Women's decision making power is associated with withdrawal use: Evidence from a community study in Greater Beirut, Lebanon

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Abstract

This paper examines the relationship between withdrawal use and women's decision making power among married women living in poor urban neighbourhoods in Lebanon. Data from a survey of 1022 currently married women, conducted in 2003, are used. The dependent variable is the use of withdrawal as the main contraceptive method. Decision

making within the family is measured by scores extracted from an exploratory factor analysis on decision making (i.e., having a final say) on five items. Associations between withdrawal use and the independent variables are assessed by adjusted odds ratios obtained from binary logistic regression. Withdrawal was the most prevalent method of contraception (35%), followed by IUD (24%). Higher decision making was negatively associated with withdrawal use adjusted for other covariates. Place of residence was the only other variable having a significant association with withdrawal use. The majority of women were satisfied with this method apparently due to 'comfort'.

Introduction

Withdrawal or *coitus interruptus* has been used since ancient times to limit fertility. It was responsible for the decline in fertility and the demographic transition in most European countries (Lee 2003). Currently, after decades of introducing modern methods to control reproduction, withdrawal use persists in most countries of the world.

Four percent of married women in reproductive age were using withdrawal in the late 1990s (**is this worldwide? Cannot locate reference**) (UN, 2000). Use of withdrawal declined after mid 1950s in Northern Europe, North America, and Australia, while in other areas it remained high especially in southern, southeastern, and Eastern Europe. In the 1990s, a high prevalence of withdrawal use still stands in countries like Turkey, Romania, and Bulgaria. (**references??? Cannot locate them**) A review of married women ever use of withdrawal methods in developing countries has shown that the highest rates are in Zimbabwe (41.1%), Trinidad and Tobago (29.8%), and Brazil (28.5%) and the lowest rates were in Mali (0.8%), Senegal (1.2%), and Egypt (2.6%) (Rogow and Horowitz, 1995).

Lebanon is known to have a relatively high rate of withdrawal use. A recent maternal and child health survey conducted in 2004 in Lebanon revealed that 20.8% of married women were using withdrawal as a contraceptive method (PAPFAM, 2004), the highest rate in the Arab region. The most common type of contraceptive used in Lebanon was found to be contraceptive pills (35.2%) followed by IUDs (29.9%) (PAPFAM, 2004). The high prevalence of withdrawal in Lebanon is not a recent phenomenon. In another review of surveys worldwide, the withdrawal rates found in Lebanon were shown to be one of the highest among the region compared to Jordan (2% in 1983), Syria (2% in 1978) and Tunisia (2% in 1983) (Mauldin and Segal, 1988). Turkey, however, had almost equally high rates as in Lebanon at 26% in 1983 (Mauldin and Segal, 1988).

Research on the determinants of traditional methods of contraception, particularly withdrawal use, in the Arab region is rare.

Previous research shows that gender dynamics have great influence on withdrawal use. Usually withdrawal is more common among couples who follow traditional gender norms and patriarchal family structyre, including traditional household division of labour (Kulczycki 2004; Ozvaris 1998). It has been argued that less autonomous or otherwise powerless women are more likely to use more risky, male contraceptive methods such as withdrawal. Men may practice withdrawal to emphasize their decision making power and masculinity (Wibe 2004; Okun 1997).

This brief paper explores withdrawal use in a high contraceptive prevalence, developing country, and specifically examines factors related to withdrawal use in comparison to other method or modern method among low-income women living in urban neighbourhoods in Beirut, Lebanon. The focus is on the association between women's decision making power and withdrawal use. The subjective reasons for satisfaction from withdrawal method are explored.

Data and methods

Sample and communities

The data used were taken from the reproductive health questionnaire of the Urban Health Study conducted in spring 2003 by the Center of Research on Population and Health at the American University of Beirut. The study was conducted in two phases. In the first phase, interviews with 2799 households were conducted in the summer of 2002 from a representative household sample chosen from three poor suburbs of Beirut: Nabaa (NA), Hay El Selom (HS), and Burj Al Barajneh camp (BB). At this stage, data on housing conditions, household demographics and socio-economic conditions were obtained by face-to-face interviews with a proxy respondent in each household. In the second phase, all ever married women (n=1869) aged 15-59 and found in those households were interviewed in person to obtain information of subjective nature of their reproductive and

general health. The response rate for the reproductive health questionnaire was 93.13%. The inclusion criteria for this study were: currently married, aged between 15 and 49 years, and currently using any method of contraception. Of the 1440 currently married women aged 15-49 years, 1022 were using a contraceptive method.

