Agency in Sexuality and Reproductive Health among Young Married Women in Bangalore, India

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Abstract

Prevention of HIV and STIs within marital relationships requires an in-depth

understanding of the conditions under which marital sex takes place, in particular spousal

communication and power dynamics. However, research on factors associated with

young married women's ability to manage sexual relations with a spouse is limited. Our

paper analyzes the factors affecting young married women's ability to influence their

sexual experience within marriage, specifically sexual communication with a spouse, in

Bangalore, India. We also examine the extent to which factors associated with sexual

communication differ from those influencing non-sexual domains of agency, specifically

fertility control and financial decision-making. We use quantitative data collected as part

of a longitudinal study on women's power in southern India. We find that young married

women face considerably more restrictions in exercising agency in the sexual domain

than in non-sexual domains. Further, unlike agency in non-sexual domains, sexual

communication was not associated with women's social and economic characteristics

such as education that are generally thought to empower them. Rather, our data suggest

that feeling prepared before the first sexual experience is an important factor associated

with sexual agency.

Keywords: Women's empowerment, Agency, India, Sexual communication

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A number of studies suggest that monogamous, married women in India are vulnerable to contracting HIV and other sexually transmitted infections (STIs) through unprotected sex with an infected spouse (Solomon *et al.* 1998, Newmann *et al.* 2000, Bhattacharya 2004, Silverman *et al.* 2008). Data on infection rates in India suggest that young women are particularly at risk – in recent years a third of reported AIDS cases in India were among those below 25 years of age, and the majority of new HIV infections have occurred among people ages 15-24 (NACO 2008). Despite the seriousness of this risk, and increasing recognition that young married Indian women are disempowered in the sexual domain (Pande *et al.* 2006; Santhya *et al.* 2007; Santhya and Jejeebhoy 2005), there is little research that identifies factors influencing young married women's capacity to exercise control within their marital sexual relationship.

Our paper addresses this gap by analyzing the extent of, and factors associated with, young married women's ability to influence their sexual experience within marriage in Bangalore, India. We frame our analysis in terms of the concept of 'agency' as defined by Kabeer (1999). Using this conceptualisation, we also examine the extent to which factors associated with sexual communication, a key aspect of sexual agency, differ from those influencing non-sexual domains of agency in young married women's lives. We focus on women in low-income households.

Our findings suggest that young married women are considerably more restricted in exercising agency in the sexual domain than in non-sexual domains. Further, sexual communication is less responsive than agency in non-sexual domains to factors such as women's education that are generally thought to be empowering.

BACKGROUND

Early marriage is highly prevalent in India and sexual initiation for young women and adolescent girls takes place for the most part within the context of marriage. More than half of all Indian women ages 20-49 are married before age 18 (IIPS 2007a p. pxxxi). The median age at first sex for sexually active young women and men is 18 years (NACO 2008) and, in a recent survey in three Indian states, only one in twenty young women reported having their first sexual experience before marriage (IIPS 2007b).

For a young woman, sex within marriage is not necessarily voluntary, negotiated, or safe (Jejeebhoy et al. 2005, Santhya et al. 2007). In India, patriarchal traditions legitimize a husband's control over a wife (Mahajan 1990). Providing sex to a husband on demand and under any circumstances is a key component of a woman's role as wife. and is often the only sexual value communicated to young women before they marry (Narayan et al. 2001, Measham 2004). At the same time, a 'good' wife is expected to be submissive, respectful, and chaste (Go et al. 2003), and to shy away from sexual communication, expression and control. Any discussion of sexual issues can lead to suspicion that she is sexually experienced and therefore not a 'good' woman. On the other hand, norms are more permissive for men and extra-marital affairs are not uncommon, particularly if men fulfil their mandated social role as financial provider for the family (Krishnan et al. 2005). A number of qualitative studies have found that these entrenched norms of male authority and female submission in marriage constrain the extent to which women can negotiate protective measures within marital sex (Joshi et al. 2001, Maitra and Schensul 2002, George 2003, Ravindran and Balasubramanian 2004).

That said, some studies counter the stereotype of the Indian wife as uniformly passive and subservient in sexual matters (ICRW 1997, Joshi *et al.* 2001). Research suggests that women in conservative South Asian settings use a combination of verbal and non-verbal communication to convey their sexual desires and needs, and can propose – though not insist on – condom use (Khan *et al.* 2002). In addition, there is evidence that if husbands violate their expected social roles in extreme ways, women who adhere to being a 'good' wife may have leverage to abstain from sex with or leave their husbands (Kishwar 1997, Krishnan *et al.* 2005). However, on the whole research suggests that, particularly in the early stages of marriage, women in much of India have limited power to control their sexual experiences with their spouses (Santhya and Jejeebhoy 2005, Santhya *et al.* 2007), partly because they are usually at the bottom of the social and familial hierarchy (Jejeebhoy 1998, Barua and Kurz 2001, Mathur *et al.* 2003).

