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Access to Money and Relation to Women's Use of Family Planning Methods among Young Married Women in Rural India

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Abstract

Objectives—The social positioning (i.e. social status and autonomy) of women in the household facilitates women's access to and decision-making power related to family planning (FP).

Women's access to spending money, which may be an indicator of greater social positioning in the household, may also be greater among women who engage in income generating activities for their families, regardless of women's status in the household. However, in both scenarios, access to money may independently afford greater opportunity to obtain family planning services among women. This study seeks to assess whether access to money is associated with FP outcomes independently of women's social positioning in their households.

Methods—Using survey data from married couples in rural Maharashtra, India (n=855), crude and adjusted regression was used to assess women's access to their own spending money in relation to past 3 month use of condoms and other forms of contraceptives (pills, injectables, intrauterine device).

Results—Access to money (59%) was associated with condom and other contraceptive use (AORs ranged: 1.5 – 1.8). These findings remained significant after adjusting for women's FP decision-making power in the household and mobility to seek FP services.

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Conclusion—While preliminary, findings suggest that access to money may increase women’s ability to obtain FP methods, even in contexts where social norms to support women’s power in FP decision-making may not be readily adopted.

Keywords

economic empowerment; contraception; condom use; reproductive health

INTRODUCTION

Women’s ability to access and make decisions related to family planning has significant benefits on women’s reproductive health, particularly in terms of greater control over pregnancy and pregnancy timing.[1–6] In rural India, there is high and early fertility, due to the commonality of adolescent marriage and non-contraceptive use prior to female sterilization, a procedure typically occurring after age 30.[7–10] Almost half (47%) of rural married women report never having used a modern contraceptive, and 55% report no current use of a modern contraceptive.[8] Younger rural women are at even greater risk for non-contraceptive use. More than 60% of young women in rural India are married prior to the legal age of 18 years, and adolescent and young adult wives (age 15–24 years) are more likely than older wives to use no contraception and have unplanned and rapid repeat pregnancies. [8,11,12] Among rural wives aged 15–24 years, any contraceptive use (including condom use) is reported by only 18% of the population.[8] As a consequence of these early and rapid repeat pregnancies, these youngest wives are at significantly increased risk for maternal and child health concerns.[13–15] Rural young wives are largely (98–99%) aware of diverse forms of contraception and the majority report a preference to delay and space their pregnancies.[8,16] However, barriers related to women’s low social positioning within the household have impeded family planning service utilization in this population. The major social barrier is lack of control over family planning and family size decision-making relative to husbands, an issue more common among rural young wives as compared to their urban and older counterparts.[16–26] Furthermore, rural husbands are less likely than urban and older rural husbands to be supportive of family planning.[8] Husbands have been reported to be more likely than their urban and older counterparts to hold negative attitudes toward contraception and condom use, to desire greater numbers of children than wives, and to believe husbands alone should decide family size.[16,27–28] Also stemming from women’s low social positioning within the household, low mobility and freedom of movement (i.e. to travel alone to places within the community) among young wives further limits women’s ability to seek family planning services without the support of their husbands.[17–20]

Recent and increasing work has focused on promoting women’s social status and autonomy in the household as a means of improving various reproductive health indicators among women.[29–31] Specifically, recent studies have supported a link between factors indicative of women’s social status and autonomy in the household (e.g. decision-making power in the household) and greater utilization of family planning methods,[32–34] Among these indicators of women’s social status and autonomy has included women’s access to spending money. Notably, access to money may be indicative of greater social status and autonomy in

the household, but may also be greater among women who engage in income generating activities for their families, particularly in poor, rural families. In either scenario, access to money may independently afford greater opportunity to access family planning services among women. More research is needed to understand the relation between women's access to money and their use of family planning, and to identify the extent to which access to money is associated with these reproductive health outcomes, independent of women's reproductive decision-making power in the household or freedom of movement to access related services (ie.. if having access to money in itself affords ability to pay for family planning services or for transportation to seek such services etc.). Thus, research is needed to better understand the economic component of women's reproductive control, above and beyond women's reproductive decision-making in their households and freedom of movement.

Thus, the objectives of the current study are: 1) to assess women's access to spending money and relation to condom use and other female-controlled contraceptive use among young married women in rural India and 2) to investigate whether having access to spending money is associated with these outcomes above and beyond women's control over reproductive health decision-making and freedom of movement to seek health care. Focusing on access to spending money among women and relation to improvements in their reproductive health is especially timely given the number of economic interventions (e.g. microfinance, microenterprise, cash transfers)[29–39] in India and elsewhere that have focused on reproductive health outcomes and targeted poor populations of women, particularly rural women who have experienced significant economic deprivation and disenfranchisement. Interventions to support women's access to money as an independent means to improve women's reproductive control may also be especially critical in such rural contexts where social norms to support women's power in family planning decision-making have not been readily adopted.

