanian society means that families often place pressure on women to remain with abusive husbands to avoid scandal and they may be abusive to her if she is perceived to be at fault.²³ ²⁴ Alternatively, the support and protection that accompany kinship in collectivist societies provides a safety net for women. Family support and close physical proximity to the woman's natal family are protective factors against the occurrence of partner violence.⁸ ²⁴ However, this support is often temporary and conditional on her not being perceived to be at fault for the abuse.⁸ ²³

Other features of family life that influence women's risk of violence and contraception use include kinship marriage (i.e. consanguinity) and polygyny. In Jordan, 35% and 5% of reproductive age women are in consanguineous or polygamous marriages, respectively. 11 In Jordan and in other Arab countries, consanguinity is valued for its many perceived benefits such as: bolstering family ties, stability and compatibility, and fostering a stronger relationship between the wife and her in-laws. 25-27 Studies of consanguinity in the Arab region suggest that consanguinity may be viewed more positively by men compared to women²⁸ and be more common among individuals of lower socioeconomic status and individuals living in rural areas. 11 29 In Jordan, consanguinity appears to have the additional benefits of reducing women's risk of experiencing interference in their ability to use contraception and appears to be protective against IPV;³⁰ but has been associated with poor reproductive health outcomes such as preterm delivery and congenital malformations.^{29 31} and a reduced likelihood of using modern contraceptive methods.³² Polygyny, while not commonly practised, often places co-wives in competition. Consequently, co-wives may use their fertility to solidify their status,²¹ may be less likely to use contraception³³ and, when attempting to use contraception, to be at greater risk of experiencing interference from their husband or natal and marital family members. Polygynously married women are also more likely to IPV experience than monogamously women.34

FV and unmet need

Spouses and former spouses are the most frequently implicated perpetrators of physical violence experienced by women from the age of 15 years; however, among women who experienced violence, 27%, 21% and 14% implicated their brother, father or mother, respectively, in the abuse. Natal and marital family members (i.e. in-laws) have also been shown to perpetrate emotional and physical violence and exert control over women after the start of marriage. Prior research from Jordan suggests that the wider family

has influence over women's exposure to IPV and her reproductive health.^{8 30} Poor familial support, experiencing interference in the marital relationship, and experiencing violence perpetrated by other family members have been associated with an increased risk of IPV.8 In a study conducted among reproductive health clinical attendees, 13% of women reported that the wider family (both marital and natal) interfered with their ability to use contraception. Concern over the family's reputation, which is tied to women's fertility and the birth of male heirs³⁵ or disapproval of contraceptive usage, may be at the heart of familial contraceptive interference. Further, women's failure to prove fertility may increase the likelihood of sexual IPV, 11 divorce and polygyny 36 and, consequently, women may return to economic dependence upon the natal family.³⁷ To date, no study has quantified the effect of FV on unmet need or examined the intersection of child marriage, FV and IPV on unmet need for family planning. This study begins to fill these important information gaps.

METHODS

Sample

The current study includes data that were collected from female participants in the 2012 Jordan Population and Family Health Survey (JPFHS), which is a nationally representative survey of 11 352 evermarried women aged 15–49 years including women of Jordanian nationality as well as women from diverse backgrounds including Syrian refugees. The sample was restricted to women who were selected to take the domestic violence module. Two-thirds of the clusters of the JPFHS sampling strategy were selected for the survey, and in each designated household one woman was randomly selected to participate in the domestic violence module (N=7027). The analytic sample was further restricted to currently married women who were not infecund or menopausal (N=6183).

