



THE AGA KHAN UNIVERSITY

eCommons@AKU

---

Community Health Sciences

Department of Community Health Sciences

---

12-1-2011

## Determining the factors associated with Unmet need for family planning: A cross-sectional survey in 49 districts of Pakistan

Waqas Hameed

Syed Khurram Azmat

Mohsina Bilgrami

Muhammad Ishaq

Follow this and additional works at: [https://ecommons.aku.edu/pakistan\\_fhs\\_mc\\_chs\\_chs](https://ecommons.aku.edu/pakistan_fhs_mc_chs_chs)



Part of the [Community Health and Preventive Medicine Commons](#), [Maternal and Child Health Commons](#), [Obstetrics and Gynecology Commons](#), and the [Women's Health Commons](#)

---

## **Determining the factors associated with Unmet need for family planning: a cross-sectional survey in 49 districts of Pakistan**

Waqas Hameed<sup>1</sup>, Syed Khurram Azmat<sup>1</sup>, Mohsina Bilgrami<sup>1</sup>, Muhammad Ishaq<sup>1</sup>

<sup>1</sup>Marie Stopes Society Pakistan. (Correspondence to Hameed W: waqas.hameed@mariestopespk.org)

### **ABSTRACT**

#### **Introduction & Background:**

Around 137 million women in the developing world who would like to avoid childbearing are unable to do so, despite a huge increase in contraceptive access and use globally. Ironically, the prevalence of unmet need in Pakistan is among the highest in the world despite being one of the first countries in South Asia to launch national family planning program. The aim of this paper is to estimate the prevalence of unmet need for contraception and to identify the factors associated with it.

#### **Methods:**

A cross-sectional survey was conducted in forty nine districts of Pakistan across all four provinces from September 2008 to March 2009. Using an adapted version of PDHS questionnaire, interviews were conducted with approximately 10,000 married women of reproductive age in each district. Sample was later weighted according to district population at the time of analysis to control over and under representation. Logistic regression analysis was used to assess the association between risk factors and unmet need.

#### **Results:**

The total unmet need for contraception was 23.5%. Multivariable analysis showed that unmet need was found significantly higher in Balochistan and Sindh province compare to Punjab. The unmet need was quite prevalent among the specific groups that include older age women, low or uneducated women, those who have higher number of living children, had no history of miscarriage or abortion, those who are not exposed to mass media once a week, and among the women in lowest wealth quintiles.

#### **Conclusion:**

Despite all the efforts made to increase in uptake of contraceptive method the contraceptive prevalence rate has hardly changed over the last decade. However, several groups of women continue to have high unmet need for family planning. Thus, the family planning programmes may need to shift their focus from increasing uptake of contraceptives to satisfying unmet need for contraception with special focus on those underserved marginalized groups and areas with highest levels of unmet need.

### **INTRODUCTION**

Around 137 million women in the developing world who would like to avoid childbearing are unable to do so, despite a huge increase in contraceptive access and use globally (1). Ironically, the prevalence of unmet need in Pakistan is among the highest in the world (2,3) despite being one of the first countries in South Asia to launch national family planning program (4). Family planning has been declared as the right of every human whether to practice it or not. However, many would space or limit their family size in order to improve living conditions (5). This results an unmet need for family planning which defined as a woman who is sexually active and prefer to avoid or delay pregnancies but

is not using any contraceptive(6-8).

Pakistan is one of the most populous country with higher growth rate of 1.9, larger population (65%) living in rural areas (9). Nearly half of the population (45%) has limited access to health services both public and private (10).

The recent demographic survey reveals a very grievous story that nearly 72% either prefer not have a/another child or want to delay the pregnancy and almost half of the women have never used any method so far despite highest proportion is aware of at least one contraceptive methods.

In addition, the contraceptive prevalence is stagnant over the last decade after a sharp increase in the earlier decade (10). Nationally, the current CPR is only meeting 54% of the total demand for contraception, and except for Punjab province the proportion of met demand is below 54% across other provinces. In spite of low stagnated CPR, the TFR has gradually reduced from 5.4 to 4. Conversely, 1 of 4.1 TFR is an unwanted pregnancy; and this gets aggravated among the rural, uneducated, and poorest groups (10). Consequently, an estimated 890,000 induced abortion occurred annually in Pakistan whereby one in seven pregnancies is terminated by induced abortion (11).