MATERIALS AND METHODS

Study Population & Procedures

This cross-sectional study involves analyses from baseline quantitative survey data from the evaluation of a male-centered family planning intervention for young couples in rural Maharashtra, called “Counseling Husbands to Achieve Reproductive Health and Marital Equity” (CHARM). The CHARM intervention, a three-session gender equity and family planning counseling intervention delivered by male health providers to young couples in rural Maharashtra, was evaluated via a two armed cluster randomized control trial in Maharashtra, India.

Participants were recruited from the rural Thane District of Maharashtra. Geographic clusters (n=50) were selected based on community mapping using geographic boundaries (e.g. hill, roads, streams), population density (each cluster had to have 300 households and presence of a private health care providers). Once recruitment was complete, the clusters were randomized equally to intervention or control conditions to assess treatment impact on spacing contraceptive use, pregnancy, and unmet family planning need. Using data from local health centers, research staff mapped and identified potential eligible households that

had one married male between the ages of 18–30 within these clusters. Between March and December 2012, trained male and female research staff approached households within the identified cluster regions to recruit young married men between 18 and 30 years of age. Upon identifying eligible households, research staff provided details regarding the CHARM intervention and evaluation to interested couples who met this age criteria. If the couple indicated interest in participating, research staff provided informed consent in a private space in the house. Due to low literacy rates in the population, consent forms were read to participants in full. Once the informed consent process was complete, couples were screened for eligibility. Eligibility criteria was based largely on the husband's characteristics and included being 18–30 years of age, fluent in Marathi, residing with their wife in the cluster area for the past three months, plans to stay in the cluster for another two years, as well as no sterilization for either the man or his wife. If a couple was eligible for participation, research staff described study procedures and asked if the couple was willing to participate in the CHARM intervention and evaluation study. Research staff screened 1881 couples between March and December 2012. Of those couples screened, 1143 were eligible to participate in the study (60.8% eligibility rate), 1081 eligible couples chose to participate in the study (94.6% participation rate). The present analyses are based on data from the baseline survey assessment of wives from the CHARM evaluation study and restricted to those who were not currently pregnant or trying to conceive (n=855).

After couples completed eligibility screening and informed consent procedures, sex-matched research staff administered a 60 minute paper survey with husbands and wives separately. Survey items covered a broad range of topics including demographics, contraception knowledge and use, marital communication, substance use, sexual history, and gender equity attitudes. Wives were also given a urine pregnancy test at time of baseline survey. No monetary incentive was provided for study or intervention program participation. All research study procedures were approved by the Institutional Review Boards at the University of California, San Diego and the National Institute for Research in Reproductive Health (Indian Council of Medical Research), Mumbai.

Measures

Demographic Variables—Age was measured continuously and grouped into three categories (20 and younger, 21–25, and 26–30). Education was measured by whether or not the participant attended any school (yes/no). Age at marriage was measured continuously and categorized as having been married when less than 18 years of age (yes/no). Participants were asked if they were planning to have more children and categorized into four categories (yes, no, cannot have children, not sure). Number of children was measured continuously and categorized based on the sample distribution as having none, one, or two or more.

Access to spending money—as an indicator of women's economic autonomy, was measured by asking women, "Do you have any money of your own that you alone can decide how to use? Women responding "yes" were categorized as having access to their own money to spend.

Control over reproductive decision-making—in the household was measured by two items asking women whether they felt they had equal right as their husband to choose a family planning method as well as to choose how many children to have. Women who reported having an equal right for both of these items were categorized as having control over reproductive decision-making. Freedom of movement regarding seeking healthcare for themselves was assessed by asking participants, “Are you usually allowed to go to a health facility alone, only with someone else or not at all?” Those who reported being able to go alone were categorized as having freedom of movement to seek healthcare.

Contraception—Participants’ condom use reflected whether they reported using condoms in the past three months. More effective contraception was measured via one question asking the method used in the three months prior by the participant and her husband to avoid getting pregnant. Participants reporting using pills, IUD or loop, or injectables were categorized as having used modern methods of non-barrier contraception in the past three months. Participants reporting other categories (rhythm method, withdrawal method) were categorized as not using modern contraception.