Unmet need was defined using the revised method and includes unmet need for limiting (i.e. women whose most recent pregnancy was not wanted at all, fecund women who did not use contraception despite their desire to have no more children, women who were postpartum amenorrheic for 2 years following an unwanted birth and were not using contraception) and spacing (i.e. women whose most recent pregnancy was not wanted initially but wanted later, fecund women not using contraception who were undecided when/if they wanted a to have a child or who wanted a child 2+ years later, and women who were postpartum amenorrheic for 2 years following a mistimed birth and were not using contraception).¹²

IPV was assessed by asking the respondents whether their (last) husband ever did any of the following based on items from the Revised Conflict Tactics Scale:³⁸ (1) push, shake or throw something at her; (2) slap her; (3) twist her arm or pull her hair; (4)

punch her with his fist or with something that could hurt her; (5) kick, drag or beat her up; (6) try to choke her or burn her on purpose; (7) threaten her with a knife, gun or other weapon or (8) physically force her to have sexual intercourse when she did not want to. A positive response to any of the eight items was indicative of exposure to IPV. Close control and monitoring of the wife's behaviour was also included as a correlate of IPV and a factor likely influencing women's ability to meet their contraceptive needs. Five items were asked indicative of controlling behaviour including: becoming jealous or angry when she talks to other men, frequently accusing her of being unfaithful, refusing to allow her to meet her female friends, trying to limit contact with her family, and insisting on knowing where she is at all times. As was done in the IPFHS publication, the variable was dichotomised at three or more behaviours, indicating that the husband exerts a high degree of control over the respondent. FV was assessed with an item inquiring about whether anyone other than the respondent's current or former husband hit, slapped, kicked or subjected to her to anything else that hurt her physically since the respondent's 15th birthday. This item was followed up with a question inquiring about the relationship of the perpetrator to the respondent. If a natal or marital family member was indicated, the respondent was considered to have experienced FV.

The covariates listed below were included in the analysis because they are characteristics that have been related to Jordanian women's unmet need⁶ 11 and risk of IPV or FV. 11 30 making them potential confounders of the relationships being tested. Covariates include: education (no education, elementary, preparatory, secondary, and higher, modelled as an ordinal variable due to its linear relationship with unmet need as documented in the JPFHS), wealth (a weighted index of household assets and property, which was divided into quintiles), participation in household decisionmaking dichotomised as no participation and participation in one or more decisions, children ever born (modelled as an ordinal variable: 0, 1-2, 3-4, 5+), and whether the participant was in a consanguineous or polygynous marriage, both modelled as dichotomous variables. Because young brides are likely to be more vulnerable to unmet need, IPV and FV, two separate models were created using logistic regression to test whether IPV and FV were independently associated with unmet need among women who married and first cohabitated prior to and after the age of 18 years, adjusting for all other covariates. Interaction terms (IPV×FV and Control×FV) were also tested in each model. Models in which a statistically significant interaction was detected were stratified for interpretation. Sampling weights and survey design variables were incorporated using SUDAAN V.11.0® (RTI International, Raleigh, NC, USA). The University of Minnesota Institutional Review Board determined

that study did not meet the regulatory definition of human subjects' research due to the sole use of de-identified data.

RESULTS

On average, participants were 33.7 (range 15–49) years of age. Table 1 indicates the characteristics of

Table 1 Participant characteristics by age of marriage (*N*=6183)