The relationships among unmet need, abortion, and contraceptive prevalence are not clear. However, large number of induced abortions worldwide are a strong evidence that millions of women want to control their fertility but have not used effective contraception (12-16).

A study in Pakistan revealed fear of side effects and spousal, cultural and social acceptance as the decisive obstacles to limit contraceptive use, rather than the monetary and related direct costs of obtaining supplies (17,18). However, limited access to quality services is also a reason (19) sharing with an intrinsic resistance to FP pertaining to cultural conservatism, religious influences and the low status of women (20). Integration of FP services with other health services at all first-level care facilities is also recommended to be a long-standing, cheap and practical way to reduce the unmet need (21).

This paper attempts to identify the factors associated with unmet need for family planning. The information is expected to be used by key stakeholders at a national and international level to devise strategies in order to increase the coverage among particular groups, and to maximizing the efficiency and effectiveness of different family planning programs. Since, Pakistan has both - low CPR and high unmet need, therefore programs can possibly increase the use by just meeting the need to potential users, keeping prime focus to the groups with highest need. Addressing this need can have immediate effect in reducing TFR and unintended pregnancies.

## OBJECTIVE

To estimate the prevalence of unmet need for contraception and to identify the factors associated with unmet need for family planning.

## METHODS & MATERIALS

The Marie Stopes Society (MSS) established a Community Based Distribution Program in 49 districts, across all four provinces of Pakistan. The model is an adapted version of original Willows Foundations model with the aim to provide door-to-door short-term contraceptive services and referrals to MSS static clinic for long term and other reproductive health care.

MSS employed 10 female workers under two supervisors in each district, covering a total population of around 68,000 in their catchment, per district. Workers hired, had a minimum secondary education, previous experience of data collection; later they underwent 8 day training on questionnaire and reproductive and family planning information. Based on programmatic requirement, each worker had to register and follow at least 1000 married women of reproductive age (MWRA) (15-49) within an allocated geographical area in a census-like manner where all MWRA in the household who gave informed consent were included in the survey. Thus, 10,000 MWRAs were to be registered in each district; approximately a total of 490,000 completed interviews were recorded at the end of baseline survey that took place from Aug 2008 to Feb 2009 in three different phases. After data entry and cleaning 474,969 records were used for the analyses purposes.

The questionnaire used in the PDHS 2006-07 surveys was adapted and used. We included variables pertaining to socio-economic status: possession of household assets, source of drinking water, women education, number of household members; Reproduction: parity, current pregnancy, desire for children, history of abortion; and Contraception: knowledge, ever use and current use of contraceptives and their sources.

A detailed guideline was developed to monitor the proceedings. Data monitoring was carried out by different managers and research teams sitting at sites including field level, district level, regional level (provincial office) and national level to assess adherence to standard protocol, completeness and accuracy of forms, logical errors, interview with data collectors about questionnaire understanding. All the data were entered in each district office by two operators under supervision. .Net 2003, MS Access 2007 was used for data entry and SPSS 19.0 for analysis.

Statistical techniques include simple frequencies and

proportions for continuous variables were used. Using logistic regression, crude odd ratios at 95% confidence interval (CI) were calculated to see the association between risk factors and the dependent variable. All the variables that showed p-value of = 0.25 were included for multivariable analysis. Weighted estimates were calculated adjusting the sample according to population size of the districts. The risk factor i.e. family status was not included for multivariable regressions as it was derived from the original variable that is 'number of living children'. Principal component analysis was used to create the socio-economic index (22) using; whether household has electricity, roof, wall and floor material, household water source and the ownership of goods (television, radio, refrigerator, bicycle, car, room cooler, washing machine, motor cycle, and water pump).

**Definition of Unmet need for contraception:**

Sexually active or fecund women who want to either limit or delay childbearing or and are not currently using any method for family planning are defined to have unmet need for family planning.

**FINDINGS**

Of the women interviewed, 66.0% belonged to Punjab, 28.9% aged >25 to =30 years, 49.3% had no formal education, 27.5% had 5 or more alive children, and 59.0% had completed family. Moreover, nearly one out of ten (11.4%) women had a history of abortion or miscarriage; self-reported pregnancy at the time of survey was 11.5%.

Nine out of ten (91.9%) were aware of at least one contraceptive method and 45.3% reported to have ever user any method. In addition, 38.7% reported to being current users of any contraceptive method at the time of survey where majority were using condoms (10.0%), followed by withdrawal (9.8%), female sterilization (8.9%), IUD (3.1%), injection (2.4%), and pills (2.1%). Nearly one-fourth (23.5%) of the women wanted to delay or avoid pregnancy but were not practicing any contraception (unmet need for contraception).