Research on the potential negative consequences of this lack of power for young Indian women remains limited. Studies in other parts of the world, however, provide evidence on how adolescent girls and young women who have little control over sexual experiences or who face sexual coercion can suffer a number of negative physiological and psychological outcomes, including genital tract infections, STIs, higher HIV risks, and unintended pregnancy (Erulkar 2004, Koenig *et al.* 2004, Jejeebhoy and Bott 2005). For instance, in Rakai, Uganda, Koenig *et al.* (2005) found that the proportion of young married women who reported at least one symptom of a genital tract infection was significantly higher among those whose first sex was coerced (44%) than among other respondents (28%).

There is also little understanding of how to increase young women's ability to control their sexual experiences, and strategies for women's sexual empowerment remain elusive. For instance, there is limited and somewhat conflicting evidence regarding the association between women's education and employment – typically thought to be empowering – and sexual power. Studies from Gujarat and West Bengal in India (Santhya *et al.* 2007) and from Uganda (Wolff *et al.* 2000) find that education was protective against unwanted sex and ability to negotiate sex. Other studies in Thailand (Im-Em *et al.* 2005) and Kenya (Erulkar 2004) find that education does not influence women's ability to control sexual experiences.

CONCEPTUAL FRAMEWORK

The concept of sexual power has been defined and operationalised in a variety of ways. Many quantitative studies use scales that include items such as sexual decision-making among partners; ability to discuss condom use with a partner; and violence in sexual discussion and negotiation (Pulerwitz *et al.* 2000, Wolff *et al.* 2000, Greig and Koopman 2003, Pettifor *et al.* 2004). Data on these have been collected through face-to-face interviews, self-administered questionnaires, and computer-assisted surveys, with varying reliability (Jaya 2008). Qualitative studies have used methods such as focus group discussions and individual case studies. However, there is no single accepted scale, definition or method that has been used consistently across studies, making it difficult to compare findings and draw inferences.

In this study, we focus on sexual 'agency,' one aspect of sexual power. We use Kabeer's (1999) definition of agency in her conceptualisation of women's empowerment.

Kabeer defines 'power' as the ability to make choices in a context in which alternatives are available and recognized (1999). Power is further conceptualised as being comprised of three distinct dimensions: resources, agency and achievements. Agency refers to the ability to choose, define and act upon goals. Resources encompass the potential or enabling factors that allow women to exercise agency, such as membership of community organizations, entitlement to and ownership of land and income, and position within the household. Achievements are the outcomes of the exercise of choice, such as the utilization of health services, and are determined by resources and agency. Embedded in all three dimensions of power are the norms and preferences of individuals and their society. Norms also assign certain decisions to be within men's domain and others as within women's domain.

Agency is typically considered a key element of empowerment. While achievements are important as the ultimate goal of empowerment, some argue that if women achieve health or other outcomes without their own active participation or agency, then while their status may improve, they may not be empowered (Malhotra and Schuler 2005). In this paper, therefore, we choose to focus on agency rather than achievements *per se*.

We focus on, and measure empirically, one particular aspect of sexual agency, namely sexual communication. Research on sexual communication suggests that in contexts where gender norms dictate that women remain ignorant of and unwilling to discuss sexual matters, they face particular difficulties in talking about sex with their partners (Wolff *et al.* 2000, Blanc 2001, Maitra and Schensul 2002). Sexual communication between partners is, however, a critical part of sexual agency and an

important precondition for preventing coercive sex (Jejeebhoy and Bott 2005, Koenig *et al.* 2008).

Agency itself is not unidimensional and can be exercised in multiple domains of a woman's life, such as finances, reproductive health and sexuality (Kishor 2000, Beegle *et al.* 2001, Malhotra and Schuler 2005). Factors that increase agency in one domain may not necessarily increase agency in other domains. Thus, for example, education and employment may enhance women's household decision-making ability but not necessarily sexual agency. Recognizing this, we specifically model the association of sexual communication (as part of sexual agency) with specific resources. We further analyze how resources affecting sexual communication differ from resources affecting non-sexual agency for the same population of women. Our analyses provide a rich empirical model for Kabeer's (1999) conceptualisation of the relationship between resources and agency. Our study is the first to our knowledge that seeks to identify the similarities and differences in factors associated with multiple domains of agency.

STUDY SETTING

Our data are drawn from the baseline survey of a longitudinal observational study on gender, power and reproductive health conducted in 2005-2006 in southern India. The overall objective of the larger study is to characterize the nature of gender-based power (measured in terms of access to resources and decision-making agency at the level of the individual, couple, household, community and society among married women and their husbands in Bangalore, India and its associations with susceptibility for STIs and HIV. We focus on married women because data suggest that the majority of women in the age

group at greatest risk for STIs in India are married. The baseline was preceded by a twoyear period of qualitative data collection to inform the design and focus of our quantitative survey.

