Marriage decision making, spousal communication, and reproductive health among married youth in Pakistan

Saima Hamid^{1,2*}, Rob Stephenson³ and Birgitta Rubenson¹

¹Division of Global Health (IHCAR), Department of Public Health Sciences, Karolinska Institute, Stockholm, Sweden; ²Health Services Academy, Ministry of Health, Government of Pakistan, Islamabad, Pakistan; ³Hubert Department of Global Health, Rollins School of Public Health, Emory University, Atlanta, GA, USA

Background: Married young women's reproductive needs are a challenge in traditional Pakistani society. The decisions regarding family planning and pregnancy are controlled by the family, often involving complex negotiations. The current study was undertaken to explore how young married women's involvement in the arrangements surrounding their marriage is associated with their ability to negotiate sexual and reproductive health decisions in marriage.

Objective: The study explores the associations between young women's involvement in their marriage arrangements and their ability to negotiate for contraceptive use and fertility decisions.

Methodology: A subset of 1,803 married young women aged 15–24 years was drawn from a nationally representative adolescent and youth survey conducted in Pakistan in 2001–2002 by the Population Council. Regression models were fitted to outcomes: reported agreement with spouse on the number of children to have, current use of contraceptives, intention to use contraceptives in the future, and the time elapsed between marriage and first contraceptive use. Key covariates of interest were variables that measure the involvement of young women in their marriage: (a) having a say in selection of spouse, (b) having met him prior to marriage, and (c) whether he was related to respondent's family. Other factors explored were respondents' mobility outside of household, social role, and decision making in their homes.

Results: Having a say in the selection of a spouse was significantly associated with agreement with spouse over number of children to have, intention to use contraceptives, and the time between marriage and first contraceptive use. These relationships existed after controlling for education, socioeconomic status, mobility outside of house, and decision making in the home.

Discussion: Women who had decision-making freedom in their parental home carried this ability with them into marriage in their new home and were better able to negotiate about their fertility.

Keywords: youth; married women; agency; Pakistan

Received: 15 February 2010; Revised: 22 September 2010; Accepted: 20 December 2010; Published: 11 January 2011

he role of communication between husband and wife on desired fertility and, consequently, on contraceptive use is well established (1–5). Interspousal communication has been recognized as a key factor for adoption and sustained use of family planning, because it allows couples to discuss what might appear unclear and exchange information that may change strongly held beliefs (2, 4, 6). Young women and especially those in arranged marriages have less decision making within marriage (7). Arranged marriages tend to occur at an earlier age and in traditional societies than

marriages agreed upon by the partners (7). They are less common in youth who have had media exposure and participated in youth clubs (8). Previous studies show that those who enter arranged marriages are less satisfied with marital relationships, face more restrictions from their husbands, and have less decision-making power (9, 10). Younger age at marriage, family class, and education have been found to be associated with less say in selecting a spouse (7). Some studies have shown that the more say a woman has in selecting her spouse, the greater is the spousal communication about family planning and

modern contraceptive use (7, 11). Familiarity with the husband before marriage may not be easy to gauge in cultures where communication between engaged couples prior to marriage is discouraged (7).

This paper focuses on young married women in Pakistan drawing a subdataset from a national survey on youth and adolescents in 2001-2002 (12). In traditional Pakistani society, decisions regarding family planning and pregnancy are controlled by the husband and the mother-in-law (3, 13). Marriage, mostly arranged, marks the beginning of sexual relations and childbearing (14). Marriage is accorded central significance in young women's lives, with newlyweds aware that they have to adjust to multiple changes in their lives. The dominant expectation on them is that through marriage, they become sexually available to their husbands and bear children, preferably sons, within a stable marital union (15). Women owe their husbands respect, and in return, husbands are required to house, feed, clothe, and care for all their dependents. The social pressure to conform remains powerful especially for less educated women belonging to poor families. The majority of married women in Pakistan have given birth to one child by the age of 20, often within the first year of marriage (14).