Majority (34.4%) reported 'RCC' as the material used for household roof, followed by 'T-iron, wood or brick' at 30.1%. Moreover, ninety nine percent had electricity, while 90.1% owned television and 73.2% had water pumps at their houses. Hand pump/tube-well was the main source of drinking water for more than half of the respondents and

95.4% reported to use flush for their toileting needs. Nearly one-fourth responded to read a newspaper or magazine once a week and almost equal proportion listen to a radio, whereas nine out of ten watch television at least once a week.

Table 1: Percent distribution of Unmet need and total demand for contraception by province and selected study districts

District	Unmet need for family planning %	Total demand for family planning %	District	Unmet need for family planning %	Total demand for family planning %
<b>Punjab</b>	<b>22.1</b>	<b>64.1</b>	<b>Sindh</b>	<b>27.8</b>	<b>56.8</b>
Attock	24.1	62.2	Badin	31.5	54.5
Bakkar	21.8	62.3	Hala	31.2	57.6
Mainwali	17.7	65.9	Jamshoro	25.7	55.0
Jhelum	17.5	71.6	Thatta	22.2	49.2
Khushab	20.7	61.5	Tando Muhammad Khan	26.3	63.0
Sahiwal	16.5	70.9	Umerkot	24.1	50.8
MandiBahauddin	28.4	63.8	Dadu	36.4	68.6
Gujrat	28.9	57.8	Mithi	26.0	54.1
Hafizabad	18.0	65.6	Jacobabad	28.7	65.1
Kasur	10.8	75.0	TandoAllahyar	22.6	67.5
Narowal	23.3	58.5	NosheroFeroz	28.3	54.6
Sialkot	24.3	62.9	Kandhkot	29.3	49.8
Sheikhupura	16.9	69.0	Shahdadkot	21.9	43.4
BhalwalNagar	19.2	62.7	<b>Khyber Pakhtunkhwa</b>	<b>22.2</b>	<b>66.1</b>
Jhang	27.8	60.9	Charsadda	15.9	69.4
Lodhran	21.7	57.1	Mardan	22.3	71.6
Okara	21.3	64.3	Haripur	28.8	70.7
Toba Teksingh	21.3	67.7	Mansehra	25.9	64.5
Vehari	32.8	59.4	Swabi	22.3	57.0
Layyah	17.1	63.5	Naushehra	18.4	62.6
Muzaffargarh	16.0	63.6	<b>Balochistan</b>	<b>28.4</b>	<b>46.8</b>
Rahim Yar Khan	24.7	63.4	Jafarabad	31.1	45.8
Pak Patan	25.6	61.9	Khuzdar	39.0	59.6
RajanPur	33.5	53.6	Lasbela	18.6	38.2
Khanewal	24.1	68.7	Nasirabad	22.3	34.9
			Sibi	22.7	51.1

**UNIVARIATE ANALYSES**

The Univariate analyses (Table 2) shows that the unmet need was significantly associated with almost all indicators except history of abortion or miscarriage. Higher unmet need was found in Sindh and Balochistan province as compared to Punjab (odds ratio, 1.35 and 1.39, respectively). Women of older age are more likely to be living with unmet need compare to younger age women; similarly having higher number of children increases the odds of unmet need. In comparison to women who did not have any child, the odds of unmet need are 6.9 (95% CI: 6.6-7.3) times higher among women already has a son(s), 4.5 (95% CI: 4.3-4.7) time higher who has a daughter(s), and 13.4 (95% CI: 12.8 14.0) higher for those who have a completed family.

Exposure to mass media (TV, radio or magazine) at least once a week also showed significant association with unmet need (odds ratio, 1.47). In comparison to the women living in fifth or highest wealth quintile, unmet need was

found higher among the women living in the first or lowest wealth quintile. Unmet need showed significant association with the levels of education and the study results showed that the unmet need was highest among the women with no formal education and lowest among the women with higher education.

Women who do not read newspaper/magazine, do not listen to radio, or do not watch television at least once a week are (1.7, 1.1, 1.3, respectively) times more likely to be living with unmet need compare to those who are practicing this. Similarly, the odds of unmet need among women who have never heard or use any contraceptive method are higher than those who are aware of or have ever used any method.