We conducted this study in two low-income areas in Bangalore, the capital city of Karnataka state in southern India. These communities are part of Bangalore's slums. The 'slums' in Bangalore, classified as such by the municipal government, were originally established in the mid-twentieth century and are now home to almost one-fifth of the city's population of five million (Nair 2005). The two clusters of slums in which we conducted our study (called sites A and B) are served by two municipal primary health centres. The two health centres were purposively selected from 36 such health centres in the city. Qualitative research suggests that our study sites are similar in terms of their overall socioeconomic profile (such as housing, occupations, access to schools ad health facilities), but differ slightly in terms of the dominant linguistic group (Kannada or Tamil).

In 2006, about one-third of women 15-49 years old in Karnataka had no education, compared to 41% in India as a whole. Over one-quarter (28%) of women in Karnataka had education beyond grade ten (IIPS 2008). In 2006, the prevalence of HIV among antenatal clinic attendees was approximately 1% for all of Karnataka, 2% in Bangalore and higher in some other districts in the state, compared to 0.6% for all of India (2006 estimates, NACO 2007).

Bangalore is the hub of the information technology industry in India, and employment opportunities abound for young people with some level of schooling, though the opportunities for career-enhancing jobs versus menial jobs continue to be limited for

low-income women in areas like our study slums (Krishnan *et al.* 2005). Economic development has been accompanied by social changes. Young women are increasingly defying traditional norms by having a say in whom they will marry, marrying later, and earning independent incomes. At the same time, patriarchal gender and social norms remain entrenched and manifest in taboos around discussion of sex and condom use and persistent domestic violence (Krishnan *et al.* 2005, Rocca *et al.* 2008).

DATA AND VARIABLES

Data

Data were collected from a convenience sample of eligible women recruited by trained field staff primarily from among those attending the two health centres. Eligible women in the study community who expressed interest during outreach activities and door-to-door visits were also recruited. Due to the poorly demarcated and often unnamed lanes characteristic of these densely populated slum communities, community mapping and purposive sampling were not feasible. Eligibility criteria included: being a married female between 16 and 25 years of age; fluency in one of two local languages, Tamil or Kannada; and anticipating residence in the community for the duration of the two-year study. Guardian consent was obtained for women below 18 years of age. Protocols for data collection were approved by human subjects' protection committees at the Indian Institute of Management, Bangalore, University of California, San Francisco and RTI International.

¹ As girls below age 18 are legally minors, existing law and the rules of the ethics committees required the study team to get consent from parents or other guardians for the participation of these minors in the study.

A total of 1707 women were eligible to participate. Of these, 744 completed the baseline survey. Enrolled women participated in face-to-face interviews conducted in private rooms in the health centres by trained female interviewers. Participants received sexual health education and optional clinical examination and lab testing.

Our data have certain limitations that need to be noted. First, all data were self-reported, which may result in some response biases. For instance, self-reports may reflect not just the sexual activity in question but also the respondents' expectations about what is socially desirable or tied to negative social consequences (Marston 2005). Asking questions about sexuality in a quantitative survey format can also be problematic as respondents may be reluctant to respond truthfully when asked sensitive questions face-to-face (Guest 2005).

Our study took several measures to reduce respondents' hesitancy to respond to sensitive questions of sexual communication. All interviewers for female respondents were young women from the same or similar communities where the research was conducted, and were trained extensively in qualitative and quantitative methods. Community residents became familiar with study staff over the two-year period of community rapport building and qualitative data collection. The quantitative interviews began with less sensitive questions regarding participants' household and sociodemographic background to put participants at ease before asking sensitive questions regarding respondents' marital relationship.

Second, our data are drawn from a relatively small convenience sample of women primarily recruited from primary health centres, and hence, our respondents may differ from those in urban slums in Bangalore and elsewhere. However, 95% of urban women

in Karnataka access antenatal care, and the majority of poor women access care through the public sector (Rocca *et al.* 2008). Thus we are confident that our recruitment strategy reached a reasonably representative sample of women in lower-income urban communities, at least in Karnataka state.

We faced challenges while recruiting women and approximately 44% of eligible women consented to enrol in this longitudinal study. Lack of interest and time were primary reasons for eligible women declining to participate. Essentially, the low consent rate reflects the challenges of recruiting young married women for participation in a longitudinal observational study. Field staff also experienced difficulties in gathering socio-demographic data from non-enrolees. Thus, though our sample population in general is most likely representative of young, married, low-income urban women, we cannot definitively say to what extent this is true of our eventual set of respondents for the baseline.