This study draws upon the model of 'agency, interpersonal distance, and types of self and family' to explain the situation of young women in Pakistan (16). The model put forward by Kagitcibasi involves a fourfold combination of the two dimensions, agency (autonomyheteronomy) and interpersonal distance (relatednessseparation), leading to different types of selves and the societal and familial contexts in which they develop. The definition of agency in this model refers to motivated action with a sense of efficacy toward a desired outcome as described by Bandura (17), which involves volition without a sense of coercion. Similarly separation and relatedness, the two spectrums in the interpersonal distance dimension can be equally volitional. The model is used in this study to understand young married women's situation in the Pakistani setting. We argue that this approach, with its emphasis on relatedness and interdependence while maintaining agency, is congruent with the Pakistani context where individuals largely conceive themselves as the composite of relationships that produce them. This notion is consistent with the findings in earlier qualitative studies by the authors where young women described how they were socialized through the impact of diverse levels of the family, community, and society resulting in their disadvantaged position with societal expectations to be obedient in all spheres of life (18, 19).

In Pakistan a majority of marriages are arranged and young women have little say in whom to marry (20). One potentially important element of agency may be marital agency (having a say in whom to marry). If a young

woman is able to express her opinion and be part of the decision for her own marriage – have a say in whom she marries and meet her future husband prior to marriage – then she may be confident in communicating and negotiating with her husband once married. It can be speculated that marital agency could influence contraceptive use as a result of more equal relations between husband and wife. Whether marital agency has independent associations with reproductive health needs further exploration. The current study was undertaken to explore how young women's marital agency is related to their ability to negotiate sexual and reproductive health decisions once married.

In 2001–2002 recognizing the dearth of information on young people's situation in Pakistan, the Population Council embarked on a nationwide survey of adolescents and youth (12). The reports and studies generated so far from this survey demonstrate constraints in education of rural girls, premature uptake of adult work burden, and persistence of traditional gender roles (21, 22). Faizunnisa and Haque explored the possible linkage between early marriage and intention to use contraceptives, and the variables of autonomy (adolescents giving their views on work, education, and marriage) and agency (adults' views on adolescents' decision-making ability). With their definition of agency and autonomy they found a positive but weak association between the two variables and age at marriage and intention to use contraceptives (23).

This paper examines whether young women who report a degree of marital agency also report agreement with their husband on number of children to have and on contraception (their intention to use contraceptives in future and current use).

Methodology

A cross-sectional study using a secondary dataset was carried out. The data for this analysis come from the nationally representative adolescent and youth survey. In 2008, Population Council released the dataset for secondary data analysis by other researchers with due acknowledgment of the source of the data.

Data and methods

The sampling frame for the survey was based on the 1998 census and a two-staged stratified sampling technique was used to randomly select 254 primary sampling units (PSU). A full listing of all households in each PSU was followed by selecting 25 households within each rural and urban PSU using a random starting point. In all, 6,812 households were contacted. The sample included 10,760 resident young people between 15 and 24 years in 4,884 sampled households. Out of this 8,074 (75%), 3,333 male and 4,741 female interviews were completed using a structured questionnaire. Many of the households had no resident young people (26%). Young people not found at

home in the 3 days the team remained in the vicinity were not interviewed. The questionnaire collected data on the participants' demographic and socioeconomic characteristics in addition to knowledge of puberty, marriage, fertility, and contraceptive use (12).

The present analysis excluded males and unmarried females as our primary interest was on married young women and their ability to negotiate with their husbands after marriage. The final sample consisted of 1,803 married women aged 15-24 years. The data was cleaned and checked for missing information. The analysis was done in SPSS 16.0 version.

Measures

Four outcome variables were chosen to represent the ability to negotiate in marriage. The first binary outcome was created from two questions examining spousal communication (a) Have you ever discussed how many children to have with your husband? If yes, (b) Do you agree with your husband on the number of children to have? The variable is coded one if the woman reports that she has discussed the number of children she wants and agreed with her partner on the number of children they would have. The second and the third binary variables were intention to use contraception in future and current use of contraceptives. Both variables were coded one if the woman reported intention to use contraceptives in the future and if she was currently using a contraceptive. The fourth variable was a continuous outcome measuring the time (in years) between marriage and first use of contraception. The variable was calculated by subtracting the reported date of marriage from the reported date at first contraceptive use. The time ranged from 0 to 9 years having excluded all the respondents married before age 15. The rationale for this exclusion was that the dataset did not include the age at cohabitation. There could be a gap between marriage and actual living together if the marriage took place before puberty or the ceremony of leaving the parental home was delayed for economic reasons. The total number was thus reduced to 1,451. For the non-users, the duration of marriage was taken into account for this variable.