	Total women (N=6183)	Marriage after 18 years old (<i>N</i> =4954)	Marriage before 18 years old (N=1229)	
Characteristic	[% (<i>n</i>)]	[% (<i>n</i>)]	[% (<i>n</i>)]	р
Education				< 0.01
No education	1.5 (161)	1.3 (110)	2.6 (51)	
Elementary	6.6 (449)	5.1 (257)	12.3 (192)	
Primary	14.2 (807)	9.4 (448)	33.3 (359)	
Secondary	46.1 (2705)	45.2 (2111)	49.8 (594)	
Higher	31.5 (2061)	39.0 (2028)	2.0 (33)	
Wealth quintile				< 0.01
Lowest	18.5 (1386)	17.2 (998)	23.4 (388)	
Second	20.7 (1559)	20.3 (1235)	22.0 (324)	
Middle	22.4 (1471)	22.4 (1189)	22.6 (282)	
Fourth	20.2 (1137)	20.3 (981)	19.8 (156)	
Highest	18.3 (630)	19.8 (551)	12.2 (79)	
Polygynous relation	onship			0.71
No	96.3 (5911)	96.3 (4743)	96.0 (1168)	
Yes	3.8 (272)	3.7 (211)	4.0 (61)	
Consanguineous	relationship			< 0.01
No	64.7 (3878)	67.6 (3226)	53.4 (652)	
Yes	35.3 (2305)	32.4 (1728)	46.6 (577)	
Children ever bor		,	, ,	<0.01
0	6.7 (376)	7.6 (337)	3.0 (39)	
1–2	26.0 (1529)		17.5 (190)	
3–4	34.6 (2057)		29.0 (317)	
5+	32.7 (2221)	28.2 (1538)	50.5 (683)	
No participation i			30.3 (003)	0.71
No	97.8 (6029)		97.5 (1188)	0., .
Yes	2.2 (154)	2.2 (113)	2.5 (41)	
Experience high of			2.3 (11)	0.95
No	87.5 (5544)		87.6 (1077)	0.55
Yes	12.6 (639)	12.6 (487)	12.5 (152)	
Intimate partner		12.0 (407)	12.5 (152)	<0.01
No	77.6 (4858)	79.0 (3980)	72.4 (878)	<0.01
Yes	22.4 (1325)	21.0 (974)	27.6 (351)	
Family violence	22.4 (1323)	21.0 (974)	27.0 (331)	0.22
No	83.3 (5239)	02.0 (4202)	OF 2 (1026)	0.22
			85.3 (1036)	
Yes Poth family and i	16.7 (944)	17.2 (751)	14.7 (193)	0.10
Both family and i	•		O2 F (4422)	0.16
No	94.0 (5847)	94.3 (4714)	92.5 (1133)	
Yes	6.0 (336)	5.7 (240)	7.5 (96)	0 47
Unmet need	06.0 (= ::::)	07.5 ((07.5)	04.6 (65.4)	0.17
No	86.9 (5419)	87.5 (4378)	84.6 (1041)	
Yes	13.1 (764)	12.5 (576)	15.4 (188)	

the sample by age at marriage. Participants married as minors comprised 20% (N=1229) of the sample. Compared to participants married at or after majority, participants married as minors had lower educational attainment, lower household wealth, a higher number of children ever born, and were more likely to be consanguineously married. Overall, 12.6% (N=639) reported experiencing a high degree of controlling behaviour, which did not differ by age at marriage. Twenty two percent (n=1325) of study participants reported IPV and participants who married before age 18 years were more likely to report IPV (27.6%, N=351) compared to those marrying at or after reaching the age of majority (21.0%, N=974). FV experienced after the age of 15 years was also commonly reported by participants; 14.7% (n=193) and 17.2% (n=751) of participants who married before and after the age of 18 years reported FV, respectively. This difference was not significantly different, however. Brothers, fathers, mothers and sisters were the most frequently named perpetrators of physical FV since the age of 15 years. Among participants who were 18+ years old at the age of marriage, 12.5% (N=576) had an unmet need for family planning; 7.4% (N=309) had an unmet need for limiting and 5.1% (N=267) had an unmet need for spacing. Fifteen percent (n=188) of participants married as minors had an unmet need; 10.2% (n=128) had an unmet need for limiting and 5.2% (n=60) had an unmet need for spacing. Differences in unmet need were not significantly different across groups by age at marriage.

Table 2 presents the adjusted odds of having an unmet need by participants' age at marriage. Among participants married as minors, experiencing IPV was associated with an 87% higher odds of having an unmet need [adjusted odds ratio (AOR) 1.87; 95% confidence interval (95% CI) 1.13 to 3.10]. Being subjected to a high degree of control was associated with a 131% higher odds (AOR 2.31; 95% CI 1.17-4.55) and being in the highest wealth quintile was associated with an 82% lower odds (AOR 0.18; 95% CI 0.06-0.55) of having an unmet need. Among women who married at or above majority, the following were associated with a higher odds of having an unmet need: experiencing IPV (AOR 1.76; 95% CI 1.30–2.38), being in a polygynous relationship (AOR 2.24; 95% CI 1.13-4.43) and higher numbers of children ever born (AOR 1.23; 95% CI 1.07-1.42). In both models, experiencing FV was associated with a lower odds of having an unmet need, although not significantly. Table 2 also indicates that for participants married at or after majority, neither the **IPV×FV** nor control×FV interactions significant.