Outcome variables

Our three outcomes are indicators of sexual and non-sexual agency. We ran a factor analysis with variables from our data indicative of multiple domains of agency. The factor analysis was rotated once, and resulting factor loadings grouped variables into three distinct factors. Since each factor had within it only two to four highly loading variables, we chose not to use the factor scores themselves as our outcome variables. Instead, we used the factors as well as the literature on these outcomes to guide us in creating three additive, ordered variables that represent agency in three domains, namely, sexuality, fertility, and finances.

As our measure of sexual agency, we use variables that measure sexual communication between spouses. Our outcome variable for sexual communication is based on women's responses to three questions, namely: whether a woman has ever expressed to her husband her interest in having sex; whether she has ever talked to her husband about having sex, for example when to have sex, how to have sex, what brings pleasure, and what does not; and whether a woman has ever told or shown her husband that she did not want to have sex. We create an ordered response variable ranging from 0 to 3, with 0 denoting no sexual agency for women who answered 'no' to all three questions; 1 assigned to women who answered 'yes' to either of the questions; 2 assigned to women who answered 'yes' to any two questions; and 3 assigned to women who answered 'yes' to all three questions and are thus considered to have the highest level of sexual communication.

Fertility is closely related to sexuality. However, we examine fertility control separate from sexual communication. Analysis of qualitative data from the first phase of this study suggests that among young married couples in this setting it is often easier for women to discuss contraception for family planning than to discuss sex *per se* (Krishnan *et al.* 2005). We measure fertility control through women's responses to four questions, namely: whether a woman has talked to her husband about using methods to prevent pregnancy; has ever used or is currently using any temporary contraception (condom, oral contraceptive pill, intra-uterine device, injectible, periodic abstinence, withdrawal, non-vaginal penetration or abstinence); has talked to her husband about whether to have children; and has talked to her husband about how many children to have. Since the last two questions represent essentially the same concept of planning the timing and size of

the family, and since positive responses to both questions tended to overlap, we combined them. The resulting ordered response variable for fertility control ranges from 0 to 3, with 3 denoting the highest fertility control and assigned to women who answered 'yes' to all three questions. Correlation analysis shows that none of the sexual communication variables is correlated with any of the fertility control variables (the highest correlation is 0.32).

Finally, we measure agency in the domain of financial decision-making based on responses to three questions, namely: whether a woman ever made decisions on her own or jointly with someone about saving, lending or borrowing money, or making large purchases for the household (a combination of four separate questions on each type of financial transaction); ever made decisions on her own or jointly with someone about spending money for her own health; and whether she is primarily or together with her husband the main decision-maker on spending her husband's earnings. About 10% of women were not involved in any financial decisions. Thus, to get an adequate sample size for multivariate analysis, we combined them with respondents involved in one decision into the reference category (labelled '0'). The resulting ordered response variable ranges from 0 to 3, with 3 denoting the highest financial decision-making agency.

Independent variables

Our independent variables represent different types of resources available to a young married woman that could influence sexual communication. Since we measure agency *after* marriage, we measure resources *before* marriage whenever possible to minimize endogeneity. Resources are drawn from Kabeer's conceptualisation of agency

(1999) and the literature on young married women in India (such as Jejeebhoy 1998, Barua and Kurz 2001, Mathur *et al.* 2003, Pande *et al.* 2006). We include measures of a woman's life stage, her education and employment, her knowledge of reproductive and sexual health, and marital intimacy.

A young bride has minimal control over her life decisions in the first few years of marriage. She gains agency over time, especially after she has proved her fertility by bearing children (Barua and Kurz 2001, Barua *et al.* 2004). Thus we hypothesize that a young married woman who has been married for two years or more, and one who has children, will have greater sexual communication with her spouse than a newly married woman or one without children.

A woman's education and employment are often assumed to provide her with skills to negotiate a number of household decisions and dynamics. However, analysis of qualitative data from this study (Krishnan *et al.* 2005) and other work on sexual agency reviewed above suggest that education and employment may not always be associated with greater sexual agency. We test this hypothesis by including women's education (none, primary, middle, secondary and higher); vocational training and work for pay outside the home before marriage.

Community-based programs in India with unmarried and married girls and young women have found that providing basic life skills and sexuality education can increase young women's confidence and agency (Pande *et al.* 2006). Thus we include whether women knew about STIs before marriage. We also include an indicator of whether a young woman felt prepared for her first sexual experience, measured by responses to a question about whether a respondent felt she knew enough before first sex. We

hypothesize that women who know about STIs and who felt prepared for their first sexual experience will be better able to communicate about sex with their husbands.

Sexual communication may be more likely among women who have some degree of intimacy with their spouse than among those who do not (Wolff *et al.* 2000, Santhya *et al.* 2007). We test this finding in our setting by measuring multiple indicators of marital intimacy, namely: whether a woman knew her husband very well before marriage; whether a woman chose her own spouse (as against her spouse being chosen for her by her parents or elders); whether her husband is her primary source of social support on issues such as childcare, looking after her when sick, etc.; whether her husband lived in the same area as her before marriage; and whether she lives in a nuclear household. We hypothesize that women who respond in the affirmative to any aspect of intimacy will be better able to discuss sex than other women.

