Women's Lifetime Experiences with Induced Abortion and Current Empowerment in Turkey

Background:
Turkey is a middle-income country situated between Asia and Europe with a predominantly Muslim population. Abortion has been legal since 1983. The abortion ratio per 100 women has continued to decline from 4.5 in 1988 to 2.5 in 1998. It is one of very few Muslim countries allowing abortion for all grounds in the first trimester. The country has one of the highest contraceptive prevalence rates at 69%, yet the single most common method reported is withdrawal (25%) followed by intrauterine device (16%).
With a method mix that is likely to lead to substantial contraceptive failure and unintended pregnancy, women in Turkey may be using abortion as a means of post-conception contraception.

Hypothesis Tested:
Women have ever had an abortion in Turkey are more likely to be empowered and less traditional.

Methodology:
We used the latest 2008 Demographic Health Surveys (DHS) data from Turkey. The data includes 7045 ever-married women. We examine the relationship between women's of abortion and whether women who have experienced an abortion are more empowered and less traditional.

We created three scores to determine women's empowerment. We examined *1) Justification of beating* (Justified if she neglects the children, if she argues with him, if she refuses to have sex with him, if she burns the food, if she wastes the money*) 2) Women's mobility* (Engages in sports, goes on holiday other than homeland/town, goes outside for a meal with her family, organize home meeting, use internet, watches women's programs on TV) and *3) Women's Status* (opinion questions on four issues: Important decisions in the family should be made by the men of the family, Men are usually wiser than women, Wife does not have the right to express opinion, It is always better for the male child to have more education than the female child.)

Different than the previous surveys, this version included various questions on the religious practices among women and we created a separate *religiosity score* (Perform namaz –the five time daily prayer in Islam-, fast, wears a headscarf outside). Our main outcome is ever having an induced abortion. We used bivariate descriptive analyses and also multiple logistic regression models. We performed the analyses on 2003 Turkish DHS in order to observe any changes in trends over time.

Findings:

Contraceptive Use:
Overall 19.3% (n=1,429) of our sample ever had an abortion. More than half of these women had only one abortion (64.4%). Contraceptive prevalence is high with 68% using a method at the time of the survey. Most women were using a modern method (42.7%), but nearly a quarter of

women were using a traditional method (25.2%). At the time of the survey, nearly a third (32.1%) were not using a method. (Table1).

We compared contraceptive use between the 2003 and 2008 DHS, by method. Even though use of family planning was similar between the two surveys, modern contraceptive use slightly increased up to 43.8% as traditional methods moved down to 25.6%, from 42.5% and 28.5% respectively. , Male condom use increased from 10.8% to 13.2%, whereas IUD use decreased from 20.2% to 16% between 2003 and 2008 surveys.

Women's Empowerment:
All three of our empowerment scores were positively associated with having an abortion, whereas the religiosity score was negatively associated (p=0.001). The associations with age, number of living children, current contraceptive use, residence and region were all statistically significant (p=0.001). Women's education was borderline significant. Women ever had an abortion were 1.5 times more likely to be currently using an IUD. Women who ever had an abortion were 1.2 times more likely to be currently using withdrawal rather than no method.

After multivariate adjustment, the relationships between the empowerment scores and abortion slightly decreased but were still statistically significant for all of our scores. The women who had scored higher in our empowerment scores were more likely to have had an abortion, whereas women who had scored higher in the religiosity score were less likely to have an induced abortion even after controlling for all the other variables in our models. Older age, greater wealth, higher number of living children, living in the West and current use of withdrawal and IUD were still significantly associated with ever having had an abortion. The results of our block modeling did not change markedly as we added more variables and the results of the final models are shown in Table 2. Contrary to our results from the 2003 DHS, the associations of induced abortion with women's education and urban residence were not statistically significant. Similarly, in 2003 DHS the empowerment scores, except social mobility score have attenuated after multivariate adjustment.