For participants married as minors, only the IPV×FV interaction was significant. Therefore, this model was subsequently stratified by exposure to

Table 2 Correlates of unmet need for contraception, by age at marriage, with and without interaction terms (*N*=6183)

Characteristic	Model 1a Marriage after age 18 years (N=4954) [AOR (95% CI)]	Model 1b Marriage before age 18 years (N=1229) [AOR (95% CI)]	Model 2a Marriage after age 18 years (N=4954) [AOR (95% CI)]	Model 2b Marriage before age 18 years (N=1229) [AOR (95% CI)]
Education	0.74 (0.64–0.85)	0.81 (0.61–1.07)	0.73 (0.64–0.85)	0.80 (0.61–1.06)
Wealth quintile				
Lowest	Ref	Ref	Ref	Ref
Second	0.74 (0.50-1.11)	0.73 (0.38-1.41)	0.74 (0.50-1.11)	0.69 (0.36-1.32)
Middle	0.80 (0.54-1.19)	1.00 (0.51-1.96)	0.80 (0.54-1.18)	0.96 (0.49-1.89)
Fourth	0.80 (0.51-1.28)	0.57 (0.25-1.30)	0.80 (0.50-1.26)	0.59 (0.25-1.36)
Highest	1.07 (0.60-1.91)	0.18 (0.06-0.55)	1.07 (0.60-1.91)	0.18 (0.06-0.54)
Polygynous relationship	2.24 (1.13-4.43)	1.70 (0.76-3.80)	2.23 (1.13-4.39)	1.66 (0.73–3.78)
Consanguinity	0.96 (0.69-1.36)	1.08 (0.65-1.79)	0.97 (0.69-1.36)	1.08 (0.65-1.80)
Children ever born	1.23 (1.07-1.42)	0.97 (0.73-1.29)	1.23 (1.07-1.42)	0.98 (0.74-1.30)
No participation in household decisions	0.95 (0.38-2.35)	0.41 (0.12-1.40)	0.94 (0.38-2.29)	0.41 (0.12-1.39)
Controlling behaviour	1.07 (0.66-1.75)	2.31 (1.17-4.55)	1.19 (0.72-1.95)	2.42 (1.09-5.36)
Intimate partner violence (IPV)	1.76 (1.30-2.38)	1.87 (1.13-3.10)	1.68 (1.22–2.33)	1.52 (0.86–2.70)
Family violence (FV)	0.68 (0.46-1.01)	0.63 (0.32-1.23)	0.68 (0.43-1.07)	0.20 (0.08-0.51)
Interaction term (control×FV)	_	_	0.64 (0.20-2.06)	0.88 (0.19-4.14)
Interaction term (IPV×FV)	_	_	1.28 (0.59–2.81)	5.26 (1.51–18.25)

AOR, adjusted odds ratio; CI, confidence interval; Ref, reference.

family violence for interpretation (Table 3). IPV was associated with a four-fold higher likelihood of having an unmet need among participants also experiencing FV (AOR 6.75; 95% CI 1.95–23.29) compared to those experiencing only IPV (AOR 1.49; 95% CI 0.84–2.38).