We control for husband's education and level of earnings, his job stability (measured by whether the husband's work is year-round and whether he has kept his job in the last 6 months), and household wealth (measured by an asset index score constructed by factor analysis of a list of assets owned by households in the sample). We also control for the woman's language and the study site in which she resides to capture unobserved characteristics of women and their households that could influence sexual communication.

STATISTICAL METHODS

We run an ordered logistic regression to analyze the determinants of sexual communication. To examine the extent to which determinants of sexual communication

differ from those for non-sexual agency, we also run ordered logistic regressions for our other two outcomes, financial decision-making and fertility control. We use the same base sample of women and the same independent variables in all three models.

The ordered logit model is used when the outcome variable is categorized on an ordinal scale, ordered by some conceptual or subjective criteria as in our case. Following the notation of McCullagh and Nelder (1989), the probability of a response for any one category of an outcome Y can be expressed as $\pi_1,...\pi_k$ for k possible values of Y. If the categories are ordered, as in an ordered logit, we can consider cumulative response probabilities $\pi_j = \Pr(Y \le j)$ rather than the category probabilities π_j . These cumulative response probabilities can be interpreted as the probability of an outcome up to a certain category, and can be written as:

$$\gamma_1 = \pi_1, \quad \gamma_2 = \pi_1 + \pi_2, ..., \quad \gamma_k = 1$$

Then, the ordered logit model can be expressed as:

$$\log\left(\frac{\gamma_1(\mathbf{x})}{1-\gamma_j(\mathbf{x})}\right) = \theta_j - \beta^T x, \qquad j = 1,...,k-1$$

for k categories of the response variable, where $Y_j = \Pr(Y \le j | x)$ is the cumulative probability up to and including j, for a covariate vector x, and θ_j is the cut-point for the jth category. Taking an exponential of both sides of the above equation gives the odds of falling into category j or lower versus falling into a category higher than j, with a given set of covariates. The odds ratio for a unit change in a particular covariate, say from $x = x_1$ to $x = x_2$, is given by:

$$\frac{\gamma_{j}(x_{1})/(1-\gamma_{j}(x_{1}))}{\gamma_{j}(x_{2})/(1-\gamma_{j}(x_{2}))} = \exp(-\beta_{x}(x_{1}-x_{2}))$$

where β_x is the coefficient of interest. An odds ratio of less than one represent a lower likelihood of the outcome, and an odds ratio of more than one represents a higher likelihood of the outcome.

The sample is baseline respondents who reported they had sex with their spouse in the six months prior to the survey, and had full information on the variables included in the analyses. This leads to a sample size of 655 for sexual communication and fertility control, and 648 for financial decision-making. We restricted our sample to these respondents because they are less likely to have recall bias around questions of sexual communication than respondents who did not have sex recently. Key characteristics of excluded women do not differ significantly from women included in the analysis. Also, the models with and without these women do not differ notably from each other. We assessed the extent of correlation among independent variables through contingency tables, chi-squared analyses and correlation matrices. We conducted Brant tests on all three models to test the assumption of parallel regression underlying ordered logistical regression models, and all the models met the assumptions. All quantitative data analysis was done using Stata 9.2 (College Station, TX).

RESULTS

Descriptive findings

Our sample was divided equally between the two study sites. Women were, on average, 22.4 years old at baseline, had been married for about 4 years, and a majority (82%) had children (see Table 1). About 18% of respondents had no education and 27% had secondary or higher. Almost a quarter of husbands (23%) had secondary or higher

education. Slightly below one-third of women reported having had vocational training before they were married (31%), and two thirds (67%) had worked before marriage. Young women have little knowledge about sex before they become sexually active. Only 10% said that they had felt adequately prepared before their first sexual experience, and 15% had heard about STIs pre-marriage.

Our data show a moderate level of marital intimacy. About half the respondents (52%) reported that they knew their husbands very well before marriage, a third (33%) said they had chosen their spouse themselves, and 48% said their husband was their main source of social support. Almost half the respondents (48%) lived in nuclear households.

As Table 2 shows, most couples do not discuss sex. A minority (37%) of respondents had ever talked to their husbands about sex. About one-quarter of all women (25%) said they had ever told or shown their husband that they want to have sex.

However, a high 78% of women said they could tell or show their husband they did not want to have sex (Table 2). Still, only 12% of respondents had ever talked to their husband about sex *and* demonstrated to their husband a desire to have sex *and* have shown their husband that they did not want sex. We also find (not shown in the table) that 35% of women had sex with their husbands when they did not want to do so.

