Syrian Refugee Women's Empowerment and Fertility: Evidence from Jordan

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Short Abstract

Fertility is higher among Syrian refugees in Jordan compared to Syrian women in Syria before the 2011 civil war. Dimensions of women's empowerment, like higher status and greater agency, are associated with sexual and reproductive health outcomes, including lower fertility. No study examines how the relationship between women's agency and fertility may vary among forced migrants displaced because of war/conflict. This study examines women's agency and fertility among Syrian refugee women and Jordanian women in Jordan, including those in urban, rural and camp settings. Using the 2016 Jordan Labor Market Panel Survey and birth histories for ever-married women 15 to 49 years old, a series of logistic, Poisson, and event history models are estimated for total fertility in 2016. Syrian refugees are significantly different from Jordanian women across several indicators of women's empowerment. However, for both forced migrants and women from Jordan, greater agency is associated with higher fertility.

Extended Abstract

Since 2011, an estimated 5.6 million Syrian refugees have left for neighboring countries, primarily Lebanon, Turkey, and Jordan (United Nations High Commissioner for Refugees [UNHCR], 2016). The Syrian Civil War that started in 2011 has killed more than 400,000 people and displaced millions of others. While the number of Syrians arriving in Europe continues to increase, it remains low compared to Syria's neighboring countries, with slightly more than 10 percent of Syrians seeking safety in Europe. Seventy-five percent of Syrian refugees to neighboring countries are women and children, and many of the women are of reproductive age (Baker, 2014; Samari, 2017).

Jordan is one of the countries most affected by the Syria crisis, with the second highest share of refugees compared to its population in the world, 89 refugees per 1,000 inhabitants. Syrian refugees are about 10 percent of the total Jordanian population of 6.5 million. Over 70 percent of Syrian refugees are residing among host Jordanian communities, and only 30 percent of refugees are in camps (Samari, 2017a). The majority of Syrian refugees in Jordan live in urban areas and over 80% live below the poverty line.

Only a few studies to date have assessed changed in fertility that may have resulted from recent wars or political change in the Middle East and North African (MENA) region (Cetorelli, 2014; Radovich et al., 2018). In 2006 in Syria, the total fertility rate (TFR) was estimated to be 2.20 in 2006, although another survey in 2009 produced an estimate of 3.5. Written reports also indicate that in 2010, Syrian women had an average of 3.5 births. These estimates are similar to those found for Jordanian women in Jordan based on Demographic and Health Surveys and Labor Market Panel Surveys (see Figure 1). Rough estimates show that the current TFR in Syria is 2.5. The fertility rate among Syrian refugees in camps in Jordan exceeds both the fertility rate in Jordan and that of pre-war Syria: 5 live births per woman (Figure 2).

One strategy used to lower fertility is empowerment of women (Balk, 1994; Dyson & Moore, 1983). Women's *empowerment* is the process in which women acquire enabling

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resources, like education, which may enhance women's *agency*, or the ability to define life choices in an evolving historic and social context (Kabeer, 1999). Research on women's agency and fertility shows that the two can be positively or negatively related, depending on the setting and the measures used (Malhotra et al., 1995; Samari, 2017b; Upadhyay et al., 2014; Upadhyay & Hindin, 2005). However, studies on women's agency and fertility have not fully explained the relationship in developing countries outside of South Asia or considered the impact of conflict and forced migration on agency and fertility.

Research Questions and Hypotheses

This study focuses on two research questions: (1) how does women's agency vary among forced migrants? (2) how is women's agency associated with fertility for both refugees displaced by the 2011 and ongoing Syrian Civil War and the host population in Jordan? Hypotheses include that forced migrants will have less agency across all dimensions of women's empowerment. Given the existing literature on agency and fertility, expected findings also include that greater agency is associated with lower fertility, and that women who have greater agency across several different dimensions will be more likely to participate in fertility decisions and opt to have fewer children. Given the established high fertility and large differences in economic development and education in camp settings, women in these settings are likely to have less agency and higher fertility.

Data & Methods

The Jordan Labor Market Panel Survey (JLMPS) is a nationally representative panel survey of households in Jordan. Data are collected every six years by the Economic Research Forum starting in 2010. The 2016 wave includes a representative sample of forced migrants from Syria that arrived in Jordan after the Syrian Civil War started in 2011. The data include socioeconomic attributes of households and a large nationally representative sample of married women. The 2016 data include birth histories and measures of women's empowerment for both Jordanian and Syrian women in Jordan. All data were self-reported during a face-to-face interview conducted by a trained field interviewer. The analytic sample is restricted to women in their childbearing years (15 to 49 years) who have ever been married and who report a complete birth history in 2016 (N=5,022). This includes 4,490 women from Jordan and 532 women who were forced migrants from the conflict in Syria.