Discussion:
In Turkey, induced abortion occurs across a wide range of socioeconomic strata and is perhaps considered a method of contraception amongst women who have contraceptive failure, given the high levels of use of withdrawal as a method of contraception. Our data suggest that women who are wealthier and live in the West who do not want a pregnancy resort to abortion, or have better access to abortion services than other segments of the population. Based on our measures, history of abortion is positively associated with empowerment among Turkish women and negatively associated with the religiosity.

Table 1: Characteristics of the population and the association with history of abortion among ever-married women in the 2008 Turkish DHS.

	Number (%)	Ever Had An Abortion (%)	Odds Ratio (Unadjusted)
Ever had an abortion (n=7,402)		-	-
No	5,973 (80.7)		
Yes	1,429 (19.3)		
Individual Characteristics			
Age (years) (N=7,405)		-	1.58 **
Mean (SD)	33.7 (8.4)		
Women's Highest Education (N=7,405)			0.93
No Education/Incomplete Primary	1,748 (23.6)	18.9	
Complete Primary	3,491 (47.1)	21.1	
Secondary Education/Higher	2,166 (29.3)	16.8	
Household and Partner Characteristics			
Wealth Index (N=7,405)			1.21 **
Poorest	1,529 (20.7)	13.9	
Poorer	1,542 (20.8)	16.7	
Middle	1,586 (21.4)	19.3	
Richer	1,485 (20.0)	21.7	
Richest	1,263 (17.1)	26.2	
Husband's Highest Education (N=7,394)			0.98
No Education/Incomplete Primary	524 (7.1)	17.4	
Complete Primary	3,160 (42.7)	20.0	
Secondary Education	1,406 (19.0)	19.6	
Higher	2,304 (31.2)	18.6	
Residence (N=7,405)			1.32 **
Rural	1,976 (26.7)	16.3	
Urban	5,429 (73.3)	20.4	
Region (N=7,402)			
West	1,876 (25.3)	24.3	Ref
South	1,013 (13.7)	17.2	0.65**
Central	1,460 (19.7)	19.9	0.77*
North	868 (11.7)	21.9	0.87
East	2,188 (29.6)	14.6	0.52**
Fertility-Related			
# of living children (N=7,405)			1.30 **
0-1	2,128 (28.7)	8.7	
2	2,317 (31.3)	21.3	
3	1,403 (18.9)	26.1	
4	741 (10.0)	26.4	
5+	816 (11.0)	23.4	
Current Contraceptive Use (N=7,405)			
No Contraceptive Use	2,378 (32.1)	16.6	Ref
Withdrawal	1,808 (24.4)	19.3	1.20 *
IUD	1,176 (15.9)	23.2	1.52 **
Other methods	2,043 (27.6)	20.2	1.27*
Women's Empowerment Scores, Mean (SD)			
Wife Beating Score (range 0-5)	4.43 (1.1)	-	1.08*
Woman's Status Score (range 0-3)	2.2 (0.9)	-	1.09*

Social Mobility Score (range 0-6)	2.18 (1.5)	-	1.13**
Religiosity Score (range 0-3)	2.5 (0.8)	-	0.82**

*p level <0.05; ** p level < 0.001

Table 2: Odds of ever having an abortion by empowerment scores and religiosity score

	Wife Beating Score	Women's Status Score	Social Mobility Score	Religiosity Score
Score	1.10*	1.13*	1.07*	0.74**
Individual Characteristics				
Age (years)	1.49**	1.49**	1.48**	1.50**
Women's Education	0.94	0.94	0.94	0.89
Household and Partner Characteristics				
Wealth Index	1.19**	1.19**	1.16**	1.19**
Husband's Education	0.97	0.97	0.97	0.97
Region	0.92**	0.92**	0.92**	0.94*
Fertility-Related				
# of living children	1.18**	1.18**	1.18**	1.21**
Current Contraceptive Use				
Withdrawal	1.20*	1.21*	1.21*	1.27*
IUD	1.47**	1.48**	1.48**	1.49**
Other methods	1.27*	1.28*	1.29*	1.30*

* p level <0.05; ** p level < 0.001