Agency in financial-decision making is more widespread. More than 40% of respondents reported being involved in decisions about household finances or about spending a husband's earnings, and 85% were involved in financial decisions about their own health care (see Table 2). About one-third of women (39%) were involved in either no or one financial decision, one-third (36%) in two, and one-quarter (25%) in all three decisions.

Women have greater fertility control than they do financial decision-making agency or sexual communication ability. More than half the sample (59%) had discussed the timing of children with their husband and three-quarters (78%) had discussed the number of children they would like to have. Fewer had ever used (26%) or discussed (35%) using contraception. Only 13% responded 'no' to all fertility control questions.

Multivariate findings

The results of the multivariate analyses are shown below in Table 3. While there are a number of interesting findings, we focus our discussion on the determinants of sexual communication and how these differ from those of other forms of agency, in keeping with our research questions.

As hypothesized, length of marriage and feeling adequately prepared before first sex are associated with greater likelihood of sexual communication (Model 1, Table 3). However, few other resources in the model increase women's odds of sexual communication. Knowledge of STIs pre-marriage is not significant, but feeling prepared before the first sexual experience is a critical resource for young women to be able to engage in sexual communication with their spouse. Women who report feeling prepared for their first sexual experience have almost twice the odds of sexual communication with a spouse than other young married women (OR 1.91, p=0.011).

The length of marriage also matters for sexual communication. As expected, women who had been married two or more years were significantly more likely than newly married women to communicate with their spouse about sex (OR 2.45, p=0.000). Women's education has no statistically significant effect on sexual communication at all

levels of education. On the other hand, women who worked pre-marriage are likely to have higher odds of sexual communication than those who did not (OR 1.48; p=0.017). Marital intimacy as measured here is also not significant, and knowing a husband very well before marriage is the only indicator of intimacy positively associated with greater sexual communication (OR 1.38, p=0.048).

A comparison across our three outcomes shows that resources that act as enabling factors for sexual communication differ from those associated with non-sexual agency, and between domains of non-sexual agency. Pre-marital employment, which is significant for sexual communication, is not associated significantly with either of our other two domains of agency. On the other hand, education is not significantly associated with sexual communication but is a significant enabling resource for women's fertility control and, at the primary level, for financial decision-making. A woman's childbearing status is associated with fertility control but not with our other outcomes. Thus, women who have children have higher odds of greater agency in terms of fertility control than those who do not (OR 1.93, p=0.002) but are not likely to have greater financial decision-making agency or sexual communication.

The effects of marital intimacy also vary across the different dimensions of agency we examine. As with sexual communication, women who knew their husbands very well pre-marriage have greater fertility control than other women (OR 1.40, p=0.035), while other aspects of marital intimacy are not significant resources. Completely different aspects of intimacy are associated with greater agency in the financial realm. Women who state that their husbands are their primary source of social support (OR 1.48, p=0.010) and those who live in a nuclear household (OR 2.18,

p=0.000) are significantly more likely to have financial decision-making agency than others.

INTERPRETATION OF FINDINGS

We find that one of the strongest resources associated with young women's ability to engage in sexual communication in marriage is feeling prepared before their first sexual experience. Qualitative research in India has documented that many young women enter marriage without such preparedness, in contrast to their husbands who may be sexually experienced (Pande *et al.* 2006). While more research is needed to identify the exact components of this preparedness, our findings highlight the importance of preparing a young woman for her marital sexual life as a way to increase her ability to control her sexual experiences.

The fact that education does not significantly increase sexual communication, but is associated with greater fertility control and – at the primary level – with financial decision-making, highlights that education may not be a 'magic bullet' that improves all aspects of agency for low-income urban women such as those in our study. It also suggests that, as hypothesized, in this population fertility and sexuality are separate concepts with different determinants. Thus even though sexuality underlies fertility, enhancing a young woman's ability to communicate about sexuality and thus start to control her sexuality may be harder to achieve than is the case for fertility.

That pre-marital employment is a significant enabling resource for post-marital sexual communication suggests that exposure to a workplace and to earning before marriage provide a young, urban low-income woman with greater confidence to negotiate

the sexual terms of her marital relationship. On the other hand, that pre-marital employment is not a resource for post-marital financial decision-making may reflect the nature of work in these low-income slum communities. Women in this setting are likely to work because of economic necessity rather than to advance a chosen career. Thus, working before marriage may not necessarily give women greater control over their financial lives once married even as it may provide young women some skills or confidence to negotiate sex with a spouse. Qualitative data from our study (Krishnan *et al.* 2005) are consistent with this interpretation.

One unique feature of our analysis is the ability to measure different aspects of marital intimacy. Our finding that different types of intimacy are important for different domains of agency needs to be explored further. These results also caution against considering 'marital intimacy' as a single homogenous concept and suggest, rather, that different aspects of such intimacy may not always work in the same manner. For instance, our results for nuclear households and whether a husband is the main source of social support suggest that perhaps couples who live in a nuclear household cooperate more than those in extended families when making financial decisions; husbands who are intimate with their wives as measured here may also be more willing to share financial decisions. However, this kind of intimacy may not necessarily provide women with more space for sexual communication or fertility control.

