Pak J Public Health Vol. 2, No. 2, 2012

Original Article

Post-abortion care family planning use in Pakistan

Syed Khurram Azmat[1], Waqas Hameed[1], Muhammad Ishaque[1], Ghulam Mustafa[1], Aftab Ahmed[1]
[1]Marie Stopes Society, Karachi. (Correspondence to Azmat SK: khurram.azmat@mariestopespk.org)

Abstract:
Introduction: The stagnated CPR and high unmet need for contraception lead to approximately 890,000 induced abortions every year in Pakistan. A fairly recent study from Pakistan also revealed that around 40% of abortions are performed by unskilled workers in backstreet clinics. Considering these grave statistics, it should not come as surprise that unwanted pregnancies are the leading cause of induced abortions in Pakistan. Despite country's inferior situation, there is no data available in Pakistan that unveils the much needed information pertaining to post-abortion care family planning (PAC) use. Thus, this paper attempts to document socio-demographic profile seeking post-abortion care clients; estimate proportion of post-abortion contraception uptake and determine its associated factors.
Methods: Medical records of 17,262 women seeking PAC as a result of incomplete abortion and treatment for complications arising from unsafe abortions were analyzed. The associations between risk factors and post-abortion family planning uptake were assessed by applying univariate and multivariable logistic regression.
Results: High post abortion contraceptive use (72.9%) was observed amongst the women who had sought for PAC services. where, 66% of the women opted to use short-term methods. The rest (33.5) considered long-term reversible IUD and implant as their method of choice and only 0.4% had undergone voluntary sterilization. Multiple logistic model identified province, women education, women occupation status, monthly family income, first time visitors to the centre, previous contraceptive use, and type of PAC treatment provided, women's health condition after post-abortion treatment had significant associations with the uptake of contraception.
Conclusion: The present study highlights the importance of strengthening post-abortion family planning services in the country which will not only contribute in increasing the overall contraceptive use in the country but will also prevent high unintended pregnancies that may ultimately lead to induced abortions. *(Pak J Public Health 2012;2(2):4-9)*
Keywords: Post Abortion Care, Family Planning, Modern Contraception, Pakistan.

Introduction

With approximately 174 million population of which 65% lives in rural areas, Pakistan is not only the 6th most populous country in the world but, it is also projected to be the world's 4th largest nation on earth by 2050(1-3). Though Pakistan was first among the South Asian countries to recognize the importance of family planning for sustainable development and introduced family planning program in 1960s(4), but it has achieved limited success in lowering the total fertility rate (TFR) and population growth rate.Today,Pakistan is one of the six countries where more than 50% of the world's all maternal deaths occur (5) with one woman dying every twenty minutes and 30,000 annually due to pregnancy-related complications (6).With the recent Pakistan Demographic Health Survey (2006-7) showing TFR at 4.1, stagnant CPR (29.6%), high (25%) unmet need for contraception, and one out of every four birth being unwanted(1) the prospects for achieving MDG 4 and 5 by 2015 are bleak until some committed, effective, innovative and out-of the-box measures are taken.

Globally, approximately 42 million pregnancies each year end in abortion (7), where half of these happen under unsafe conditions (8). More than 95% take place in developing countries (8,9).The only nationally representative study conducted in 2004 estimates 890,000 induced abortions occurring every year in Pakistan with annual abortion rate of 29 per 1,000 women aged 1549; resulting approximately 200,000 hospitalizations for post-abortion complications.Moreover, one abortion in every five live births implies that every Pakistani woman on an average has an abortion during her lifetime (10). A fairly recent study reveals that around 40% of abortions are performed by unskilled workers in backstreet clinics (11).Considering these grave statistics, it should not come as surprise that unwanted pregnancies are the leading cause of induced abortions in Pakistan (12).

The law in Pakistan allows abortion in the early stages of pregnancy to save the life of the woman or to provide necessary treatment but it is silent on the issues of rape, incest and fetal abnormalities (13). Moreover, lack of adequate understanding about Post Abortion Care (PAC) among public sector decision makers contributes to the persistent criminalization of women seeking services; therefore, service providers are still performing PAC

'underground' in highly clandestine conditions with little regulations or oversight from the government (14). Despite the adverse health effects of abortion, the low economic status of these women compels them to resort to abortion rather than practicing contraception - as the former entails a 'onetime cost' as opposed to the continuing costs of contraceptives (15).These high numbers of abortion not only identify the need for promoting contraception on the whole. Yet, it also highlights the importance of strengthening post-abortion family planning services in the country.