Measures

Five measures of *agency* are included: individual household decision-making, joint household decision-making, mobility, attitudes towards intimate partner violence, and attitudes towards gender norms as reported by female respondents in the survey. Two additional measures of women's *status* that are closely tied to fertility are also included: educational attainment and age at first marriage. *Fertility* is based on women ever giving births and total number of births reported in their birth history from 2011 to 2016.

Analysis

First, frequency distributions of the variables in the analysis for forced migrant Syrian women and Jordanian women in Jordan are examined. Differences in distributions of measures of agency between forced migrants and Jordanian women are also examined. Using logistic and

Poisson models, bivariate relationships for each measure of agency with ever having a birth and number of births are then considered.

For multivariate models, I use the user-generated Stata command tfr2, developed by Bruno Schoumaker for use with DHS, MICS, and other surveys which collect birth histories (Schoumaker, 2013). Using tfr2, I compute age specific fertility rates (ASFRs) and TFRs by generating a table of exposure time and outcomes (live births) for single years by women's five-year age groups from the birth history sections of each survey. In this procedure, individual exposure was multiplied by an all-women inflation factor to adjust fertility rates for ever-married women and compute ASFRs and TFRs for all women of reproductive age. I estimate a series of multivariate models using the Stata tfr2 command with the total fertility as the outcome variable and respondents' agency, age, education, age at first marriage, location (urban vs. rural vs. camp), and region as independent variables. Similar to the proportional hazards assumption of event history models, the multivariate models assume that the age pattern of fertility is fairly similar across the values of the explanatory variables (Schoumaker, 2013). For explanatory variables, under that assumption, rate ratios are interpreted as ratios of TFRs.

Results

Table 1 shows the descriptive characteristics for women ages 15 to 49 who were ever married by 2016 (N=5,022). Syrian refugee women are on average 32 years old compared to Jordanian women who are on average 34 years old. Supplemental Table 1 shows the age distribution of the sample and demonstrates that the Syrian refugee's in Jordan are younger and include more women as there are significantly fewer men (compared to the host population) aged 20 to 29 years.

Table 2 shows the distributions of measures of women's agency. In 2016, respondents have a low amount of personal power in household decisions, with the average score for forced migrant respondents making household decisions equivalent to making only one to two decisions (Mean=1.54, SD=2.71). Nonetheless, there is still variation with scores ranging from 0 to 10. For respondents making decisions along with another person, there is a greater amount of participation (Mean=4.55, SD=3.56). Household decision-making and the attitudinal measures (attitudes towards intimate partner violence and gender norms) are significantly different between Syrian refugees and Jordanian women. Syrian refugees are significantly different from Jordanian women across several indicators of women's empowerment.

Table 3 shows the bivariate relationships between agency and fertility. Most measures of agency are associated with the fertility outcomes in 2016 except joint household decision-making. However, relationships are not in the expected direction with most demonstrating that greater agency is associated with higher fertility for both forced migrants and Jordanian women.

Tables 4 shows the results of the multivariate event history models. Syrian women who make more household decisions have higher fertility. The remaining measures of agency – freedom of movement and attitudes towards intimate partner violence and gender norms are not associated with fertility for Syrian refugees in Jordan. However, freedom of movement and attitudes towards intimate partner violence are associated with fertility for Jordanian women in Jordan. In contrast to much of the existing literature, women with more agency in Jordan have higher fertility. As expected, women who reside in camps also have higher fertility, and those who reside in Northern Jordan also have higher fertility. Figure 3 shows the ASFRs for Syrian refugees as compared to Jordanian women in Jordan, showing that age specific fertility rates are higher for the younger age cohorts of Syrian refugees in Jordan.

Discussion and Future Directions

This study is the first to consider the impact of socio-political upheaval and one of the worst humanitarian crises in Syria on women's empowerment and fertility in Jordan. There is a lot of discussion of lack of agency among those displaced by conflict, but very few empirical investigations. Furthermore, there are no studies of the relationship between women's empowerment and sexual and reproductive health for those displaced by conflict and the host communities in which they reside. This is an important first step in furthering understanding of how conflict shapes women's status, agency, and fertility behaviors, particularly because the relationship between agency and fertility is inverse to what is often found in South Asian countries. Future directions include nesting the survival models in communities to see how much of the variation in agency and fertility is explained by community locations and norms.