DISCUSSION

We believe this study contributes to the literature on women's empowerment in three key ways. First, we identify some important resources that act as enabling factors for young married women's sexual communication with their spouse. Second, we establish how these resources differ from those associated with non-sexual agency. Finally, we contribute to hitherto limited rigorous quantitative analyses on various domains of agency and, in particular, sexual communication among young, married, low-income women in urban India.

One finding of programmatic importance is the strong relationship to sexual communication of adequate preparedness prior to first sex. A recent national survey in India shows that there is support for providing sex education to youth. About half of women and two-thirds of men surveyed agreed that girls should learn about contraception in school, and a large proportion agreed that boys and girls should be taught about sex in school (IIPS 2007a p. xlv).

Our finding that education and employment are not equally effective across domains of agency adds to recent literature questioning the assumption that these resources are modernizing factors that empower women across the board. In contexts of strong social norms that discourage a 'good' woman from being sexually knowledgeable or vocal, education – though desirable in its own right – may not be the most effective trigger to promote change in sexual norms, even at high levels of schooling. On the other hand, programs that seek to promote greater fertility control or greater financial decision-making by young married women in urban, low-income communities such as our study area would do well to provide them with formal education in addition to other planned program inputs.

Insofar as employment is concerned, what 'employment' means in particular settings and for particular domains of agency needs to be carefully considered. While

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mere exposure to a workplace and going outside the home to earn an income may be empowering for an urban, low-income woman in the sexual domain, it is the nature and type of work that may matter for greater financial control.

In conclusion, our study suggests that policymakers and programmers seeking to enhance young married women's sexual agency need to seriously consider the importance of providing sexuality education to young women before they marry. More broadly, interventions designed to increase women's agency, in particular those focused on education and employment, need to be carefully tailored to the type of agency being examined.

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Table 1: Key Characteristics of Respondents in the Analysis (N=664)

| (N=664) | | |
|---|---------|-----------|
| Independent Variables | Percent | Std. Dev. |
| Life Stage | | |
| Age, years, continuous¹ | 22.4 | 2.26 |
| Married 2 years or longer | 79.8 | 0.40 |
| Has child(ren) | 81.5 | 0.39 |
| Own Education and Employment | | |
| Education | | 1.06 |
| None | 18.0 | |
| Primary, grades 1-5 | 23.4 | |
| Middle, grades 6-8 | 32.0 | |
| Secondary, grades 9+ | 26.6 | |
| Had vocational training pre-marriage | 30.9 | 0.46 |
| Worked pre-marriage | 67.3 | 0.47 |
| Knowledge of RSH | | |
| Felt prepared for first sex | 9.9 | 0.30 |
| Had heard about STIs pre-marriage | 14.8 | 0.35 |
| Marital intimacy | | |
| Husband lived in same area pre-marriage | 56.0 | 0.50 |
| Knew husband well pre-marriage | 51.5 | 0.50 |
| Chose own spouse | 32.5 | 0.47 |
| Husband is primary source of social support | 48.0 | 0.50 |
| Live in nuclear household | 47.9 | 0.50 |
| Background | | |
| Husband has 10+ grade education | 22.9 | 0.42 |
| Husband has moderately to high paying job | 81.5 | 0.39 |
| Husband has a stable job | 14.9 | 0.36 |
| Language | | 0.46 |
| Kannada | 30.6 | |
| Tamil | 69.4 | |
| Study site A | 59.2 | 0.49 |
| Asset index, continuous¹ | 0.04 | 1.01 |
| ¹mean | | |
| | | |