The outcome variables theoretically represent the ability of young women to have a voice over their fertility in marriage; that is, to be able to negotiate with their spouse on the number of children to have and when to start using contraceptives. For each of these outcomes, our key covariates of interest were variables that measured the processes around marriage: marital agency (having a say in selection of spouse), having met him prior to marriage, whether he is related to the respondent's family, age difference with spouse, and duration of marriage. Other factors explored were respondents' education, mobility outside of home, social roles, and decision making in the home.

We created an index to measure mobility. Respondents were asked if they were able to go alone, with permission, or not at all to 10 places (neighbors, nearby shop, school, sports ground, friends, relatives, fields inside/outside village, nearby community, and nearby health outlet: 0 = can go alone, no permission needed; 1 = can go alone with permission; 2 = can go with permission with someone; 3 = cannot go at all). The index ranges from 0 to 30, with 0 representing those women who report they were able to go alone to all 10 places. The index was summative and a higher score indicated a more restricted mobility outside home. Similarly, we created two indices to measure gender equity and decision making in the household, respectively. The women were asked who should be responsible for household chores (earning money, going outside to buy household goods, cleaning and washing, fetching water, cooking and feeding the family, helping kids with homework, taking care of sick inside home, taking sick to the hospital or doctor, and taking care of livestock) and decisions at home (spending household earnings, schooling of boys and girls, women working for an income, whether boys should be allowed to go abroad, and marriage of children). We assigned a score of 0 to each chore she was responsible for and 0 to each decision she said women were solely responsible for; the indices ranged from 0 to 27 and 0 to 15, with 0 representing views of a woman who reported full responsibility and total decision-making power across the elements examined. The operational definitions of the variables used in the analysis are given in Table 1.

Bivariate analysis for identification of patterns of association was followed by fitting regression models for each of the outcome variables reported here. For the binary outcome variables, the logistic regression models are reported. For the continuous variable, the linear regression model is reported.

Results

One-third of the married women included in the study were aged 15-19 years (32.6%) and only 31.7% had some education (Table 2). While 26.5% of the fathers had some education, almost none of the mothers had any. The mean age at puberty was 13 years, 31.9% had been informed about menstruation before it first occurred, while 73.2% had wanted more information. When asked about the appropriate age for marriage, mean age given was 20 years, whereas the actual mean age at marriage was 16.4 years. The reasons for young women to get married were physical maturity (16%) and accomplished to manage household work (19.9%). As shown in Table 2, one-third were the same age as their spouse, whereas 33.9% had spouses older by 1–5 years and 29.9% had spouses more than 5 years. Half the respondents were related to their spouses, one-quarter had met their fiancé prior to marriage, and 11.5% had input into the decision

Table 1. Operational definitions

Variable Definition

Marriage process involvement, gender, and mobility

Marital agency

Respondent met husband prior to marriage Respondent was related to husband prior to marriage Role index

Decision-making index

Mobility outside of home index

Respondent reports question of who to marry was discussed, she was able to express an opinion, and she felt her opinion was listened to (three questions). Respondent met or talked to her fiancé before marriage.

Husband was related to respondent's family.

Respondent's views on who should be responsible for household tasks (earning money, going outside to buy household goods, cleaning and washing, fetching water, cooking and feeding the family, helping kids with homework, taking care of sick inside home, taking sick to the hospital or doctor, and taking care of livestock).

Respondent's views on who should be responsible for decision making (spending household earnings, schooling of boys and girls, women working for an income, whether boys going abroad, marriage of children). Respondent's ability to travel with or without permission to neighbors, nearby shop, school, sports grounds, friends, relatives, fields inside/outside village, nearby community, and nearby health services.

as to whom they should marry. The average number of live births was 1.46 and 9.9% of the respondents had used a contraceptive method. Approximately 50% had an intention to use contraceptives in the future. More than 50% had discussed number of children with their spouse and 44.2% had agreed on the number of children.

