CONSANGUINITY AND INTIMATE PARTNER VIOLENCE IN EGYPT AND JORDAN

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Introduction:

A large number of people (estimated over 6 million) in the world have consanguineous parents. Many countries in the Arab region still have very high rates of consanguineous marriages compared to western countries [1-3]. The prevalence of consanguinity varies within countries of the Arab world ranging from 28.96 % in Egypt to around 56% in north Jordan [5-16]

The influence of modernization on the practice of consanguineous marriage seems not to be evident across areas. Whereas this practice is declining steadily in some communities in Jordan [17],Palestinian territories [18] and Israeli Arabs [19, 20] and non-Bedouin communities in Kuwait[21], the rate of consanguinity is increasing in Yemen [9], UAE [11] and Qatar[13]. Consanguineous marriage is more common in those who get married at younger age [9, 18, 22] in those residing in rural areas [5, 8, 10, 12, 15, 18], within Bedouins communities [10, 21]. Moreover, Muslim affiliation [6, 7, 10, 12], husbands with low occupational status [6] women out of labor force [7, 18], lower socioeconomic status and individuals with lower wealth index [18, 20] are associated with consanguinity. The role of education in consanguineous marriage is mixed, with some studies showing that women and men with low educational level are more likely to be in consanguineous marriage [6, 7, 9, 12], but this was not evident in other studies [16-18, 22] furthermore, the opposite was true in Yemen regarding husband's education[9].

The effect of consanguineous marriage on pregnancy outcomes, congenital malformations, genetic diseases and cancer risks has been well studied [23-29]. However, the effect of such marriage on the family dynamic including Intimate Partner Violence (IPV) has not been studied.

The hypotheses for preference of consanguinity in the middle East is the assumption that there will be better adaptability and acceptability of the female in her new environment which leads to more stability within the family [31]. It is unknown whether this kinship between spouses would make domestic violence less likely. There are only a few prevalence studies for intimate partner violence from the region that include consanguinity as a covariate, but with mixed results.

A study from Pakistan that included postnatal women revealed that 44 % of women interviewed reported marital abuse; consanguinity, among other factors, carried a significant risk for violence[32]. However, a study on pregnant females attending a family planning clinic in Jordan showed that 15.4%of women reported physical abuse during pregnancy. Being married to a first or second degree cousin was a protective factor against violence in multivariate model compared to unrelated or distantly related marriage [33].These findings were in line with survey results from Egypt (El-Zanaty 2006). However, husband's relation and degree of this relation was not statistically different between physically abused and non-abused group of women in Aleppo[34]. Similarly, consanguinity was associated , but not statistically significant, with lower rates of sexual coercion among pregnant Palestinian refugees in Lebanon [35].

Given the discrepancy of findings, the aim of this study is examine the association between consanguinity and intimate partner violence (IPV) while also accounting for other factors (age, age at marriage, marital duration, educational level, rural vs. urban residence, wealth index, and work status). The availability of national level survey data on intimate partner violence and consanguinity with comparable instruments and survey methodology from two counties in the region provide a unique opportunity to asses this association in detail.

Methods

The investigation is based on secondary analysis of data obtained by Demographic Health Survey (DHS) from Egypt 2005 and Jordan 2007. The study focuses on ever married women aged 15-49 years. A total of 5,240 women in Egypt and 3,444 women in Jordan were included. The outcome variable is exposure to IPV during the past year. A range of demographic and socio-economic risk factors were included as control variables, including age, age at marriage, duration of marriage, education, residence, employment, and household wealth.

Binary logistic regression models were used to assess this association. The analysis was conducted using the Statistical Package for Social Sciences (SPSS). A p value of <0.05 is considered statistically significant.

Results

IPV prevalence during the *past year* was generally high, and fairly similar, in Egypt and Jordan. Physical violence was 18% in Egypt and 12% in Jordan. One in ten women suffered from emotional violence in both countries. Sexual violence was lower at 6% in Jordan and 4% in Egypt. Over a third of women were married to relatives in both countries, with Jordan having a higher rate of consanguinity (39%) than Egypt (33%).

The age profile of women interviewed was fairly similar, with Egypt having a slightly younger sample. About 38% of Egyptian women were aged less than 30 years compared to 33% in Jordan. On the other hand, Egyptian women were much less educated than their Jordanian counterparts. About one of two Egyptian women had less than secondary education compared to one in 10 in Jordan. Despite their higher educational level, Jordanian women were less likely to be employed (12%) than Egyptian women (22%). As for age at marriage, about 16% of Egyptian women married before 16 years old as compared to only7% of Jordanian women. Marital duration was fairly similar in both countries, with about a fifth of women were married for less than 5 years. The vast majority of Jordanian women come from urban places (85%) while only 42% of Egyptian women do. The wealth index looks similar to the household distribution in both countries.

Looking at the bivarate (unadjusted) associations, consanguinity was significantly associated with physical IPV in Jordan but not in Egypt, with relatives having lower rates of physical IPV than women married to non-relatives. Younger age, low education, low age at marriage, shorter marital duration and low level of wealth were also associated with physical IPV in both countries. It should be noted that marital duration was not consistently related to physical IPV in Egypt, but longer marital duration (>20 years) was associated with lower rates of physical IPV in Jordan. Finally Egyptian women residing in rural areas were more likely to suffer from physical abuse than urban women.

With respect to emotional violence: Women married to relatives had significantly lower rates of emotional abuse than non-relatives but only in Jordan. As with physical violence, lower education, lower age at first marriage, shorter marital duration and lower wealth index were associated with emotional IPV in both countries. However, non-working women in Jordan and rural women in Egypt were more likely to be sexually abused than other women.