Table 3 Correlates of unmet need for contraception among women married as minors, by exposure to family violence (N=1229)

Characteristic	No exposure to FV (N=1036) [AOR (95% CI)]	Exposure to FV (N=193) [AOR (95% CI)]
Education	0.80 (0.59–1.10)	1.26 (0.56–2.83)
Wealth quintile		
Lowest	Ref	Ref
Second	0.58 (0.28-1.19)	1.68 (0.37–7.61)
Middle	0.84 (0.39-1.80)	1.91 (0.37–9.96)
Fourth	0.56 (0.23-1.35)	0.14 (0.01–2.65)
Highest	0.16 (0.05-0.51)	0.29 (0.01-8.11)
Polygynous relationship	2.05 (0.86-4.87)	0.38 (0.02-6.98)
Consanguinity	1.21 (0.68-2.16)	0.65 (0.18-2.33)
Children ever born	1.01 (0.75-1.38)	0.79 (0.39–1.58)
No participation in household decisions	0.42 (0.10–1.73)	0.39 (0.02–6.40)
Experience high degree of control	2.40 (1.09–5.30)	2.30 (0.62–8.47)
Intimate partner violence	1.49 (0.84–2.38)	6.75 (1.95–23.29)

AOR, adjusted odds ratio; CI, confidence interval; FV, family violence; Ref, reference.

DISCUSSION

The findings of this study suggest that IPV independently increases Jordanian women's likelihood of having an unmet need and indicate the need for IPV and FV screening and reproductive counselling to prevent unmet need, especially among women married as minors. This study of a nationally representative sample of married, reproductive age Jordanian women is the first to quantify the impact of FV on unmet need among women experiencing IPV. These findings confirm prior studies linking IPV and women's lack of reproductive agency (i.e. unmet need, unintended pregnancy, and interference in women's ability to avert pregnancy) in the Middle East^{6 7 39} and around the world⁵ and demonstrate the wider influence of extended family members and the intersection of IPV, FV and child marriage on unmet need.

While prior research has found that members of the extended family have a limited influence on Jordanian women's family planning, ⁴⁰ this study finds that FV is associated with lower unmet need, although not at traditionally significant levels. While Jordanian women may rely on extended family members to provide information about family planning ⁴⁰ and to intervene in cases of IPV, ⁸ 19 exposure to FV is associated with increased odds of women experiencing IPV and may indicate that a woman cannot rely on her natal family to assist her if she decides to end the relationship or is divorced. ⁸ 37 Thus women may proactively seek out family planning as a method of self-preservation and protection.

The compounding effect of FV and IPV on unmet need among women who marry as minors suggests the need to strengthen laws against child marriage and to empower girls at risk of early marriage. Only 6% of females aged 15–19 years are married in Jordan; 11 however, girls and boys between the ages of 15 and 17 years may be married in Jordan with permission from a judge. 41 In addition to its relationship with unmet need identified in this study, early marriage has been linked to premature termination of a girl's education, and physical and sexual assault, 13-15 both findings which are supported by the present study. Women married as minors are less likely to discuss family planning with their husbands and use contraception, 42 and have been shown to have poorer maternal health. 43 Therefore, more reproductive education and counselling is warranted for this vulnerable population.

Both international⁴⁴ and Jordanian⁴⁵ actors point to the healthcare sector as one of many venues to address unmet need. Improving women's access to higher quality services, longer-lasting contraception methods, and female health providers through ongoing implementation of the National Reproductive Health/Family Planning Strategy would address some aspects of unmet need especially for women of lower socio-economic status in underserved areas of Jordan. 45 While there are no studies of the efficacy of IPV screening in healthcare settings in Jordan, the US Preventive Services Task Force recommends universal IPV screening and referral for women of childbearing age in healthcare settings⁴⁶ and an enhanced screening and education strategy in the USA has been shown to improve women's reproductive agency.⁴⁷