As shown in Table 3, respondents having marital agency (a say in their marriage) were 1.71 times more likely to discuss and agree with their husbands upon the number of children to have compared to those who had no say in the selection of their spouse at the time of their marriage. Similarly, they were 1.58 times more likely to use contraceptives in future. However, this association was not found to be statistically significant for current users. Having marital agency was associated with earlier adoption of contraceptives (Table 4).

Table 3 (showing the logistic regression models) shows that the respondents with spousal age difference over 6 years were 1.91 times more likely to be using contraceptives. However, respondents married for 2-5 years were twice more likely to be current users. This finding is consistent with the cultural expectation of having a child right after marriage. The odds of intention to use contraceptives were higher among respondents aged 20-24 years at marriage as compared to 15–19 years old. The more children the respondents had, the higher was the likelihood of discussing and agreeing with their spouse on the number of children to have, intention to use contraceptives, or be current users. Those respondents whose fathers had some education as compared to those with fathers with no education had higher likelihood of discussing and agreeing with their spouse on the number of children and of being current users. The more involved the respondents were in decision making at home, the higher was the likelihood of discussing and agreeing with their spouse on number of children and intention to use contraceptives. Higher mobility outside the household was associated with higher intention to use contraceptives. Age, educational level, and socioeconomic status were not strongly associated with the three outcome variables (Table 3).

Table 4 (showing the linear regression model) shows that marital agency, older age at marriage and higher educational level and higher educational level were associated with earlier adoption of contraception. The initiation of contraceptive use was delayed for respondents belonging to lower socioeconomic groups and those with more number of living children.

Our findings did not reveal a significant association of being related to spouse or having met him prior to marriage with any of the outcome variables.

Discussion

This study examines how women's marital agency is related to their negotiating ability on the use of contraceptives and in discussing and agreeing with their spouse on the number of children to have. The findings highlight the importance of marital agency with the ability to negotiate in marriage. It remained a significant factor even after controlling for factors such as education, socioeconomic status, mobility outside of the home, and decision making in the home. In addition education, socioeconomic status, father's education, age at marriage, and decision making were significant predictors for discussing and agreeing with spouse on the number of children to have and with intention to use contraceptives. These findings are consistent with earlier research (24–27).

Table 2. Characteristics of married Pakistani young women (15-24) (n = 1,803)

	Percentage/
	Mean (range)
Background characteristics	
Age	
15–19	32.6
20–24	67.4
Years of education	
0	68.3
1–5	16.4
6–10	12.5
11+	2.9
House asset index quartiles	
1	32.1
2	22.7
3	23.6
4	21.6
Father received some education	26.5
Mother received some education	6.4
Mobility outside of home index	22.8 (1–30)
Role index	22.9 (13–27)
Decision making index	11.87 (5–15)
Marriage characteristics	
Age at marriage	16.4 (10–24)
Duration of marriage	3.8 (0-16)
Spousal age difference	
No difference	36.2
Husband 1-5 years older	33.9
Husband 6+ years older	29.9
Marital agency	11.5
Respondent met husband prior to marriage	26.8
Respondent was related to husband	52.4
prior to marriage	
Fertility and contraceptive use	
Number of pregnancies	2.0 (0-9)
Number of live births	1.46 (0-8)
Currently using a modern contraceptive method	9.9
Discuss number of children with spouse	55.1
Agree on number of children with spouse	44.2
Time (months) between marriage and first contraceptive use	13.8 (0–13)
Intention to use contraceptives in future	910.0 (50.5%)

Literature shows that a positive relationship with parents and connectedness lead to healthy development (28). The Kagitcibasi model falls short of addressing questions regarding why and how different types of self develop in young women, and which types of socialization processes lead to having marital agency. Our study highlights the contextual developmental orientation and

the construct of the autonomous-related self. Young women who were raised and given decision-making agency at home carried it with them to the new home. This is reflective of the trend toward modernization, similar to the findings in earlier work by the authors where parents of young women in a poor semi-urban locality were beginning to accept their daughters' choice of husbands (29).