### MULTIVARIATE ANALYSES

In the multivariate analysis, variables like reading newspaper/magazine, listen to radio and watch television were combined and kept in the model. Moreover, variable of family status was dropped and only the variable 'number of living children' was included to avoid multicollinearity. The adjusted odds ratio estimated from the multivariable are reduced for almost all of the variables but stayed highly significant. In addition, women having no history of abortion or miscarriage turned significant with the adjusted odds of 1.10 (95% CI: 1.08 - 1.13). The unmet in Sindh and Balochistan stayed significantly higher compare to Punjab: women of Sindh had 1.31 times and Balochistan had 1.28 times higher odds compare to Punjab. Unmet need showed significant association with the levels of education and the study results showed that the unmet need was highest among the women with no formal education and lowest among the women with higher education. Women over the age of 35 years have the adjusted odds ratio of 2.05 (95% CI: 2.00 - 2.10) compare to under 25 years women. Similarly, women with 5 or more children are almost thrice (AOR 2.89) more likely to be living with unmet need compare with women having two or less children.

**Table 2:** Univariable logistic regression analysis of factors associated with Unmet need for family planning among married women of reproductive age group (15-49) across Pakistan

Variables	Unmet need for family planning			
	N	n (%)	OR	(95 % C.I)
<b>Province</b>				
Punjab	315386	22.1	1	--
Sindh	105026	27.8	1.35	1.33- 1.37***
KPK	45622	22.2	1.01	0.98 - 1.03
Balochistan	11516	28.4	1.39	1.34 - 1.45***
<b>Age Categories of MWRAs</b>				
<=25	124101	13.1	1	--
>25 to <=30	137820	20.0	1.66	1.63 - 1.70***

>30 to <=35	92220	25.6	2.29	2.25 - 2.35***
>35	123409	36.5	3.83	3.75 - 3.90***
<b>No. of a live children</b>				
0-2 children	200235	12.5	1	--
3-4 children	146070	27.2	2.71	2.67 - 2.76***
5 or more	131246	36.9	4.24	4.17 - 4.32***
<b>Family Status</b>				
No child	61599	3.4	1	--
Girl only	54553	19.0	4.49	4.26 - 4.72***
Boy only	79506	13.2	6.94	6.62 - 7.28***
Complete family	281892	31.2	13.43	12.84 - 14.05***
<b>Education Categories</b>				
Higher	62460	15.5	1	--
No formal education	23515	28.5	2.16	2.11 - 2.21***
Primary	108987	20.9	1.44	1.40 - 1.47***
Secondary	70909	18.2	1.21	1.17 - 1.24***
<b>Socio-economic status</b>				
First/Poorest quintile	95512	26.8	1.36	1.33-1.39***
Second quintile	95339	24.8	1.14	1.12-1.17***
Third quintile	98193	23.4	1.04	1.01-1.06***
Fourth quintile	93019	21.8	1.01	0.99-1.03
Fifth/Highest quintile	95489	20.9	1	--
<b>Exposure to media once a week</b>				
Yes	439447	23.0	1	--
No	38104	29.9	1.472	1.39 - 1.46***
<b>Have you ever had a pregnancy where you underwent an induced abortion</b>				
Yes	49859	23.8	1	--
No	425109	23.5	0.98	0.96 - 1.00
<b>Have you heard at least one contraceptive method</b>				
Yes	423274	22.8	1	--
No	54277	32.2	1.61	1.58 - 1.65***
<b>Ever use of any FP method</b>				
Yes	216225	10.1	1	--
No	261326	34.6	4.69	4.62 - 4.77***

**Table 3:** Multiple logistic regression analysis of factors associated with Unmet need for family planning among married women of reproductive age group (15-49) across Pakistan

Variable	Unmet need for family planning	
	AOR	(95 % C.I)
<b>Province</b>		
Punjab	1	--
Sindh	1.31	1.28-1.33
KPK	0.93	0.90-0.95
Balochistan	1.28	1.23-1.34
<b>Age of MWRA</b>		
<=25	1	--
>25 to <=30	1.19	1.17-1.22
>30 to <=35	1.36	1.32-1.39
>35	2.05	2.00-2.10
<b>No of a live children</b>		
0-2 Children	1	--
3-4 Children	2.34	2.30-2.39
5 or more	2.89	2.83-2.96
<b>Education Categories</b>		
No formal education	1.41	1.38-1.45
Primary	1.16	1.13-1.19
Secondary	1.11	1.08-1.14
Higher	1	--
<b>Socio-economic</b>		
First/poorest quintile	1.14	1.11-1.17
Second quintile	1.04	1.02-1.07
Third quintile	0.99	0.97-1.01*
Fourth quintile	0.97	0.95-0.99**
Fifth/Highest quintile	1	--
<b>Exposure of media once a week</b>		
Yes	1	--