There is evidence to suggest that a healthcare intervention to address the intersection of violence and unmet need in Jordan is plausible. Researchers in neighbouring countries have found that women in Arab societies often welcome IPV screening in healthcare settings, 48 and the capacity of Jordanian organisations to address violence has grown significantly over time. The Noor Al-Hussein Foundation's Institute for Family Health has been among the leaders in comprehensively addressing the impact of violence on its patients and the broader communities it serves. The Jordanian Ministry of Health has developed guidelines for addressing violence in the health sector in collaboration with the United Nations Population Fund (UNFPA) and the National Council for Family Affairs. With support from the United Agency for International Development (USAID), the Private Sector Project for Women's Health improved the capacity of private sector hospitals and providers to detect and refer domestic violence survivors. However, research in Jordan has found that most partner violence survivors do not seek help in the health sector; 11 and when identified in the health sector, patients are generally dissatisfied

with the health provider response. 49 Screening rates among Jordanian nurses are low and significant barriers to effective screening have been documented, especially a lack of institutional supports. 50 Survivor blaming and tolerance of abuse to discipline an errant wife are also pervasive, 11 50 and undermine the effectiveness of screening. Given the social repercussions of help-seeking and divorce, and widespread tolerance of abuse, building a stronger healthcare response will not only require improving screening practices, but will also require addressing the stigma associated with help-seeking outside the family and they myriad contributors to women's disempowerment.

Limitations

Underreporting of violence may be possible because most incidents are not reported to verifiable sources. In addition, the FV measure assesses violence that occurred after the respondent's 15th birthday; therefore, it is unclear if FV occurred prior to or after marriage and whether this time frame influenced women's report of in-law FV. The fact that mostly natal family members were mentioned signals that the wider family may be unable or unwilling to rally to support women facing IPV.8 Finally, examination of IPV and FV by women's nationality and refugee status was not possible for the current study since there were too few Syrians in the sample, but could be important given the high rates of violence and early marriage ⁵¹ 52 among Syrian refugees in Jordan.

CONCLUSIONS

Despite significant advances in family planning services, unmet need remains an important reproductive health issue in Jordan. Enhanced screening, education and referral for IPV and FV in health services may identify women who are especially vulnerable to having an unmet need for contraception. Fundamentally, efforts to reduce gender inequality, including the experience of IPV, are warranted to bolster women's reproductive agency.

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REFERENCES

- 1 Li Y, Marshall CM, Rees HC, et al. Intimate partner violence and HIV infection among women: a systematic review and meta-analysis. J Int AIDS Soc 2014;17:18845.
- 2 Coker AL. Does physical intimate partner violence affect sexual health? A systematic review. *Trauma Violence Abuse* 2007;8:149–177.
- 3 Maxwell L, Devries K, Zionts D, et al. Estimating the effect of intimate partner violence on women's use of contraception: a systematic review and meta-analysis. PLoS ONE 2015;10: e0118234.
- 4 Pallitto CC, García-Moreno C, Jansen HA, et al. Intimate partner violence, abortion, and unintended pregnancy: results from the WHO Multi-country Study on Women's Health and Domestic Violence. Int J Gynaecol Obstet 2013;120:3–9.
- 5 Hindin MJ, Kishor S, Ansara DL. Intimate Partner Violence among Couples in 10 DHS Countries: Predictors and Health Outcomes. Calverton, MD: Macro International Inc, 2008.
- 6 McCleary-Sills J. Jordanian social norms and the risk of intimate partner violence and limited reproductive agency. *J Int Womens Stud* 2013;14:12–29.
- 7 Clark CJ, Silverman J, Khalaf IA, et al. Intimate partner violence and interference with women's efforts to avoid pregnancy in Jordan. Stud Fam Plann 2008;39:123–132.
- 8 Clark CJ, Silverman JG, Shahrouri M, et al. The role of the extended family in women's risk of intimate partner violence in Jordan. Soc Sci Med 2010;70:144–151.
- 9 Cleland J, Conde-Agudelo A, Peterson H, et al. Contraception and health. Lancet 2012;380:149–156.
- Higher Population Council. National Reproductive Health/ Family Planning Strategy 2013–2017. Amman, Jordan: Higher Population Council, 2013.
- 11 Department of Statistics [Jordan], ICF International. Jordan Population and Family Health Survey 2012. Calverton, MD: Department of Statistics and ICF International, 2013.
- 12 Bradley SE, Croft TN, Fishel JD, et al. Revising Unmet Need for Family Planning. Calverton, MD: ICF International, 2012.
- 13 Nasrullah M, Zakar R, Zakar MZ. Child marriage and its associations with controlling behaviors and spousal violence against adolescent and young women in Pakistan. *J Adolesc Health* 2014;55:804–809.
- 14 Speizer IS, Pearson E. Association between early marriage and intimate partner violence in India: a focus on youth from Bihar and Rajasthan. J Interpers Violence 2011;26:1963–1981.
- 15 Hong Le MT, Tran TD, Nguyen HT, et al. Early marriage and intimate partner violence among adolescents and young adults in Viet Nam. J Interpers Violence 2014;29:889–910.