In South Asia a young bride holds a subservient position in the household (30). Literature shows that decisions regarding fertility and childbearing are largely the domain of older female relatives. Once married, young women exert influence in subtle and unconfrontational ways as explained by Mumtaz in her study from Pakistan. The study shows that women's use of antenatal care is decided in a complex interplay of gender and age hierarchies. Decisions related to antenatal care lie with authorities such as the husband and the mother-in-law: thus, the well-being of the woman lies in her relationship to these key family members (31). In our study, the Kagitcibasu model, sensitive to the kinship ideology of togetherness highlights the linkages and relationships important for framing a woman's identity. It incorporates women's sense of self as individuals connected to their families by ties of love and affection as well as claims and obligations. The relationships of young women after marriage extend beyond the couple. The strength of a woman's linkages with her husband and his family determines the degree of her embeddedness in her new family. She has to make a place for herself and negotiate for her reproductive health. Our study shows that those women who were allowed to participate in decision making in their parental home carried it with them into marriage in their new homes. Although current use of contraceptives was not associated with marital agency, one can contend that for young married women who have not yet completed their family, the intention to use contraceptives in the future is a stronger indicator of their negotiating ability than current use. As most marriages are arranged and within kinship, factors such as whether the woman had met her husband prior to marriage or if she was related to him were explored and not found to be significant predictors of their negotiating ability. Durrant has shown that married adolescent girls express little desire for family planning because of the pressure to produce an offspring, resulting in a short gap between marriage and first birth (30). Higher involvement in early decision making was positively associated with agreement with spouse on the number of children to have and intention to use contraceptives in the future. Higher mobility was only associated with higher intent to use contraceptives in future. These findings are consistent with findings from a previous study on contraceptive use in Pakistan that showed that education and decision making were associated with contraceptive use (32). Our

Table 3. Logistic regression model of agreement with spouse on number of children, intention to use contraceptives and current users among married, Pakistani young women (15-24)

Variable (reference group)	Agree on number of children with spouse Odds ratio (95% CI) $N = 1,803$	Odds ratio (95% CI)	Current contraceptive users Odds ration (95%CI)
(reference group)	N = 1,603	N = 1,729	N = 1,803
Background charac	eteristics		
Age (20-24 years)			
15–19	1.14 (0.83–1.57)	1.42 (1.01–2.00)	0.98 (0.54–1.78)
Years of education (0	0)		
1–5	1.19 (0.90–1.57)	1.57 (1.16–2.10)	1.66 (1.04–2.64)
6–10	1.21 (0.86–1.70)	1.38 (0.95–1.99)	1.89 (1.13–3.18)
11+	2.06 (1.04–4.08)	1.24 (0.59–2.61)	1.73 (0.65–4.60)
Household asset ind	ex quartiles (1)		
2	0.96 (0.74–1.24)	1.18 (0.91–1.55)	1.30 (0.77–2.21)
3	1.09 (0.84–1.44)	1.70 (1.28–2.26)	2.08 (1.35–3.44)
4	1.25 (0.92–1.70)	1.69 (1.21–2.34)	2.94 (1.71–5.06)
Father received	1.27 (1.01–1.60)	1.13 (0.88–1.44)	1.54 (1.06–2.25)
some education			
Number of live births	1.18 (1.03–1.36)	1.26 (1.08–1.46)	3.18 (2.34-4.33)
Mobility outside of	1.0 (0.98–1.02)	0.97 (0.96–0.99)	0.97 (0.95–1.00)
home index			
Decision making	0.93 (0.89–0.98)	0.93 (0.89–0.98)	0.95 (0.87–1.00)
index	,	, ,	,
Role index	0.99 (0.97–1.03)	0.97 (0.95–1.00)	0.98 (0.94–1.03)
Marriage character	istics		
Age at marriage (Les			
15–17 years	1.19 (0.89–1.60)	1.46 (1.07–1.99)	1.56 (0.93-2.64)
18–19 years	1.34 (0.90–1.90)	2.16 (1.41–3.29)	1.44 (0.71–2.92)
20-24 years	1.36 (0.81–2.28)	2.60 (1.49–4.54)	1.64 (0.69–3.92)
Duration of marriage			·
1 year	1.35 (0.91–1.98)	1.50 (1.00-2.23)	1.44 (0.93–2.25)
2–5 years	1.16 (0.79–1.68)	1.00 (0.68–1.49)	2.00 (1.27–3.16)
More than 5 years	, , , ,	0.78 (0.44–1.37)	1.63 (0.88–3.03)
Spousal age differen	•	, , ,	(,
Husband 1–5	1.11 (0.89–1.41)	0.98 (0.77–1.25)	1.49 (0.95–2.32)
years older	Ç. ==,	(. (
Husband 6 years	1.04 (0.82–1.34)	0.96 (0.74–1.25)	1.91 (1.24–2.97)
older	(5.52 1.51)	5.55 (5 1 1.20)	(2.07)
Marital agency	1.71 (1.25–2.34)	1.58 (1.13–2.21)	0.91 (0.55–1.52)

^{*}Significant results at $p \le 0.05$ in italics.

study explores factors that improve decision making on fertility in marriage early on, so as to help young couples achieve their desired family size, have more control over their life, and better reproductive health.