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Tables and Figures

Table 1. Sample Characteristics (Means (SE) or %) of Ever Married Women Ages 15 to 49, 2016 Jordanian Labor Market Panel Survey (N=5,022)

	Forced Migrants (N=532)		Jordanians (N=4,490)	
Key Variables	N	% or Mean (SD)	N	% or Mean (SD)
Current Age (years)* **	532	31.6 (8.29)	4,490	33.6 (8.55)
Education* **				
None	326	7.26	121	22.74
Read & Write	739	16.46	287	53.95
Primary	1,302	29	54	10.15
Secondary	700	15.59	41	7.71
Post Secondary	1,423	31.69	29	5.45
Marital Status				
Married	250	5.57	39	7.33
Separated/Divorced/Widow	4,240	94.43	493	92.67
Age at First Marriage* **				
<=18 years old	1,052	23.43	206	38.72
>18 years old	3,438	76.57	326	61.28
Location* **				
Urban	3,552	79.11	190	35.71
Rural	938	20.89	12	2.26
Camp	-	-	330	62.03
Region* **				
Middle	2,130	47.44	194	36.47
North	1,604	35.72	336	63.16
South	756	16.84	2	0.38
Ever Given Birth				
No	549	12.23	74	13.91
Yes	3,941	87.77	458	86.09
Number of Births**	532	3.28 (2.32)	4,490	3.14 (2.36)

Notes: *p<0.05, ** p<0.01, *** p<0.001 for differences between groups

Table 2. % or Mean (SD) of Agency Measures for Ever Married Women Ages 15 to 49, 2016 Jordanian Labor Market Panel Survey (N=5,022)

	Forced Migrants N=532	**Jordanians** N=4,490
Key Variables	Mean (SD)	
Individual Household Decision-Making	1.54*** (2.71)	1.11 (1.90)
Joint Household Decision-Making	4.55*** (3.56)	5.60 (3.11)
Mobility	2.91 (1.07)	2.94 (0.95)
Domestic Violence Attitudes	0.42* (1.30)	0.49 (1.42)
Egalitarian Gender Attitudes	3.91*** (0.55)	3.98 (0.51)

Notes: *p<0.05, ** p<0.01, *** p<0.001 for differences in agency between groups

Table 3. Logistic and Poisson Bivariate Regression Models of Women's Fertility, 2016 Jordanian Labor Market Panel Survey

	Forced Migrants				Jordanians			
	Ever Given Birth		Number of Births		Ever Given Birth		Number of Births	
	Logistic		Poisson		Logistic		Poisson	
Key Variables	OR	(SE)	IRR	(SE)	OR	(SE)	IRR	(SE)
Individual Household Decision-Making	1.20**	(0.084)	1.02*	(0.009)	1.34***	(0.053)	1.05***	(0.004)
Joint Household Decision-Making	1.05	(0.037)	1.01	(0.007)	1.09***	(0.015)	1.00	(0.003)
Mobility	0.67*	(0.122)	0.91***	(0.021)	0.90	(0.061)	0.96***	(0.009)
Domestic Violence Attitudes	0.71***	(0.052)	0.93**	(0.020)	0.87***	(0.023)	0.97***	(0.006)
Egalitarian Gender Attitudes	1.97**	(0.410)	1.17***	(0.053)	1.12	(0.099)	0.95**	(0.016)

Notes: *p<0.05, ** p<0.01, *** p<0.001. Standard errors in parentheses

Table 4. Rate Ratios (Ratios of TFRs) from Event History Models of Women's Fertility, Married 15 to 49 Year Old Women, 2016 Jordanian Labor Market Panel Survey

	Forced Migrants	Jordanians
Key Variables	Rate Ratio of TFRs	
Individual Household Decision-Making	1.03*	1.04***
Joint Household Decision-Making	1.02**	1.02***
Mobility	1.04	1.04***
Domestic Violence Attitudes	0.97*	0.98**
Egalitarian Gender Attitudes	0.95	0.96
Education (Ref=None)		
Read & Write	1.07	0.95
Primary	1.15	0.92
Secondary	1.00	0.84***
Post Secondary	0.81	0.77***
Older than 18 at First Marriage	1.02	0.89***
Location (Ref=Urban)		
Rural	1.29	1.06*
Camp	1.19**	-
Region (Ref=Middle)		
North	1.14*	1.14***
South	2.05	1.07*

Notes: *p<0.05, ** p<0.01, *** p<0.001. Standard errors in parentheses

Supplemental Table 1. Sample Age Distribution; 2016 Jordanian Labor Market Panel Survey

	Jordanians		Forced Migrants	
Age	**Female**	**Male**	**Female**	**Male**
00 – 05	15.5%	15.6%	24.0%	25.4%
06 – 11	12.6%	12.7%	17.1%	17.7%
12 – 14	6.0%	6.1%	7.1%	8.5%
15 – 19	9.8%	10.1%	8.5%	10.6%
20 – 29	19.2%	19.5%	15.6%	12.1%
30 – 39	12.4%	13.2%	14.1%	12.5%
40 – 49	10.2%	9.8%	6.9%	7.7%
50 – 59	6.6%	6.2%	2.6%	2.7%
60 – 64	2.7%	2.1%	2.2%	1.0%
=>65	5.0%	4.8%	1.9%	1.9%