- 16 Khawaja M, Barazi R. Prevalence of wife beating in Jordanian refugee camps: reports by men and women. *J Epidemiol Community Health* 2005;59:840–841.
- 17 Clark CJ, Bloom DE, Hill AG, et al. A prevalence estimate of intimate partner violence in Jordan. East Mediterr Health J 2009;15:880–889.
- 18 Darwazeh N. Violence Against Women: Assessing the Situation in Jordan. 2008. http://www.un.org/womenwatch/ianwge/ taskforces/vaw/VAW_Jordan_baseline_assessment_final.pdf (accessed 12 October 2015).
- 19 Spencer RA, Shahrouri M, Halasa L, et al. Women's help seeking for intimate partner violence in Jordan. Health Care Women Int 2014;35:380–399.
- 20 Haj-Yahia MM. Wife abuse and battering in the sociocultural context of Arab society. Fam Process 2000;39:237–255.
- 21 Al-Krenawi A, Graham JR, Al Gharaibeh F. A comparison study of psychological, family function marital and life satisfactions of polygamous and monogamous women in Jordan. *Community Ment Health J* 2011;47:594–602.
- 22 Barakat H. The Arab family and the challenge of social transformation. In: Fernea EW (ed.), Women and the Family in the Middle East: New Voices of Change. Austin, TX: University of Texas Press, 1985:27–48.
- 23 Haj-Yahia MM, Sadan E. Issues in intervention with battered women in collectivist societies. *J Marital Fam Ther* 2008;34:1–13.
- 24 Brown JK. Introduction: definitions, assumptions, themes, and issues. In: Counts DA, Brown JK, Campbell JC (eds), Sanctions and Sanctuary: Cultural Perspectives on the Beating of Wives. Boulder, CO: Westview Press, 1992:1–18.
- 25 Hamamy H. Consanguineous marriages: preconception consultation in primary health care settings. *J Community Genet* 2012;3:185–192.
- 26 Hamamy H, Jamhawi L, Al-Darawsheh J, et al. Consanguineous marriages in Jordan: why is the rate changing with time? Clin Genet 2005;67:511–516.
- 27 Hamamy H, Bittles AH. Genetic clinics in Arab communities: meeting individual, family and community needs. *Public Health Genomics* 2009;12:30–40.
- 28 Sandridge AL, Takeddin J, Al-Kaabi E, *et al.* Consanguinity in Qatar: knowledge, attitude and practice in a population born between 1946 and 1991. *J Biosoc Sci* 2010;42:59–82.
- 29 Tadmouri GO, Nair P, Obeid T, et al. Consanguinity and reproductive health among Arabs. Reprod Health 2009;6:17.
- 30 Clark CJ, Hill A, Jabbar K, et al. Violence during pregnancy in Jordan: its prevalence and associated risk and protective factors. Violence Against Women 2009;15:720–735.
- 31 Obeidat BR, Khader YS, Amarin ZO, *et al.* Consanguinity and adverse pregnancy outcomes: the North of Jordan experience. *Matern Child Health J* 2010;14:283–289.
- 32 O'Hara K, Tsai L, Carlson C, *et al*. Experiences of intimate partner violence and contraception use among ever-married women in Jordan. *East Mediterr Health J* 2013;19:876–882.
- 33 Baschieri A, Cleland J, Floyd S, et al. Reproductive preferences and contraceptive use: a comparison of monogamous and polygamous couples in northern Malawi. J Biosoc Sci 2013;45:145–166.
- 34 Barnawi FH. Prevalence and risk factors of domestic violence against women attending a primary care center in Riyadh, Saudi Arabia. *J Interpers Violence* 2015; May 27. pii: 0886260515587669 [Epub ahead of print].
- 35 Kridli SA, Libbus K. Contraception in Jordan: a cultural and religious perspective. *Int Nurs Rev* 2001;48:144–151.