Limitations

The key variable in the study was 'agency = having a say in marriage.' This key variable was generated from affirmative responses to a series of three questions in the research instrument. We generated three indices on the decision-making, mobility, and social gender roles. The validity of such indices can be discussed. When constructing an index, one is always confronted with decisions and trade-offs concerning, for example, the choice and treatment of the variables included, the weighting scheme, and the aggregation method. All

Table 4. Linear regression model of time between marriage and first contraceptive use among married Pakistani young women (15-24) (n = 1,451)

	Beta coefficient (95% SE)
Background characteristics	
Age (20-24)	
15–19	-0.24 <i>(</i> 0.13)*
Years of education	-0.14 (0.07)*
Household asset index quartiles	-0.15 <i>(</i> 0.52)*
Number of live births	0.35 (0.05)*
Decision making index	0.04 (0.03)
Marital agency	-0.05 <i>(</i> 0.16)*

^{*}Significant results at $p \le 0.05$ in italics.

elements in the dataset pertaining to the three indices were included with equal weight given to each element examined. The indices produced followed a careful examination of all the elements constituting them. Qualitative information would have been a valuable supplement.

Conclusions

The results of our study emphasize the importance of an individual's agency for improved reproductive health among young married women in Pakistan. If young women are brought up in their parental home with more involvement in decision making and are trained to speak up for themselves, they are more likely to be involved in decision making once married. Promoting an environment in the parental home where young women are encouraged to participate in decision making about their marriage has positive future implications on their reproductive life.

Authors' contributions

SH was the main author of the manuscript and involved in all aspects of the study. RS supervised the selection of variables, drawing of the subdataset and analysis. RS and BR provided scientific oversight and feedback throughout the development of the study and write up of the manuscript. All co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

Acknowledgements

We are very grateful to Dr. Zeba Sathar, Country Director, Population Country, Pakistan and Dr. Minhaj ul Haque from Population Council, Pakistan for sharing the details about the dataset and Dr. Amy Tsui from Gates Institute, Johns Hopkins University, US for facilitating the process. This article is part of PhD study of PI that was fully funded by GTZ (German Technical Cooperation).

Conflict of interest and funding

The authors have not received any funding or benefits from industry or elsewhere to conduct this study.

