

## Review Article

# A New Framework for Family Planning Programme Evaluation

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## Abstract

Research is needed for family planning program evaluation because the controversies among researchers regarding evaluation methodologies which are in vogue do exist. Previously many different approaches have been adopted ranging from simple description to complex set of criteria which are heavily based on service statistics and the information regarding program acceptors only. Evaluating the FP program by neglecting the non-acceptors perhaps poses a substantial problem in our line of argument particularly in those developing countries where contraceptive prevalence is low. In this paper, we suggest and apply a less complicated framework for evaluating the family planning programme by incorporating both the acceptors and non-acceptors information. To best deal with the objective of this paper; family planning program of Pakistan is investigated because of its persistent low contraceptive prevalence rates. The proposed conceptual framework for evaluating the family planning program is based on the five set of criteria. These criteria are: family planning information; contraceptive method specific information; program based and non-program based factors for not using contraception and the fertility outcomes of users and non-users of contraception. One of the interesting finding of this study using the proposed conceptual framework is: the fertility outcomes of women contraceptive users in Pakistan is higher as compared to non-users.

**Keywords:** Evaluation; Pakistan's family planning program; Contraception

## Introduction

In a literal meaning of the term 'programme evaluation', three schools of thoughts have been in vogue in research since 1960s: judgemental, adaptive and control [1]. The first one is based on the use of some criteria(s) to judge the worth of the program; however, the selection of specific criterion is critical. The second school measures the worth of program in terms of its performance and the third school focus on the feedback of the management control. The issue of evaluating the performance of family planning programs has been identified in the late 1960s but the measures or criteria about evaluating family planning programme (EFPP), is perhaps less clear, inconclusive and still under debate among researchers. Previously many different approaches have been adopted ranging from simple description to complex set of criteria. Every approach fall under one of the three schools of thoughts for evaluation with or without a sufficient degree of overlap depending on the evaluators pre-decided objectives.

Previously many approaches including 'cause-specific analysis', 'situation analysis', 'cost recovery analysis of contraception', 'cost-effect analysis' have been in vogue to measure the impact of FP inputs in different countries of the world [2-5]. One could come up with a question that: were these studies based on standard set of criteria to

evaluate the success or failure of the programme? The posed question was partially answered by Lapham and Mauldin through their landmark document regarding review and evaluation of national FP programs [6]. They developed a framework for evaluation based on four criteria: statistical measurements of acceptors and users (criteria A), programmatic measurement (criteria B), fertility measurement (criteria C), and lastly social, economic and health measurements (criteria D). In addition to informal evaluation procedures mostly using the huge service statistics, the first formal or standard document providing the methodological guidelines to measure the impact of FP program input on fertility is perhaps the United Nation's manual IX covering the eight different approaches [7]. These approaches are: standardization approach, standard couple year of protection, component projections, analysis of reproductive process, multivariate areal analysis, simulation models and use of experimental designs. Two features are notable in applying any of the approach documented above: measuring the impact in terms of fertility outcome and the changes in the fertility status of acceptors only.

Nevertheless any approach whether formal or informal for evaluating FP program poses a problem of data constraint quite in general and acceptors or users service statistics in specific. Controversies among researchers exist on the methodological side of the approaches used for evaluation purposes. Perhaps this could be true that no single form of evaluation is best for all family planning programs. There is a real need for more work in this field. One possible dimension to this line of argument is that these approaches are evaluating the acceptors only-which are less in number as compared to non-acceptors particularly in developing countries. Evaluating the FP program by neglecting the non-acceptors perhaps poses a substantial problem, one being that more than half of the target population is ignored and this is particularly the case in countries where contraceptive prevalence are low. Indeed we foresee that non-acceptors (non-users) should be observed on the basis of

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their fertility outcomes and on the grounds of understandings that what are the probable reasons which cause them to belong to the groups of non-users? Do these reasons are from the programme factors or not belong to program side? In this paper we suggest and apply a conceptual framework to answer these questions. It is further argued that in previous approaches to evaluate a particular FP programme, heavy reliance is kept on service statistics, indeed the present work is focused on using response statistics.