No	1.13	1.10-1.16
<b>History of miscarriage or abortion</b>		
Yes	1	--
No	1.10	1.08-1.13

\*Insignificant

\*\* Marginally significant

## DISCUSSION

Although the national unmet need for contraception has reduced from 33% in 2001 to 25% in 2006-7 (10) with marginal increase in the CPR from 28% to 29.6%. After controlling for different risk factors, the multivariate analyses showed that the unmet need is still significantly higher among different sub-group of population that older age group, low educated, large number of living children, exposure to mass media, lower wealth quintiles and history of abortion or miscarriage. Moreover, geographically higher unmet need was found in Sindh and Balochistan as compared to Punjab and KPK.

Women with male children are more likely to have unmet need indicating the preference of having son in their family. Similarly, women are more likely to be living with unmet need once she has completed son(s) and daughter(s) in her family.

The relationship of socio-demographic characteristics with unmet need has changed overtime. In 1991, women from the poorest households had the lowest unmet need; over time unmet need among these women rose substantially, and they now have the highest unmet need (23). In 1991, 40 percent of women surveyed wanted no more children, this increased to 52 percent in 2007 (24). In addition, findings of this study also substantiate the findings of the latest nationally representative survey which reported that unmet need was highest among the poor, those living in rural areas, and women with no education (10).

Interestingly, the present study showed that women with history of miscarriage/abortion had lower unmet need as compared to women with no history of miscarriage/abortion. While high unmet need of contraceptives also results in danger to the lives of women as many women seek induced abortions in case of unwanted pregnancies. Abortion in Pakistan is used as a mean of birth control and avoiding unwanted pregnancies. Due to restrictive abortion laws, abortions are usually conducted by unskilled providers under clandestine

conditions that further bring various severe consequences from life time disabilities to death increasing the maternal mortality rate (25).

This study also highlights significant provincial disparities with highest unmet need in Sindh followed by Balochistan. High levels of unmet need in Sindh may be explained with reference to largely rural population base in the province; whereas in Balochistan low literacy levels, rigid tribal setups, and poor road infrastructure, the lack of financial, technical and community resources explain the high unmet need (26). In addition, there is a lack of service delivery outlets and due to population growth pressure is increasing on the existing ones day by day. Furthermore, the service centers are not professionally staffed and their insensitive attitudes are vital hindrances for women to seek family planning services (25).

This study also indicates that married women of reproductive age having more media exposure had low unmet need in comparison to the women who had less media exposure and thus high unmet need. Family planning programs can use effective communication channels to address barriers affecting contraceptive use and to bring about a behavioral change. Effectively crafted, evidences-based messages can explain the true risk of pregnancy for women who are breastfeeding or have sex infrequently, address concerns about contraceptive side effects and health risks (27).

The findings of the study highlight the need for initiating family planning interventions that expand excess to high quality family planning services in rural areas as well as among the poor, women with no education and, among the couples achieving complete family size and wanting no more children.

## CONCLUSION

Despite all the efforts made to increase in uptake of contraceptive method the contraceptive prevalence rate has hardly changed over the last decade. However, the several groups of women continue to have high unmet need for family planning which includes older age, low or uneducated, having higher number of 'alive children', women not exposed to mass media once a week, women among the lowest wealth quintiles and women in Balochistan and Sindh province. Thus, the family planning programmes may need to shift their focus from increasing

contraceptive prevalence rate to satisfying unmet need with special focus on the groups and areas with highest levels of unmet need. Yet, the shift should not neglect serving continuing contraceptive users.