Research

- 36 Rutstein SO, Shah IH. Infecundity, Infertility, and Childlessness in Developing Countries DHS Comparative Reports No. 9. Calverton, MD: ORC Macro and the World Health Organization, 2004.
- 37 Gharaibeh M, Oweis A. Why do Jordanian women stay in an abusive relationship: implications for health and social well-being. *J Nurs Scholarsh* 2009;41:376–384.
- 38 Straus M, Hamby SL, Boney-McCoy S, et al. The Revised Conflict Tactics Scales (CTS2): development and preliminary psychometric data. J Fam Issues 1996;17:283–316.
- 39 Khawaja M, Hammoury N. Coerced sexual intercourse within marriage: a clinic-based study of pregnant Palestinian refugees in Lebanon. J Midwifery Womens Health 2008;53: 150–154.
- 40 Khalaf IA. Exploring the use of modern contraceptive methods among Jordanian women: a qualitative study. *Dirasat Med Biol Sci* 2004;31:46–66.
- 41 UNICEF. Jordan. MENA Gender Equality Profile: Status of Girls and Women in the Middle East and North Africa. 2009. http://www.unicef.org/gender/files/Jordan-Gender-Eqaulity-Profile-2011.pdf (accessed 12 October 2015).
- 42 Kradsheh M. Female early marriage: its determinants and effects on demographic behavior in Jordan. *Jordan J Soc Sci* 2012;5:37–59.
- 43 Raj A. When the mother is a child: the impact of child marriage on the health and human rights of girls. *Arch Dis Child* 2010;95:931–935.
- 44 World Bank. *Jordan Reproductive Health at a Glance*. Washington, DC: World Bank, 2011.

- 45 The Higher Population Council. *National Reproductive Health/Family Planning Strategy* 2013–2017 *Amman, Jordan.* 2013. http://data.unhcr.org/syrianrefugees/documents.php? page=1&view=grid&Country[]=107&Sector[]=24 (accessed 12 October 2015).
- 46 Moyer VA, U.S. Preventive Services Task Force. Screening for intimate partner violence and abuse of elderly and vulnerable adults: U.S. preventive services task force recommendation statement. *Ann Intern Med* 2013;158:478–486.
- 47 Miller E, Decker MR, McCauley HL, et al. A family planning clinic partner violence intervention to reduce risk associated with reproductive coercion. Contraception 2011;83:274–280.
- 48 Usta J, Antoun J, Ambuel B, *et al*. Involving the health care system in domestic violence: what women want. *Ann Fam Med* 2012:10:213–220.
- 49 Damra JK, Abujilban SK, Rock MP, et al. Pregnant women's experiences of intimate partner violence and seeking help from health care professionals: a Jordanian qualitative study. J Fam Violence 2015;30;6:807–16.
- 50 Al-Natour A, Gillespie GL, Felblinger D, et al. Jordanian nurses' barriers to screening for intimate partner violence. Violence Against Women 2014;20:1473–1488.
- 51 UNICEF. A Study on Early Marriage in Jordan 2014. 2014. http://www.unicef.org/mena/UNICEFJordan_EarlyMarriage Study2014(1).pdf (accessed 12 October 2015).
- 52 Spencer RA, Usta J, Essaid A, et al. Gender Based Violence Against Women and Girls Displaced by the Syrian Conflict in South Lebanon and North Jordan: Scope of Violence and Health Correlates. Alianza por la Solidaridad, 2015.

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