Regarding sexual violence, unlike the findings for physical and emotional violence, consanguinity was not associated with sexual abuse in both countries. Younger age, lower education, shorter marital duration and lower wealth were associated with sexual abuse in both countries. However, rural residence and unemployment was significantly associated with sexual abuse in Egypt but not in Jordan.

Table 1 shows the adjusted associations between the three forms of violence and background variables. Consanguinity seems to be protective within marriage of abuse across all types, but the association is statistically significant only for emotional abuse in both countries and marginally significant

for physical and sexual abuse. Interestingly, age was not associated with abuse in the adjusted models. Low educational level was significantly associated with increase of both physical and emotional violence, but not sexual abuse, perhaps owing to small sample size of the latter. Longer marital duration (i.e., >5 years) was significantly associated with increased physical violence in Egypt, and with emotional violence in both countries. Finally, lower wealth was significantly associated with the three types of abuse in Egypt, but not Jordan.

Conclusion

Our results reveal that, getting married to a relative and getting educated but not employed, protect woman from exposure to Intimate Partner Violence. Given their serious implication on women empowerment strategies, these results are to be taken with caution and within the specific context that will be presented.

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Table 1. Adjusted odds ratios from logistic regression of physical, emotional and sexual violence, Egypt and Jordan

Variable	OR (95% CI) Physical violence		OR (95% CI) Emotional violence		OR (95% CI) Sexual violence	
	Jordan	Egypt	Jordan	Egypt	Jordan	Egypt
Consanguinity						
Relative	1.0	1.0	1.0	1.0	1.0	1.0
Non-relative	1.3 (0.9-1.9)	1.1 (0.9-1.3)	1.6 (1.1-2.3)	1.4 (1.1-1.8)	1.1 (0.7-1.7)	1.4 (0.9-2.1)
Age						
15-29	1.1 (0.6-2.2)	1.5 (1.0-2.2)	1.6 (0.8-3.0)	1.2 (0.7-1.9)	1.7 (0.7-4.1)	0.7 (0.3-1.3)
30-39	0.9 (0.6-1.5)	1.2 (0.9-1.7)	1.4 (0.9-2.1)	1.1 (0.7-1.5)	1.5 (0.7-3.0)	0.9 (0.5-1.5)
40-49	1.0	1.0	1.0	1.0	1.0	1.0
Education						
Less than secondary	2.1 (1.1-4.0)	3.9 (2.3-6.6)	2.1 (1.0-4.3)	4.2 (1.8-9.6)	2.0 (0.9-4.8)	1.4 (0.4-4.6)
Secondary	1.5 (0.9-2.4)	2.5 (1.5-4.0)	1.4 (0.8-2.5)	2.7 (1.2-5.9)	1.4 (0.7-2.6)	1.4 (0.5-4.2)
Higher than secondary	1.0	1.0	1.0	1.0	1.0	1.0
Employment						
Not working	0.8 (0.5-1.4)	1.0 (0.8-1.2)	1.2 (0.6-2.3)	0.8 (0.6-1.1)	1.0 (0.5-2.2)	1.5 (0.9-2.4)
Working	1.0	1.0	1.0	1.0	1.0	1.0
Age at first marriage						
<16	1.2 (0.5-2.6)	0.9 (0.6-1.3)	0.7 (0.3-1.8)	1.2 (0.7-2.0)	0.9 (0.3-2.3)	1.8 (0.8-4.2)
16-19	0.9 (0.5-1.5)	1.0 (0.8-1.4)	1.1 (0.6-2.1)	1.1 (0.7-1.6)	0.8 (0.4-1.6)	1.4 (0.8-2.7)
20-22	0.7 (0.4-1.2)	0.9 (0.6-1.2)	1.1 (0.6-2.0)	0.8 (0.5-1.2)	0.8 (0.4-1.6)	1.4 (0.7-2.5)
23+	1.0	1.0	1.0	1.0	1.0	1.0
Marital duration						
<5	1.0	1.0	1.0	1.0	1.0	1.0
5-19	1.1 (0.7-1.8)	1.3 (1.0-1.7)	1.8 (1.0-3.4)	1.7 (1.2-2.5)	1.1 (0.5-2.4)	1.2 (0.7-

						2.1)
20+	0.7 (0.3-1.6)	0.9 (0.5-1.4)	3.3 (1.3-8.1)	1.0 (0.6-1.8)	0.9 (0.3-2.6)	0.5 (0.2-1.1)
Place of residence						
Urban	1.0	1.0	1.0	1.0	1.0	1.0
Rural	0.9 (0.6-1.2)	1.0 (0.8-1.2)	0.8 (0.6-1.2)	0.8 (0.6-1.1)	1.2 (0.8-1.9)	1.2 (0.8-1.9)
Wealth index						
Poorest	1.3 (0.7-2.6)	1.4 (0.9-2.1)	1.4 (0.7-2.6)	2.1 (1.2-3.5)	2.0 (0.7-5.4)	2.3 (1.0-5.4)
Poorer	1.3 (0.7-2.5)	1.5 (1.0-2.1)	1.3 (0.7-2.3)	1.8 (1.1-3.0)	1.8 (0.6-4.8)	2.6 (1.2-5.7)
Middle	0.9 (0.5-1.7)	1.4 (1.0-2.0)	0.7 (0.4-1.4)	1.7 (1.1-2.8)	2.6 (1.0-6.8)	2.6 (1.2-5.9)
Richer	1.3 (0.7-2.6)	1.2 (0.9-1.6)	1.0 (0.5-2.0)	1.2 (0.8-1.8)	1.8 (0.6-5.0)	2.1 (1.1-4.4)
Richest	1.0	1.0	1.0	1.0	1.0	1.0