The three communities included in our sample were impoverished, largely informal settlements in the southern and eastern suburbs of Beirut. The populations of these communities were relatively young, with a median age of 34 years, and were largely displaced from their place of origin during Lebanese civil war. They had relatively low income: household average income per year was 4.8, 8.6 and 10.0 million Lebanese pounds in BB, HS and NA respectively; where, only 25% of the Lebanese households had an average income of less than 11.2 million Lebanese pounds at the national level (?? REF). Furthermore, around 60% of responders perceived themselves as being 'poor'. Two of the communities (HS and BB) were Muslims, while NA is mixed (77% Christians and 23 % Muslims). Most residents in HS and NA were Lebanese while those in BB were Palestinian refugees.

Variables

The main variable of interest was current use of withdrawal as the main method of contraception. Married women were initially asked if they were using any contraceptive method at the time of survey; and for those responding 'yes', they were asked about the type of contraceptive method currently used. Two outcome measures were used in the analysis: withdrawal use versus any other method and withdrawal use versus any other modern method. In addition, we used other outcome-related variables to shed some light

on the use of withdrawal. These include the person who decided on the choice of withdrawal and the reasons for the stated satisfaction with this method. For decisions on the choice of method the instrument included the responses: myself, husband, husband and myself, physician, and others. Finally, women using the withdrawal method were asked about their satisfaction with this method, with open-ended responses. Here, we grouped the responses into comfort, preference for 'natural' method, fear of infertility, cost, and other reasons (including lack of side effects).

Our main independent variable was women's autonomy, focusing on decision making within the family. The instrument included questions about who has the final say in deciding to (1) buy furniture such as a chair or table for the house, (2) shop, (3) take kids to the physician if needed, (4) choose a place for entertainment or recreation, and (5) select a TV program to watch at night. Answers to each of these questions included: myself, husband, joint decision, daughter/son, and other family members. Given our interest in women's autonomy and the skewed distribution in these items, we categorized the answers into three category scales: women (3), joint/others (2), and husband (1). Demographic and socio-economic control variables included women's age measured in completed years, husbands' age measured in completed years, women's and husbands' education measured in years of schooling completed, yearly household income measured in 1000 Lebanese Lira (1500 LL=$1), and place of residence indexed by the categorical variable, community (NA, HS and BB).

Analysis

Descriptive analysis of the demographic, socio-economic, decision making, contraceptive methods used, decisions concerning the choice of contraceptive method used, and satisfaction with withdrawal were first produced. Exploratory factor analysis was used to identify linear combinations of the variables, i.e., factors, that represent the underlying dimensions of the five observed items of decision making. Responses to the decision making items were scored as 3 for 'woman', 2 for 'others', and 1 for 'husband'. Thus, higher scores indicated higher autonomy. In order to achieve a 'simple structure', the factors and loading matrix were rotated using the Varimax rotation criterion which maximizes the sum over factors of the variances of the squared loadings (Bartholmew and Knott 1999). Factors with an eigenvalue of at least 1.0 were retained. Logistic regression was finally used to determine the factors associated with the use of withdrawal versus (1) other methods and (2) modern methods. Independent variables included the decision making index, demographic and socio-economic factors described above. The analyses were undertaken using SPSS for Windows (version 13.0).

Results

The study included 1022 currently married women aged between 15 and 49 years old and using contraceptive method. The mean and median of their age was 34 years. Educational level of these women was relatively low, it ranged between 0 to 21 years; 50% had less than 8 years of education and only 25% had more than 10 years of schooling. Their husbands' age ranged between 17 and 73 years old, where the mean and median was 39 years. Husband's years of education ranged from 0 to 21 years with a median of 7 years. The yearly household income was 6 million Lebanese pounds. Forty percent of these

women resided in BB and 35% and 24% reside in Nabaa and Hey El Sellom, respectively. As for decision making, 26% of the women decided by themselves to buy a chair or table, 70% made decisions to shop, 64% decided to take kids to the physician, 18% to choose place of entertainment, and 15% to choose a TV program to watch. The decision making items were quite related as results of factor analysis revealed a single factor, explaining 41% of the variance.