Postabortion family planning use varies widely depending upon the quality of family planning and counseling services provided to such clients. The substantial results advocate that post-abortion counseling may be an effective tool to increase the usage of contraceptives. In addition, improved post-abortion family planning counseling should be an integral part of post-abortion care services (16). Although, adoption of any contraceptive method would be important, if not that effective, for that they at least do play pivotal role to prevent unwanted pregnancies rather than of being a non-user of any contraception.

Despite country's inferior situation, there is no data available in Pakistan that unveils the much needed information pertaining to post-abortion care family planning. Thus, this paper attempts to document socio-demographic profile seeking post-abortion care clients; estimate proportion of post-abortion contraception uptake and determine its associated factors.

This present study was conceptualized following the idea of a similar study conducted in Ethiopia (17).We used the client-based health services data obtained from local NGO clinics, that provides quality post-abortion care (PAC) services to women seeking such services as a result of incomplete abortion and treatment for complications arising from unsafe abortions. The NGO maintains a record of health services, socioeconomic and demographic profiles of its clients. This data is systematically recorded in a computer based Client Information System (CIS) which is managed by its Management Information System department.

Methods

We analyzed the client service records (collected prospectively) of women seeking PAC related services from local NGO clinics during July 2010 to June 2011. This client data was collected as part of a screening/pre-assessment of post-abortion care seekers. All the relevant centre staff members of the NGO were trained on data gathering and its computerization. All the clients provided written informed consent before the service provision, and the client confidentiality was maintained throughout the process from data extracting to analysis and reporting. In addition, the data analysis was not conducted by facility specification and no information was disclosed. No direct contact was made by the authors with the clients.

Clients were selected using a multistage sampling strategy. All (5) Balochistan centres and four (4) centres of KhyberPakhtoonkhwa (KPK) province were excluded since these centres had no CIS installed.The total eligible centres included: Sindh 19; Punjab 35; and KPK 5 centres. Within each province, based on PAC services, we purposively selected three each low, middle and high performing centres from Sindh and Punjab Province; while from KPK one each (low, middle, and high performing) centre was selected.

During July 2010 to June 2011, a total of 17,262 women received PAC related services at the selected centres. Records of all women were included in the descriptive analysis; however 1,334 medical records of women were excluded from multivariable analysis due to missing values in different potential risk factors.

We included variables pertaining to socio-demographic: women age, education, husband's education, women occupation status, average family monthly income, and number of alive children; reason for post-abortion care: type of treatment for complication arising from unsafe abortion and following an incomplete abortionmedical (PAC-M) or surgical (PAC-S), counseling, and post procedure contraceptive services uptake by method, last contraceptive method used and whether women has ever been to the (index) centre before, and women's health condition after treatment of post-abortion.

Statistical Analysis

Data were presented in tabular and graphical form based on simple proportions for socio-demographic and health services indicators. The associations between risk factors and post-abortion contraception uptake[1] were assessed by applying univariate and multivariable logistic regression. SPSS 18.0 was used for analyses. A p-value of <0.05 was taken to indicate statistical significance. Moreover, to ensure confidentiality, the names of the clinics/facilities were not displayed and facility wise analysis was also avoided.

[1]Women who received any modern contraceptive method, within 30 days, after the treatment of neither post-abortion complication nor following an incomplete abortion.

Results

Profile of PAC clients:

Of the total women who received PAC services, 54.6% were from Sindh, 31.8% from Punjab, and 13.7% were from KPK province. Three-fifths of the women aged 25 to 34 years, followed by 35 to 49 years (22.1%). One out of four women had more than four live children. Low education was found among study participants and their husbands, where 47.8% and 42.9% of them had no formal education, respectively. Moreover, 83.9% were housewives, and the average family monthly income of majority (46.3%) was =6000PKR (Table 1).

Nearly three-fifths of PAC seekers never used any contraceptive method, while condom (20.1%), pill (7.1%), withdrawal and injection (4.5% each) were the common methods most recently by them. Nearly 83 percent of the women had come to clinic for the first time whilst 54.0% used surgical treatment and 46.0% opted to choose medical treatment. Only 0.9% of the women were in poor health condition as observed by the service provider, while majority 62% were marked as 'good' (Table 1).