Table 2: Distribution of Outcome Variables

| Sexual communication Ever told/ shown husband want to have sex Ever talked to husband about having sex Ever told/ shown husband did not want to have sex Sexual communication ordered variable 0 1 2 3 | 24.6 37.2 77.6 13.4 45.9 28.6 12.1 | 0.43 0.48 0.42 0.74 | 664 664 664 664 |
|--|--|------------------------------|--------------------------|
| Ever told/ shown husband want to have sex Ever talked to husband about having sex Ever told/ shown husband did not want to have sex Sexual communication ordered variable 0 1 2 | 37.2 77.6 13.4 45.9 28.6 | 0.48 0.42 | 664 664 |
| Ever talked to husband about having sex Ever told/ shown husband did not want to have sex Sexual communication ordered variable 0 1 2 | 37.2 77.6 13.4 45.9 28.6 | 0.48 0.42 | 664 664 |
| Ever told/ shown husband did not want to have sex Sexual communication ordered variable 0 1 2 | 77.6 13.4 45.9 28.6 | 0.42 | 664 |
| Sexual communication ordered variable 0 1 2 | 13.4 45.9 28.6 | - | |
| 0 1 2 | 45.9 28.6 | 0.74 | 664 |
| 1 2 | 45.9 28.6 | | |
| 2 | 28.6 | | |
| | | | |
| 3 | 12.1 | | |
| | | | |
| Fertility control | | | |
| Ever discussed contraception with husband | 34.6 | 0.48 | 664 |
| Uses or used non-permanent contraception | 25.8 | 0.44 | 664 |
| Discussed timing of children with husband | 58.6 | 0.49 | 664 |
| Discussed number of children with husband | 78.0 | 0.41 | 664 |
| Fertility control ordered variable | | 1.03 | 664 |
| 0 | 12.8 | | |
| 1 | 25.0 | | |
| 2 | 28.6 | | |
| 3 | 33.6 | | |
| Financial decision-making | | | |
| Involved in all household financial decisions | 46.8 | 0.50 | 657 |
| Involved in financial decisions about her healthcare | 40.6 85.4 | 0.35 | 657 |
| Involved in infancial decisions about her healthcare Involved in decisions about spending husband's | UU. T | 0.55 | 057 |
| income | 43.7 | 0.50 | 664 |
| Financial decision-making ordered variable | | 0.79 | 657 |
| 0 | 39.0 | | |
| 1 | 36.1 | | |
| 2 | 25.0 | | |

Table 3: Ordered Logit Analysis – Sexual and Non-Sexual Domains of Agency Among young married women ages 16-25 in Bangalore, India

| Variables (reference in parentheses) | es) Model 1 | | Model 2 | | Model 3 | |
|--|-------------------------|---------|---------|-------------|----------------------------------|-------------|
| | Sexual Communication | | | | Financial Decision- Making | |
| | OR | p-value | OR | p- value | OR | p- value |
| Resources: life stage | OI C | p value | Oix | value | Oix | value |
| Has been married 2 or more years (less than 2 yrs) | 2.45 | <0.001 | 1.26 | 0.258 | 1.24 | 0.341 |
| Has children (none) | 0.77 | 0.244 | 1.93 | 0.002 | 1.16 | 0.527 |
| Resources: own education & employment | | - | | | | |
| Education: primary, 1-5 (none) | 0.92 | 0.714 | 1.63 | 0.032 | 1.63 | 0.043 |
| Middle, 6-8 (none) | 1.51 | 0.071 | 2.20 | <0.001 | 1.44 | 0.125 |
| High school or more, 9+ (none) | 1.22 | 0.426 | 2.66 | <0.001 | 1.25 | 0.403 |
| Had vocational training pre-marriage (no) | 1.04 | 0.805 | 1.30 | 0.109 | 0.77 | 0.122 |
| Worked pre-marriage (did not work) | 1.48 | 0.017 | 1.31 | 0.090 | 0.98 | 0.922 |
| Resources: reproductive & sexual health | | | | | | |
| Felt prepared for first sex (no) | 1.91 | 0.011 | 1.34 | 0.238 | 1.21 | 0.447 |
| Had heard about STIs pre-marriage (no) | 1.33 | 0.194 | 1.22 | 0.369 | 1.45 | 0.100 |
| Resources: marital intimacy | | | | | | |
| Husband lived in same area pre-marriage (no) | 1.00 | 0.977 | 1.07 | 0.668 | 1.05 | 0.774 |
| Knew husband well pre-marriage (no) | 1.38 | 0.048 | 1.40 | 0.035 | 1.08 | 0.626 |
| Chose own spouse (elders decided) | 0.75 | 0.087 | 0.82 | 0.243 | 0.83 | 0.299 |
| Husband primary social support (no) | 0.79 | 0.107 | 0.88 | 0.392 | 1.48 | 0.010 |
| Nuclear household (extended household) | 1.02 | 0.894 | 0.90 | 0.475 | 2.18 | <0.001 |
| Background | | | | | | |
| Husband has 10+ education (less than 10 yrs) | 0.96 | 0.819 | 0.88 | 0.461 | 1.41 | 0.065 |
| Husband has moderately to high paying job (no) | 0.91 | 0.645 | 1.05 | 0.794 | 0.96 | 0.830 |
| Husband has stable job (no) | 0.93 | 0.760 | 1.28 | 0.261 | 0.98 | 0.934 |
| Language: Tamil (Kannada) | 0.75 | 0.137 | 0.54 | 0.001 | 1.72 | 0.006 |
| Where resident: study site A (site B) | 1.12 | 0.506 | 0.96 | 0.809 | 1.19 | 0.334 |
| Household asset score, continuous | 1.09 | 0.300 | 1.04 | 0.632 | 0.95 | 0.509 |
| Sample size N | 655 | | 655 | | 648 | |