## Proposed Frame Work

The proposed evaluation framework consists of five criterion of evaluation by dividing the target population into four groups. For understanding purposes a typical FP program presents the stages. First and foremost task of FP program is to disseminate the FP information and contraceptives as well. Primarily program focus on the target population to join the program. After the information disseminated or during the on-going disseminating process, the population freely has to decide whether to join the program or not; this is presented in state 2 of the population progress toward FP use (or have used). From this state, group could easily be divided between users and non-users in general and with current and ever use or non-use status in specific. The four groups current users, current non-users, ever users and ever non-users may well define and cover the overall group with a negligible overlap between ever and current user. One of the criteria for evaluation could be the exposure of contraception among the four groups. The significant differences in terms of FP exposure among the groups would indicate the first evaluation of the program. After having the exposure of information of contraceptives, the next logical criteria would be the contraceptive method specific exposure of the four groups. The exposure towards the sources of FP is mandatory and would be an important criterion for evaluation, therefore this criteria deal with the exposure of FP through various sources equally available for all groups. One of the key criteria for measuring the performance of FP program is the understanding of core reasons of not using contraceptives in the ever non user group. These overall reasons in addition could be categorized into program and non-program related factors which might clearly provide the feedback of improvement. Finally, the last criterion is the change in fertility levels of the four groups. The significant difference between the users and non-users fertility levels might conclude the success (failure) of the particular national FP program.

## Application of the Framework

Pakistan could be an interesting case for evaluation the FP program using the proposed conceptual framework for a variety of good reasons. For example, Pakistan ranks sixth among the most populous countries of the world (184.8 million). Additionally, among South Central Asian countries Pakistan ranks second in fertility with a total fertility rate (TFR) of 4.0. Pakistan's FP program has a long history (since 1950s). The detailed view of FP Programme of Pakistan can be seen elsewhere [8].

During the past five decades, Pakistan has experienced a slow-paced change in the level and pattern of fertility. The total fertility rate has declined from seven or eight children per woman in the early 1960s to only four by the end of 2000s (Table 1). The other notable reason to include Pakistan as case study is that the Pakistan's FP input has not motivated the minds of Pakistani people. A 30 percentage point rise in contraceptive use over 57 years indicates

a rate of increase of only 0.5% per annum. On this least successful FP story of Pakistan, researchers have declared various arguments about the limited success of FP in Pakistan. Some researchers pointed out that the failure to understand the demand side factors as the key elements of unsuccessful FP programme in Pakistan [9]. On the other hand, some believed that the FP programme had not worked well administratively [10,11]. Previous research has developed a perception that Pakistan population programme is weak and ineffective. Unlike many strategies over time have been proposed and implemented to meet the population control challenge of Pakistan [12-14]. These arguments based 60 year FP research of Pakistan left us uninformed to outline a key conclusive statement at a moment. Therefore, an attempt has been made in this article to investigate the FP input of Pakistan using the response statistics. However, the fertility transition between 1988 and 2002 in Pakistan is identified as the fastest as compared to other time periods (Table 1).

To best deal with this time duration, the present paper uses the three data sets namely Pakistan Demographic and Health Surveys

**Table 1:** Trends in total fertility rate of Pakistan during 1960s-2010s.

Decade	Source	TFR
<b>1960s</b>		
1962-65	Population Growth Experiment using Chandra-Deming formula	8
1965-69	Pakistan Fertility Survey	7
1968-69	National Impact Survey	5
1968-71	Population Growth Survey	6
<b>1970s</b>		
1970-74	Pakistan Fertility Survey	6.3
1970-75	Population Labour force and Migration Survey	7.1
1975-79	Population Labour force and Migration Survey	6.5
1976-79	Population Growth Survey	6.9
<b>1980s</b>		
1984-85	Pakistan Contraceptive Prevalence Survey	6
1984-88	Pakistan Demographic Survey	6.9
1986-91	Pakistan Demographic and Health Survey	5.5
1987-91	Pakistan Integrated Household Survey	6.3
<b>1990s</b>		
1992-96	Pakistan Fertility and Family Planning Survey	5.4
1994-95	Pakistan Contraceptive Prevalence Survey	5.6
1994-96	Pakistan Integrated Household Survey	4.5
<b>2000s</b>		
2000-01	Population Reproductive Health & Family Planning Survey	4.2
2001	Pakistan Demographic Survey	4.1
2003	Pakistan Demographic Survey	3.9
2005	Pakistan Demographic Survey	3.8
2006	Pakistan Demographic Survey	3.7
2006-07	Pakistan Demographic and Health Survey	4.1
2007	Pakistan Demographic Survey	3.7
<b>2010s</b>		
2012-13	Pakistan Demographic and Health Survey	3.8