References

- Azimi YN, Atiya AS. Husband-wife communication and family planning practices among Malay married couples in Mukim Rusila, Terengganu. Med J Malaysia 2003; 58: 218–28.
- 2. Bawah AA. Spousal communication and family planning behavior in Navrongo: a longitudinal assessment. Stud Fam Plann 2002; 33: 185–94.
- Casterline JB, Sathar ZA, Haque M. Obstacles to contraceptive use in Pakistan: a study in Punjab. Stud Fam Plann 2001; 32: 95–110.
- Feyisetan BJ. Spousal communication and contraceptive use among the Yoruba of Nigeria. Popul Res Policy Rev 2000; 19: 29–45.
- 5. Fikree FF, Khan A, Kadir MM, Sajan F, Rahbar MH. What influences contraceptive use among young women in urban squatter settlements of Karachi, Pakistan? Int Fam Plan Perspect 2001; 27: 130–36.
- Klomegah R. Spousal communication, power, and contraceptive use in Burkina Faso, West Africa. Marriage Fam Rev 2006; 40: 89–105.
- Haberland N, Chong E, Bracken H. Married adolescents: an overview. Paper prepared for the Technical Consultation on Married Adolescents. Geneva: WHO, December 9–12, 2003.
- 8. Ghimire DJ, Axinn WG, Yabiku ST, Thornton A. Social change, premarital nonfamily experience, and spouse choice in an arranged marriage society. AJS 2006; 111: 1181–218.
- 9. Xiaohe X, Whyte MK. Love matches and arranged marriages: a Chinese replication. J Marriage Fam 1990; 52: 709–22.
- Fox GL. Love match and arranged marriage in a modernizing nation: mate selection in Ankara, Turkey. J Marriage Fam 1975; 37: 180–93.
- 11. Gage AJ. Women's socioeconomic position and contraceptive behavior in Togo. Stud Fam Plann 1995; 26: 264–77.
- Sathar ZA, Lloyd CB, Haque M, Diers J, Faizunnissa A, Grant M, et al. Adolescents and youth in Pakistan 2001–2002: a nationally representative survey. Islamabad: Population Council; 2003.
- 13. Mumtaz Z, Salway S. Understanding gendered influences on women's reproductive health in Pakistan: moving beyond the autonomy paradigm. Soc Sci Med 2009; 68: 1349–56.
- Pakistan Reproductive Health and Family Planning Survey 2000–1 – Preliminary report. Pakistan: National Institute of Population Studies (NIPS); 2001.
- 15. Winkvist A, Akhtar HZ. God should give daughters to rich families only: attitudes towards childbearing among low-income women in Punjab, Pakistan. Soc Sci Med 2000; 51: 73–81.
- Kagitcibasi C. Autonomy and relatedness in cultural context: implications for self and family. J Cross Cult Psychol 2005; 36: 403–22.
- 17. Bandura A. Human agency in social cognitive theory. Am Psychol 1989; 44: 1175–84.
- Hamid S, Johansson E, Rubenson B. Security lies in obedience voices of young women of a slum in Pakistan. BMC Public Health 2010; 10: 164.

- 19. Hamid S, Johansson E, Rubenson B. Who am I? Where am I?' Experiences of married young women in a slum in Islamabad, Pakistan. BMC Public Health 2009; 9: 265.
- 20. Malik IH. Culture and customs of Pakistan. Westport, CT: Greenwood Press; 2005.
- 21. Lloyd CB, Mete C, Grant MJ. Rural girls in Pakistan: constraints of policy and culture. In: Lewis MA, Lockheed ME, eds. Exclusion, gender, and education: case studies from the developing world. Washington, DC: Center for Global Development; 2007 pp. 99-118.
- 22. Lloyd CB, Grant MJ. Growing up in Pakistan: the separate experiences of males and females. In: The changing transitions to adulthood in developing countries: selected studies. Washington, DC: CPOP; 2005 pp. 320-66.
- 23. Faizunnisa A, Haque MU. Adolescent reproductive health: the role of agency and autonomy. Pak Dev Rev 2003; 42: 569-83.
- 24. Williamson L, Parkes A, Wight D, Petticrew M, Hart G. Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. Reprod Health 2009; 6: 1-12.
- 25. Al Riyami A, Afifi M. Women empowerment and marital fertility in Oman. J Egypt Public Health Assoc 2003; 78: 55-72.
- 26. Al Riyami A, Afifi M, Mabry RM. Women's autonomy, education and employment in Oman and their influence on contraceptive use. Reprod Health Matters 2004; 12: 144–54.

- 27. Moursund A, Kravdal O. Individual and community effects of women's education and autonomy on contraceptive use in India. Popul Stud 2003; 57: 285-301.
- 28. WHO. Helping parents in developing countries improve adolescents' health. Geneva: World Health Organization; 2007.
- 29. Hamid S, Johansson E, Rubenson B. 'Good' parents strive to raise 'innocent' daughters. (Unpublished data).
- 30. Durrant V. Adolescent girls and boys in Pakistan: opportunities and constraints in the transition to adulthood. Islamabad: Population Council; 2000.
- 31. Mumtaz Z, Salway SM. Gender, pregnancy and the uptake of antenatal care services in Pakistan. Sociol Health Illn 2007; 29:
- 32. Saleem S, Bobak M. Women's autonomy, education and contraception use in Pakistan: a national study. Reprod Health 2005; 2: 1-8.

*Saima Hamid,

Division of Global Health (IHCAR) Department of Public Health Sciences Karolinska Institute 9 Nobels väg SE 171 77 Stockholm, Sweden Email: saima_hamid@yahoo.com