Figure 1. Most Recent TFR's for Jordanians and Syrians

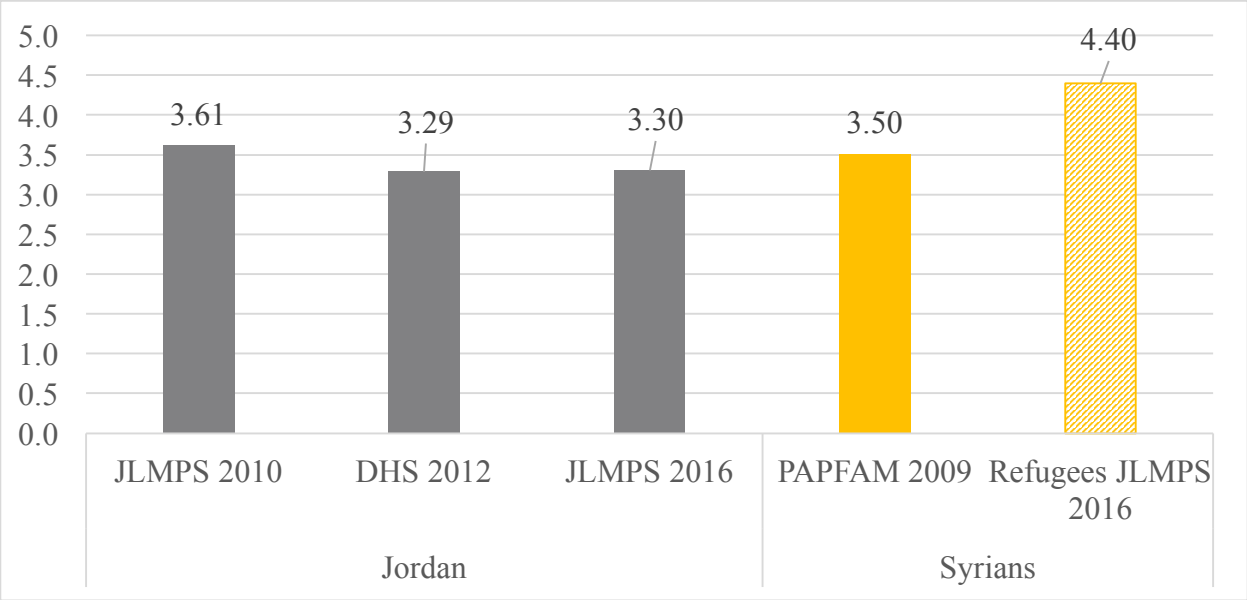

Figure 2. Total Fertility Rates for Syrian Refugees by Location/Urbanicity

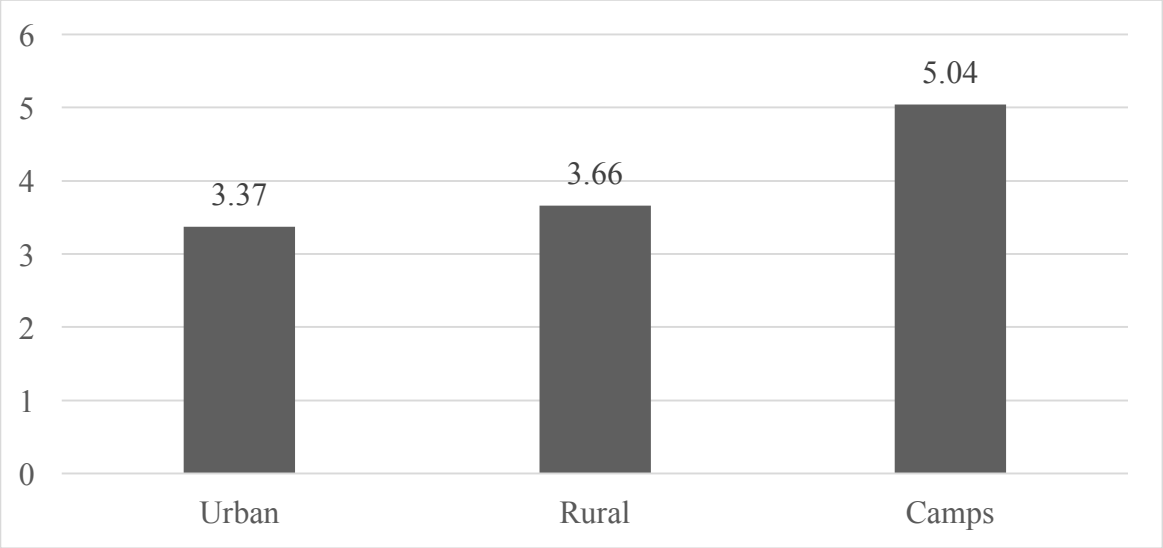

Figure 3. Age Specific Fertility Rates, 2016 Jordanian Labor Market Panel Survey