Withdrawal was the most prevalent method of contraception (35%), followed by IUD (24%) and oral contraceptive pills (21%). The use of other contraceptive methods was very low (Table 1).

Table 2 shows the logistic regression coefficients of using withdrawal versus other methods or modern methods. Higher decision making was negatively associated with withdrawal use as compared to the use of other methods (*B*= -0.161) or to modern methods (*B*=-0.175) adjusted for other covariates. Place of residence was the only other variable having a significant association with withdrawal use. Women in Nabaa (*B*= 1.824) and Hey El Sellom (*B*=0.590) were more likely to use withdrawal than women in the poorer refugee community of Burj el Barajneh.

The decision to use withdrawal as a contraceptive method was apparently not made by husbands alone according to women's reports. The vast majority of women (82%) stated that the use of withdrawal was mainly a joint decision of the couple. The rest of withdrawal users claimed that the decision was made by themselves (8%), their husbands (8%), or a physician (2%). Decision making was different for modern methods of contraception. For example, 45% and 44% of the women made decisions themselves is using oral contraceptive pills and IUD, respectively.

Among the women (n=358) using withdrawal, the vast majority (78%) were satisfied or very satisfied, 13% fairly satisfied, and only 9% not satisfied with the method. Reasons for the reported satisfaction with withdrawal included comfort (49%), preference for a "natural" method (23%), infertility (12%) and cost (7%) as withdrawal has no associated cost (Figure 1).

Discussion

Thirty five percent of women in the sample use withdrawal as a contraceptive method. This is very high when compared to national figures of Lebanon and other countries even to Turkey. This could be due to the specific selected communities where residents are relatively poor and have low educational level. On the other hand, national figures of withdrawal use may be misrepresentative. Practice of withdrawal method is usually underreported due to the promotion of modern methods, its use in combination with other methods, being a male method where women forget to report it, or compiling it with other traditional methods as a single lump.

Couples in these communities depend highly on withdrawal to control fertility; reasons behind this high practice is unknown. Although the three communities are more or less similar in their socio economic profile, difference in withdrawal use across sites was significant. Hay El Sellom, the poorest community, had the highest proportion of withdrawal use. Living in Hay El Sellom is related to high withdrawal use even after controlling for most socio economic variables. This fact reflects that withdrawal use is related to social and cultural beliefs and not merely educational or economic factors. The lower use of withdrawal in Burj El Barajneh could be due to the free access of modern methods through UNRWA.

Shall we talk about religion? I recall that religion didn't affect use but ill check again .

Decision making plays an important role in using withdrawal. Women who had less decision making power in household and family aspects were more likely to use this

method as compared to other methods or modern methods. This was shown also in other articles like Kulczycki 2004 …More

Withdrawal was mainly a choice of both spouses (82%) and only 8% of women stated that it's their husband decision. Hence, withdrawal is not imposed by their husbands and its mainly a joint decision. It is a matter of women's attitude. Less empowered women are less self oriented and more passive. They are more likely to agree with their husbands on using withdrawal. MORE.

The case is different for modern methods. Using oral contraceptive pills or IUD is mainly women's choice. Modern methods, being female methods, requires women's acceptance for using them. However, in these communities it's more a women's decision rather than couple's one. Is it because men don't agree? Are men less informative about modern methods? Do they feel not in control of these methods as when using male methods?

Most women (78%) were satisfied with withdrawal. Main reasons were comfort and being a natural method and not the low cost. This implies that women do like this method and it's not imposed on them. Withdrawal is viewed as an easy, natural, and self administered method with no health risks. What else?

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References

Lee, Ronald. (2003). "The Demographic Transition: Three Centuries of Fundamental Change." *Journal of Economic Perspectives*. Vol. 17, No. 4: 167-190.