Table 1: Socio-demographic and health services indicators of women who received post-abortion care services between July 2010 and June 2011

Characteristics	n (%)
Province[a]	
Sindh	54.6
Punjab	31.8
KPK	13.7
Women age (years)[b]	
15-24	15.9
25-34	60.3
35-49	22.1
Women education[c]	
None/no formal	47.8
Primary	26.3
Secondary	15.5
Post-secondary	10.5
Husbandeducation[d]	
None/no formal	42.9
Primary	27.1
Secondary	14.6
Post-secondary	15.4
Average family monthly income[e]	
≤ 6000	46.3
> 6000 - ≤9000	27.6
> 9000	26.1
Number of alive children[f]	
1 to 2	37.8
3 to 4	39.1
5+	23.1
Most recent contraceptive method used[g]	
Never used	60.4
Condom	20.1
Pills	7.1
Injection	4.5
IUD	3.3
Implant	0.0
	0.1
Periodic	4.4
Withdrawal	
Women Occupation Status [h]	
Housewife	83.9
Working	16.1
Women Health Condition [i]	
Poor	0.9
Fair	37.3
Good	61.8
Women ever been to the facility before[j]	
No	82.7
Yes	17.3
PAC Treatment[k]	
PAC-Surgical	54.0
PAC-Medical	46.0

[B]-Missing cases 26; [E]-Missing cases 457; [F]-Missing cases 680; [G]-Missing cases 683; [i]- Missing cases 1334

Post-abortion contraceptive uptake and its associated factors:

Almost 73%of the PAC seekers adopted some method of modern contraception. Among those who used, majority (31.6%) had inserted IUD, followed by condom (29.1%), pill (27.2%) and injection (9.7%). Only 1.9% chose implant and 0.4% had undergone sterilization (Figure 1).

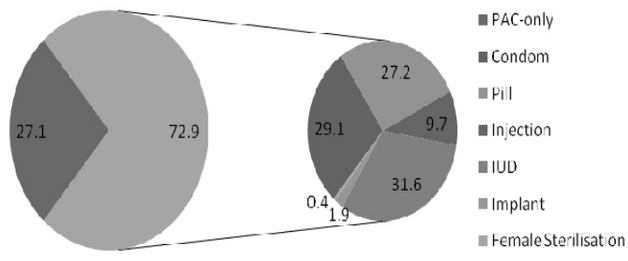

Figure 1: Contraceptive uptake among women seeking PAC services

Table 2: Unadjusted and adjusted odds ratios of post-abortion contraceptive uptake, by socio-demographic, contraceptive and health services indicators

Variables	N	Post-abortion modern contraceptive uptake %	OR(95% CI)	AOR(95% CI)
Province				
Punjab	5481	65.7	1	1
Sindh	9419	74.0	1.48 (1.37-1.60)*	1.76 (1.59-1.95)*
KPK	2362	85.4	3.04 (2.67-3.45)*	5.10 (4.32-5.96)*
Age of women				
15-24	3033	68.4	1	1
>24-34	10391	73.6	1.29 (1.18-1.40)*	0.99 (0.88-1.11)
>34-49	3812	74.6	1.35 (1.22-1.50)*	0.93 (0.80-1.08)
Women education categories				
No formal education	8248	75.8	1	1
Primary	4536	68.4	0.69 (0.63-0.75)*	1.17 (0.98-1.40)
Secondary	2673	68.0	0.68 (0.62-0.74)*	0.95 (0.82-1.10)
Post-secondary	1805	78.2	1.14 (1.01-1.29)*	1.53 (1.22-1.92)*
Husband education categories				
No formal education	7410	75.8	1	1
Primary	4680	68.5	0.69 (0.64-0.75)*	0.98 (0.82-1.16)
Secondary	2519	68.7	0.69 (0.63-0.77)*	1.00 (0.85-1.17)
Post-secondary	2653	76.5	1.04 (0.93-1.15)	1.10 (0.90-1.35)
Monthly family income of women				
≤6000	7783	73.4	1	1
>6001 to 9000	4632	71.9	0.93 (0.85-1.00)	1.25 (1.11-1.39)*
>9000	4390	72.1	0.94 (0.86-1.01)	1.61 (1.40-1.83)*
No. of alive children				
1 to 2	6272	71.7	1	1
3 to 4	6485	73.6	1.10 (1.02-1.19)*	1.09 (0.98-1.17)
>4	3825	74.8	1.17 (1.07-1.28)*	1.09 (0.94-1.16)
Last contraceptive method used				
Never used	10018	72.0	1	1
Used any method	6561	74.4	1.13 (1.05-1.21)*	1.22 (1.12-1.32)*
Women occupation status				
Working	2772	66.5	1	1
Housewife	14490	74.1	1.44 (1.32-1.57)*	1.20 (1.04-1.37)*
Women condition of health				
Poor	139	47.5	1	1
Fair	5941	64.4	2.00 (1.42-2.80)*	2.11 (1.46-3.06)*
Good	9848	77.9	3.91 (2.79-5.46)*	4.00 (2.76-5.75)*
Women ever been to the facility before				
No	14281	71.9	1	1
Yes	2981	77.7	1.36 (1.24-1.50)*	1.91 (1.70-2.13)*
Type of PAC-service				
PAC-M	7939	64.6	1	1
PAC-S	9323	80.0	2.18 (2.03-2.33)*	2.65 (2.44-2.87)*