Data Analysis

Chi square tests were used to assess sample characteristics by reports of women’s access to their own spending money. Crude and adjusted logistic regression models were used to examine women’s access to their own spending money (as the independent variable) in relation to the following dependent variables: non-barrier contraception (pill, injection, IUD) (past 3 months) and condom use (past 3 months). Separate regression models were created for each dependent variable. Demographic variables that were associated (at $p < 0.1$) with women’s access to money were included in adjusted regression models (except for the variable indicating women’s involvement in income generating activities, which was a major determinant of whether women report having access to their own money). Fully adjusted models also included variables related to women’s control over reproductive health decision-making in the marriage, as well as freedom of movement in seeking healthcare; this was decided *a priori* in order to assess women’s access to money and relation to contraceptive use, independent of these indicators of women’s social positioning. Odds ratios are presented with associated 95% confidence intervals, and significance of individual variables was evaluated using Wald Chi-square tests. All analyses were conducted using SAS version 9.1 (SAS Institute Inc, Cary, North Carolina).

RESULTS

Sample Characteristics

Participants ranged in age from 18 and 30, and had a mean age of 22.6 years (SD: 2.5). The majority of women reported some level of education (82.7%). Just under one quarter of women (23.9%) reported engagement in income-generating activities. Approximately one-third (32%) of women married prior to the age of 18, and were married on average for 4 years (standard deviation: 2.6; range: 0–14 years). Over 80% of the sample reported having children and 75% reported a desire to have children in the future. Just under three quarters (72%) of women reported freedom to seek healthcare by themselves and just over one half

(53%) reported to have equal or greater control over reproductive decisions with their husbands. (Table 1) In this sample, 15% of women reported contraceptive use and 14% reported using condoms in the past three months.

Regarding access to spending money, 58% of women reported having such access. Women who reported access to their own money were more likely to report income generating activities compared to women who did not report such access (28% versus 16%) ($\chi^2 = 15.5$, $p < 0.0001$). Otherwise, having access to money did not vary significantly by other demographic factors. Women who reported freedom of movement to seek healthcare were more likely to report having access to their own money compared to those who did not report freedom of movement to seek healthcare (76% versus 68%) ($\chi^2 = 6.1$, $p = 0.01$). There was no significant association between women's access to their own money and reports of reproductive decision-making control with husbands. (Table 1)

Access to Money and Relation to Contraceptive Use: Findings from Crude and Adjusted Logistic Regression Models

In adjusted logistic regression models (adjusted for age), women who reported access to their own spending money were more likely to report use of condoms (AOR=1.8; 95% CI: 1.2–2.7) and other more effective contraceptives (AOR=1.5; 95% CI: 1.1–2.3). These findings remained significant after adjusting for women's control over reproductive health decision-making and freedom of movement to seek health care. (Table 2)

DISCUSSION

Findings indicate that in this rural region in India where contraceptive use is low, particularly among young married couples, having access to spending money is an important and independent factor in relation to women's use of family planning methods. Previous work has highlighted that women's reproductive decision-making control and freedom of movement to access services are associated with increased contraceptive and condom use; [40–45] however, the current study is among the few to highlight the potential independent influence of women's access to money on these outcomes as well.[46] These findings are also congruent with previous work suggesting that indicators of economic autonomy are associated with greater sexual and condom negotiating power among women with their male partners,[46–49] as well as the smaller number of studies that have shown evidence for economic interventions to be associated with increased use of family planning methods among women.[32–34]

New to the literature, current study findings suggest that the relation between women's access to their own spending money and increased use of family planning methods appears to be independent of factors related to women's reproductive decision-making power and freedom of movement to access family planning services. For example, women who have access to their own spending money may also have greater opportunity to use those funds towards family planning and reproductive health service utilization (including transportation to seek family planning services). This work highlights a need for greater consideration of the economic component of women's reproductive control. However, more research is needed to confirm these findings as well as to better understand the possible mechanisms by

which access to money may afford women greater opportunities for family planning. Women who have access to money may be more likely to pay for transportation costs needed to obtain health care and thus, more likely to obtain condoms and/or other contraceptives as part of these services. Regardless of the mechanism, having access to money may provide women with more capacity to obtain condoms or other contraceptives, which may not be prioritized by husbands, or in some cases, without the husband's awareness. Yet, we found that access to money was not only significantly associated with contraceptive pill use (which could be controlled by females without the knowledge of males partners), but was also associated with contraceptive methods that require male involvement (condom use). Future studies are needed to assess whether access to money affords women with greater capacity to obtain family planning items, how these items may be obtained (particularly in the case of condoms), and the ways in which women implement their use, including whether women reveal using contraceptives, with their husbands. The findings of this study must be considered with recognition of several limitations. The cross-sectional design does not establish the temporality of these associations, and thus, more work is needed to look at these relations longitudinally. Additionally, the items used for analyses rely on self-reported responses. Stigma can often result in underreporting of sensitive issues, such as contraceptive use.[49–50] However, such underreporting would decrease statistical power to detect significant associations between key variables, and the current study found multiple strong links among these factors. Future longitudinal studies are also needed to examine whether women who report having access to their own money report subsequently greater use of family planning services, as well as improved birth spacing, and less unintended pregnancy. Future studies are needed to better identify the specific elements pertinent to women's reports of having access to money that are most salient in terms of producing these outcomes and to better understand the mechanisms involved (e.g. being able to use the money directly to purchase services, transportation to access services). Finally, the current study findings are most applicable to populations of young, rural, married women in the state of Maharashtra and may not be generalizable to other populations of women from this state or other Indian states (or elsewhere).