(1) Ergocmen BA, Koc I, Senlet P, Yigit EK, Roman E. A closer look at traditional contraceptive use in Turkey. Eur J Contracept Reprod Health Care 2004; 9(4):221-244.

(2) Myntti C, Ballan A, Dewachi O, El Kak F, Deeb ME. Challenging the stereotypes: men, withdrawal, and reproductive health in Lebanon. Contraception 2002; 65(2):165-170.

(3) Schenker JG, Rabenou V. Contraception: traditional and religious attitudes. Eur J Obstet Gynecol Reprod Biol 1993; 49(1-2):15-18.

(4) Varea C, Crognier E, Bley D, Boetsch G, Baudot P, Baali A, Hilali MK. Determinants of contraceptive use in Morocco: stopping behaviour in traditional populations. J Biosoc Sci 1996; 28(1):1-13.

(5) Wiebe ER, Janssen PA, Henderson A, Fung I. Ethnic Chinese women's perceptions about condoms, withdrawal and rhythm methods of birth control. Contraception 2004; 69(6):493-496.

(6) Okun BS. Family planning in the Jewish population of Israel: correlates of withdrawal use. Stud Fam Plann 1997; 28(3):215-227.

(7) Bulut A, Cilingiroglu N, Bertan M. Is withdrawal a handicap for fertility regulation? Nufusbil Derg 1986; 8:45-55.

(8) Oodit G. Male contraception. Withdrawal: a time-honoured but risky method? Plan Parent Chall 1996;(2):25.

(9) Yurdakul M, Vural G. Reasons for using traditional methods and role of nurses in family planning. Contraception 2002; 65(5):347-350.

(10) Kulczycki A. The determinants of withdrawal use in Turkey: a husband's imposition or a woman's choice? Soc Sci Med 2004; 59(5):1019-1033.

(11) Goldberg HI, Toros A. The use of traditional methods of contraception among Turkish couples. Stud Fam Plann 1994; 25(2):122-128.

(12) Jinadu MK, Olusi SO, Ajuwon B. Traditional fertility regulation among the Yoruba of southwestern Nigeria. I. A study of prevalence, attitudes, practice and methods. Afr J Reprod Health 1997; 1(1):56-64.

(13) Rahman MM, Islam MN, Islam MM. Users of traditional methods of contraception in Bangladesh: 1981-91. J Biosoc Sci 1996; 28(3):257-264.

(14) Withdrawal continues to be popular in Turkey Prog Hum Reprod Res 1994;(29):2.

(15) Withdrawal in Pakistan: new insight into an old method Popul Briefs 1998; 4(3):6.

(16) Finger WR. Withdrawal popular in some cultures. Contraceptive update. Network 1996; 17(1):15-6, 24.

(17) Rogow D, Horowitz S. Withdrawal: a review of the literature and an agenda for research. Stud Fam Plann 1995; 26(3):140-153.

(18) Young V. Withdrawal: said to be unreliable yet it remains popular. Popul Forum 1981; 7(1):16-17.

Bartholomew DJ, Knott M. *Latent Variable Analysis and Factor Analysis*. Second Edition. London: Arnold. 1999.

Table 1. Contraceptive methods used, Urban Health Study, 2003, (n=1022).

Contraceptive methods	(%)
Withdrawal	35
IUD	24
Oral contraceptive	21
Condom	7
Breast feeding	5
Rhythm	5
Other	3

Table 2. Logistic regression coefficient for using withdrawal as compared to other or modern methods

Independent variable	Use of withdrawal versus other method		Use of withdrawal versus modern methods	
	coefficient	p-value	coefficient	p-value
Decision making	-0.161	0.04	-0.169	0.03
Women's age (yrs)	0.006	0.95	-0.008	0.64
Women's education (yrs)	-0.027	0.23	-0.024	0.32
Husband's age (yrs)	0.009	0.68	0.008	0.58
Husband's education (yrs)	-0.012	0.92	0.005	0.81
Income (1000 L.L.)	-0.005	0.48	-0.007	0.37
Community (ref: BB)				
Hey El Sellom	0.614	0.00	0.722	0.00
Nabaa	1.836	0.00	1.995	0.00

Figure1: Reason given for satisfaction with withdrawal use, Urban Health Study, 2003 (n= 277)