*Statistically significant

The adjusted odds ratio in table 2 shows that women in Sindh and KPK province had (1.76 and 5.07 times, respectively) higher chances of adopting post-abortion modern contraceptive compared to women from Punjab. Similarly, women having post-secondary education had 1.53 times more likely to adopt modern contraception compared to those who had no formal education; while uptake of contraceptive among housewives was substantially higher (AOR=1.20) compare to working women. Family monthly income was also found increasingly associated with uptake of post-abortion contraception.

Women who had previous contraceptive experience were 1.22 times higher odds of opting for contraception compared to those who had never used any contraceptive method. Likewise, women who received surgical treatment had 2.65 times and those came to the clinic first time had 1.91 times higher chances of adopting contraception compared to women who received medical treatment and have ever been to the facility before, respectively. In addition, women's health condition after post-abortion treatment was also found increasingly associated with the uptake of contraception (Table 2).

Discussion and Conclusion

Findings from a multi-country review concluded that investment in family planning services can reduce unintended pregnancies and unsafe abortion, and contribute towards achieving the Millennium Development Goals (18). Whilst, comprehensive post abortion care is also identified as an important intervention to treat complications resulting from miscarriage and unsafe abortion, reduce the incidence of repeat unplanned pregnancy, and decrease the incidence of repeat abortion(19) since post abortion period is the right time to introduce contraceptive advices because women are more ready to receive massages (16).

The findings of the present study revealed that majority of the PAC seekers aged between 25 to 34 years, had 1 to 4 children, less educated, housewives, monthly family income was =6000 PKR, and importantly they have never used any contraceptive method. The overall uptake of post-abortion contraceptive was significant - 72.9%.Amongst those, an almost 35% relied on long term and permanent methods (more than 90% used long-term reversible IUD); while 65% opted to choose less effective methods such as pills, injections and condoms which is consistent with the findings of a recent systematic review on PAC family planning(20). Yet, the reason for not opting for contraceptive, amongst those who did not choose any contraceptive, should be explored in order to better understand a broader client perspective.

The study also determined significant association between post-abortion contraceptive uptake and several risk factors that include: province, women education, women occupation status, monthly family income, and first time visitors to the centre. Moreover, higher chances of contraceptive uptake was found among women who received surgical treatment;this probably due to nature of procedure which takes shorter time and is carried out at the centre whereby the providers have the opportunity to counsel the client on contraception, and clients can also choose the method of their choice at the same instant. On the contrary, the medical procedure does not take place in one go and may require clients to come back to the centre to choose a method of their choice, except for condom and pill.Lower odds of post-abortion contraceptive uptake among women who have never used any contraception reinforces the fact that abortion perhaps being used as a method of family planning and the reluctance of using contraceptive methods among them.

Despite this study revealed some vital findings, it suffers some limitation common to all retrospective analyses. Moreover, this study used the data of a single NGO and representing only three provinces of Pakistan. Additionally, the women were not followed prospectively once they received the contraceptive method after post-abortion treatment so as to determine the level of method continuation. Lastly, no information was gathered if the women used the contraception from any other provider within 30 days of post-abortion treatment.