These limitations notwithstanding, while more work is needed to confirm our findings, the current study contributes to an increasing body of literature highlighting the potential impact of women's access to money, particularly in increasing women's control over family planning and in improving women's reproductive health. Specifically, study findings provide important insight into the potential utility of efforts that promote access to money among women, and suggest that such efforts may likely provide distinct impact on women's reproductive control practices and health, particularly among rural populations of married women. Overall, these findings highlight the need for more research to better understand: 1) the mechanisms that explain the relation between women's access to their own spending money and increased use of family planning methods, 2) whether the relation between access to money and increased use of family planning also translates to improved reproductive health outcomes, such as decreased unintended or untimed pregnancy, and 3) the potential for programs that promote women's access to money to have a significant and independent impact on women's use of family planning methods. Understanding the influence of women's access to money on improvements in their reproductive control may

be especially critical in rural contexts where social norms to support women's power in FP decision-making have not been readily adopted.

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Table 1

Sample Characteristics (n=855) among Women Participating in the CHARM Intervention at Baseline

Sample Characteristics	Total (n= 855) % (n)	Access to own money (n=503) % (n)	No access to own money (n=352) % (n)	Chi-Square (χ^2 , p value)
Age				
18–20 years	22.7 (194)	20.5 (103)	25.9 (91)	5.3, 0.07
21–25 years	64.7 (553)	67.8 (341)	60.2 (212)	
26–30 years	12.6 (108)	14.6 (59)	13.9 (49)	
Age Married				
Less than 18	31.5 (269)	32.4 (163)	30.1 (106)	0.5, 0.5
18 or older	68.5 (586)	67.6 (340)	69.9 (246)	
Education				
Attended some school	82.7 (707)	83.9 (422)	81.1 (285)	1.2, 0.3
No school	17.3 (146)	16.1 (81)	19.0 (67)	
Income Generating Activity Involvement				
Yes	23.3 (199)	28.0 (141)	16.5 (58)	15.5, 0.0001
No	76.7 (656)	72.0 (363)	83.5 (294)	
Children				
0	17.7 (85)	17.0 (85)	18.9 (66)	0.7, 0.7
1	49.8 (424)	49.7 (249)	50.0 (175)	
2 or more	32.4 (276)	33.3 (167)	31.1 (109)	
Desire for More children				
Yes	75.0 (639)	73.4 (369)	76.7 (270)	1.2, 0.3
No	25.3 (216)	26.6 (134)	23.3 (82)	
Freedom of Movement in Seeking Healthcare				
Yes	72.4 (619)	75.6 (380)	67.9 (239)	6.1, 0.01
No	27.6 (236)	24.5 (123)	32.1 (113)	
Control in Reproductive Decisions				
Yes	52.5 (449)	50.3 (253)	55.7 (196)	2.4, 0.1
No	47.5 (406)	49.7 (250)	44.3 (156)	

Table 2

The association between women's reports of access to their own money and relation to contraceptive use and condom use (n=855)¹

Dependent Variables	Total (n=855) % (n)	Access to Own Money (n=503) % (n)	No Access to Own Money (n=352) % (n)	Crude Odds Ratio (95% CI)	Adjusted Odds Ratio ² (95% CI)	Adjusted Odds Ratio ³ (95% CI)
Non-barrier contraceptive use, past 3 months						
Yes	14.6 (125)	16.7 (84)	11.7 (41)	1.5 (1.1–2.3) ¹	1.5 (1.1–2.3) ¹	1.6 (1.1–2.4) ¹
No	85.4 (730)	83.3 (419)	88.4 (311)	1.0 Referent	1.0 Referent	1.0 Referent
Condom use, past 3 months						
Yes	14.2 (121)	16.9 (85)	10.2 (36)	1.8 (1.2–2.7) [±]	1.8 (1.2–2.7) [±]	1.8 (1.2–2.8) [±]
No	85.9 (734)	83.1 (418)	89.8 (316)	1.0 Referent	1.0 Referent	1.0 Referent

¹ Odds ratios are presented from separate regression models created for each dependent variable.

² Adjusted for age.

³ Adjusted for age, women's freedom of movement in seeking healthcare, and women's reproductive decision-making control in the household

¹ p<0.05

[±] p<0.01