(PDHS) (1990, 2006 and 2012) and Pakistan Reproductive Health and Family Planning Survey (PRHFPS) conducted in year 2000-01. The three surveys were conducted by National Institute of Population Studies (NIPS), Islamabad, [15-18]. In the three household surveys, the ever married (15-49 year old) woman was the target for interview. The sample sizes for successfully completed interviews in three surveys are shown in Table 2.

**Results**

The starting point of the conceptual framework is the categorization of the group among ever users, ever non-users, current users and current non-users. For the surveys; the distribution of categorization is shown in table 3. In addition to overall sample, the cohort analysis is also performed and taking the (20-24) year age cohort of women in 1990 as base, the cohort wise categorization of the four groups is shown in Table 3A. The results based on overall and cohort wise sample are presented in terms of percentages (overall sample: Tables 3 through 6; cohort: Tables 3A through 6A).

**First evaluation criteria: family planning information**

The first criterion of evaluation deals with the information of the contraception. The responses of non-users groups is the focus of this study and any substantial level of differences between the user’s knowledge and non-user’s knowledge would indicate the progress of FP input. Keeping this in view, the overall knowledge of contraception among ever non-users has increased from 73% (1990) to 91.4% (2006), but notably the level of knowledge is higher (93.7%) among current non-users in 2006 as compared to ever non-users (Table 4). The cohort wise analysis of ever non-users reveals that the information of contraception has substantially increased (from 72.5% to 91.7%) since 1990s (Table 4A).

**Second evaluation criteria: Contraceptive method specific information**

The second criterion of evaluation deals with the method specific information of the contraception. Two groups of contraceptive methods are presented. The traditional methods group include the rhythm,

**Table 2:** Sample sizes of ever-married women in Pakistan Demographic and Health and Population Reproductive Health and Family Planning Surveys of Pakistan.

Sample Characteristics	PDHS 1990-91	PRHFPS 2000-01	PDHS 2006-07	PDHS 2012-13
<b>Total</b>				
Eligible	6904	7411	10601	14569
Successfully interviewed	6611	6579	10023	13558
% successfully interviewed	95.8	88.8	94.5	93.1

**Table 3:** Number of respondents classified by users and non-user category.

Ever users’	Ever non users’	Total	Current users’	Current non users
<b>2006</b>				
4674 (46.6%)	5349 (53.4%)	10023	2721 (27.1%)	7302 (72.9%)
<b>2000</b>				
2646 (40.2%)	3933 (59.8%)	6579	1730 (26.3%)	4849 (73.7%)
<b>1990</b>				
1535 (23.2%)	5076 (76.8%)	6611	859 (13.0%)	5752 (87.0%)

**Table 3A:** Cohort of respondents classified by users and non-user category.

Ever users’	Ever non users’	Total	Current users’	Current non users
<b>1990 (age cohort: 25-29)</b>				
338 (23%)	1131 (77%)	1469	172 (11.7%)	1297 (88.3%)
<b>2000 (age cohort: 35-39)</b>				
523 (0.51%)	513 (0.49%)	1036	385 (37.2%)	651 (62.8%)
<b>2006 (age cohort: 40-44)</b>				
739 (57.6%)	543 (42.4%)	1282	482 (37.6%)	800 (62.4%)

**Table 4:** Responses (%) of overall information or knowledge of any contraception.

Time	Ever users’	Ever non users’	Current users’	Current non users
2006	100	91.4	100	93.7
2000	100	87.9	100	90
1990	99.9	73	99.9	76.2