#### References:

1. Gill K, Pande R, Malhotra A. Women deliver for development. *Lancet* 2007;370(9595):1347-57.
2. Westoff CF, Unmet need, Demographic and Health Surveys Comparative Studies, No.16, Columbia, MD, USA: Institute for Resource Development/Macro Systems; 1995.
3. Robey RB, Ross J, Bhushan I, Meeting unmet need: new strategies, Population Reports, Series J No: 43; 1996.
4. Fikree FF, Khan A, Kadir MM, Sajjan F, Rahbar MH. What Influences Contraceptive Use Among Young Women In Urban Squatter Settlements of Karachi, Pakistan? *Int Fam Plan Perspect*, Sept. 2001; 7(3)
5. United Nations. Report of International Conference on Population and Development. Report no: A/CONF.171/13. Cairo. 1994.
6. Casterline JB, El-Zanatay F, El-Zeini LO. Unmet need and unintended fertility: longitudinal evidence from upper Egypt. *Int Fam Plan Perspect* 2003;29(4):158-66.
7. Benson J, Gringle R, Winkler J. Preventing unwanted pregnancy: management strategies to improve postabortion care. *Adv Abort Care* 1996;5(1):1-8.
8. Westoff CF. Planned and unplanned births in the United States. 2. The decline in unwanted fertility, 1971-1976. *Int Fam Plan Perspect* 1981;13(2):70-2.
9. Population Reference Bureau. 2009 World Population Data Sheet; 2009.
10. National Institute of Population Studies. Pakistan Reproductive Health & Family Planning Survey 2006-07, Islamabad, Government of Pakistan; 2008.
11. Sathar Z, Singh S, Fikree FF. Estimating the Incidence of Abortion in Pakistan. *Studies in Family Planning* 2007; 38: 11-22.
12. Henshaw SK, Adewole I, Singh S, Bankole A, Oye-Adeniran B, Hussain R. Severity and cost of unsafe abortion complications treated in Nigerian hospitals. *Int Fam Plan Perspect* 2008; 34(1):40-50.
13. Sedgh G, Henshaw S, Singh S, Ahman E, Shah IH. Induced abortion: estimated rates and trends worldwide. *Lancet* 2007; 370(9595):1338-45.
14. Marston C, Cleland J. Relationships between contraception and abortion: a review of the evidence. *Int Fam Plan Perspect* 2003;29(1):6-13.
15. Mbizvo MT, Fawcus S, Lindmark G, Nystrom L. Maternal mortality in rural and urban Zimbabwe: social and reproductive factors in an incident case-referent study. *Soc Sci Med* 1993; 36(9):1197-205.
16. Westoff CF, DeLung JS, Goldman N, Forrest JD. Abortions preventable by contraceptive practice. *Int Fam Plan Perspect* 1981;13(5):218-23.
17. Population Council, The Gap between reproductive intentions and behavior: A Study of Punjabi men and women. Islamabad: 1997.
18. Sathar Z, Jain A, Ramarao S, Haque M, Kim J. Introducing client-centered reproductive health services in a Pakistani setting. *Stud Fam Plan* 2005; 36(3):221-234.
19. Rukanuddin AR, Razzaque A, Hardee-Cleveland K. Can family planning succeed in Pakistan? *Int Fam Plan Perspect* 1992; 18(3):109-115.
20. Sathar Z, Crook N, Callum C, Kazi S. Women's status and fertility change in Pakistan. *Popul Dev Rev* 1988; 14(3):415-432.
21. Shaikh BT. Unmet need for family planning in Pakistan PDHS 2006/2007: it's time to re-examine déjà vu. *Open Access Journal of Contraception* 2010; 1: 113-118.
22. Vyas S, Kumaranayake L. Constructing socio-economic status indices: how to use principal components analysis. *Health Polic and Plan* 2006;21(6), 459-68. Oxford Univ Press. [Available

f r o m U R L :  
<http://www.ncbi.nlm.nih.gov/pubmed/17030551>]

23. Gavin WJ. Population and Poverty: The Situation in Asia and the Pacific: Asia-Pacif Pop J 2009;24(1):65-86.
24. Sathar Z, Zaidi B. Status of Family Planning in Pakistan, UNFPA - ICOMP REGIONAL CONSULTATION Family Planning in Asia and the Pacific Addressing the Challenges: 8-10 December 2010, Bangkok, Thailand.
25. World Population Foundation. Safe Motherhood 'SAVING THE SOUL BEARERS' on the eve of International Mothers' Day: 2008
26. Baluchistan Rural Support Programme. [Available f r o m U R L :  
[http://www.brsp.org.pk/program\\_social\\_sector\\_reproductive\\_health.asp](http://www.brsp.org.pk/program_social_sector_reproductive_health.asp)]
27. PATH-UNFPA. Outlook 25th Anniversary issue 2008;25(1).