Most importantly, this was one of the first facility-based studies focusing on post-abortion contraceptive uptake in Pakistan. The study identified the groups that need to be focused where adoption of post-abortion contraceptive is low. On the whole, the findings set the foundation for strengthening post-abortion contraceptive uptake, which will not only contribute in increasing the overall contraceptive use in the country but will also prevent high unintended pregnancies that may ultimately lead to induced abortions. Nonetheless, the available global evidence on post-abortion contraception use is scarce especially from developing and low-income countries perspective such as from Pakistan. Thus, there is a strong need to conduct comprehensive evaluation through employing multi-country prospective cohort studies to determine method continuation rates; impact of post-abortion family planning use on maternal mortality or illness, unsafe abortions and unplanned pregnancies (20).

References

1. National Institute of Population Studies and Macro International. Pakistan Demographic and Health Survey 2006-07. Islamabad: Government of Pakistan; 2008.
2. Pakistan Bureau of Statistics. Pakistan Demographic Survey 2007. Islamabad: Economic Affairs Division, Government of Pakistan; 2007. [cited 2012 May 25]. Available from URL:http://www.pbs.gov.pk/content/pakistan-demographic-survey-2007
3. Finance Division. Pakistan Economic Survey 2010. Islamabad: Ministry of Finance, Government of Pakistan; 2010. [cited 2012 May 16]. Available from URL: http://finance.gov.pk/survey_1011.html
4. Sathar Z. Stagnation in Fertility Levels in Pakistan. Asia Pac Popul J 2007;22(2):113-31.
5. Hogan MC, Foreman KJ, Naghavi M, Ahn SY, Wang M, Makela SM, et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. Lancet 2010; 375(9726):1609-23.
6. Sajjad R, Khan A. Nutrient intakes of pregnant women in comparison to the reference intake. Pak J Nutr 2012;11(2):166-71.
7. Sedgh G, Henshaw S, Singh S, Ahman I, Shah I. Induced abortion: estimated rates and trends worldwide. Lancet 2007;370(9595):1338-45.
8. World Health Organization. Safe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. 6thed. Geneva: WHO; 2011.
9. World Health Organization. Safe Abortion: Technical and Policy Guidance for Health Systems. Geneva: WHO; 2003.
10. Sathar Z, Singh S, Fikree FF. Estimating the Incidence of Abortion in Pakistan. Stud Fam Plann 2007;38(1):11-22.
11. Bano S. Reality strikes. Women's magazine: The News [Jang online]; 2009 Oct 27. [cited 2012 May 16]. Available from URL: http://jang.com.pk/thenews/oct2009-weekly/you-27-10-2009/index.html#1
12. John C, Arif SM. Unwanted Pregnancy and Post Abortion Complications. Islamabad: Population Council; 2003. [cited 2012 May 25]. Available from: http://www.shirkatgah.org/_uploads/_files/f_14-abortion_material_in_pak.pdf
13. Ahsan A, Jafary SN. Unsafe Abortion: Global picture and situation in Pakistan. J Pak Med Assoc 2008;58(12):122-7.
14. Azmat SK, Bilgrami M, Shaikh BT, Mustafa G, Hameed W. Perceptions, interpretations and implications of abortions: A qualitative enquiry among the legal community of Pakistan. Eur J Contracept Reprod Health Care 2011;17(2):155-63.
15. John C, Singh S, Sathar Z. Unwanted pregnancy and post-abortion complications in Pakistan: Findings from a National study of Population Council. Islamabad: Population Council;2004.[cited 2012 May 25]. Available from: http://www.shirkatgah.org/_uploads/_files/f_14-abortion_material_in_pak.pdf
16. Ceylen A, Ertem M, Saka G, Akdeniz N. Post abortion family planning counseling as a tool to increase contraception use. BMC Public Health 2009;15:9-20.
17. Prata N, Bell S, Holston M, Gerdts C, Melkamu Y. Factors Associated with Choice of Post-Abortion Contraception in Addis Ababa, Ethiopia. Afr J Reprod Health 2011;15(3):55-62.
18. Sedgh G, Singh S, Shah IH, Ahman E, Henshaw SK, Bankole A. Induced abortion: incidence and trends worldwide from 1995 to 2008. Lancet 2012;379(9816):625-32.
19. United States Agency for International Development. Decentralization of Post abortion care in Senegal and Tanzania. Washington DC: USAID; 2005. [cited 2012 May 16]. Available from URL: http://www.usaid.gov/our_work/global_health/pop/news/issue_briefs/pac_brief_senegal_tanzania.pdf
20. Tripney J, Schucan BK, Kwan I, Kavanagh J. The impact of post-abortion care family planning counseling and services in low-income countries: a systematic review of the evidence. Technical report. London: Social Science Research Unit, University of London; 2010.