**Table 4A:** Cohort responses (%) of overall information or knowledge of any contraception.

Time	Information of contraception			
	Ever users’	Ever non users’	Current users’	Current non users
<b>1990 (age cohort: 25-29)</b>				
	100	72.5	100	76.02
<b>2000 (age cohort: 35-39)</b>				
	100	89.9	100	91.7
<b>2006 (age cohort: 40-44)</b>				
	100	91.7	100	94.4

withdrawal and others and modern method include Female and male sterilization, pill, IUD, injectable, implants and condoms. The overall knowledge of modern contraceptive methods among ever non-users has increased from 72.4% (1990) to 91.2% (2006), but notably the level of information is higher (93.5%) among current non-users in 2006 as compared to ever non-users (Table 5). Notably, the information of traditional contraceptive methods is at same level (0.2%) among the four groups in 2006. It is surprising to note that the information of traditional contraceptive methods is very minimal (less than 4%) in all four groups as compared to modern methods. The cohort wise analysis of ever non-users reveals that the information of modern contraception has substantially increased (from 99.7% to 99.9%) since 1990s (Table 5A).

**Third evaluation criteria: main source of contraceptive exposure**

The third criterion of evaluation deals with the sources of contraceptive exposures make available to group as a program activities. Three main sources are used for this purpose: mass media including radio and television and FP workers through visits. The exposure of contraception through television among ever non-users has increased from 29.1% (1990) to 37.4% (2000), but notably the exposure level of current non-users is higher (41.7%) in 2000 as compared to ever non-users in the same year (Table 6). The cohort wise analysis of ever non-users reveals that the exposure of contraception using television has increased 19% (1990) to 36.6% in year 2000 (Table 6A).

**Fourth evaluation criteria: reasons for not using contraception**

The reasons of no use of contraception among the non-users are shown in Table 7. A total of twenty one reasons have been reported by currently married women (15-49) who are not using contraception and who do not intend to use in future. We categorized these reasons according to programme (supply) and non-programme (demand) factors. The percentage distribution of these reasons since 1990s is shown in Table 7. Table 7 shows that only seven out of twenty

**Table 5:** Responses (%) of method specific information of contraception.

Methods	Ever users'	Ever non users'	Current users'	Current non users
<b>2006</b>				
Only				
Traditional'	0.2	0.2	0.2	0.2
Modern''	99.8	91.2	99.8	93.5
<b>2000</b>				
Any				
Traditional	3.3	0.9	3.9	1.1
Modern	97.4	87	98.9	88.9
<b>1990</b>				
Only				
Traditional	1	0.6	0.2	0.8
Modern	98.9	72.4	99.7	75.4

**Table 5A:** Cohort responses (%) of method specific information of contraception.

Methods	Ever users'	Ever non users'	Current users'	Current non users
<b>1990 (age cohort: 25-29)</b>				
Only				
Traditional'	1	8	-	9
%	0.3	1.0	-	0.9
Modern''	337	812	172	977
%	99.7	99	100	99.1
<b>2000 (age cohort: 35-39)</b>				
Any (only)				
Traditional	26 (12)	4	20 (4)	10
%	4.8 (2.3)	0.9	5.0 (1.0)	1.7
Modern	511	457	381	587
%	97.7	99.1	99	98.3
<b>2006 (age cohort: 40-44)</b>				
Only				
Traditional	1	2	1	2
%	0.1	0.4	0.2	0.3
Modern	738	496	481	753
%	99.9	99.6	99.8	99.7

'Traditional methods include the rhythm, withdrawal and others  
 ''Female and male sterilization, pill, IUD, injectable, implants and condoms are grouped in modern methods

**Table 6:** Responses (%) of source of contraceptive exposure.

Time	Main source of contraceptive exposure			
	Ever users'	Ever non users'	Current users'	Current non users
<b>1990</b>				
Family planning messages or information through mass media				
Radio	12.3	8.7	12.8	9.5
TV	49.3	29.1	51.7	33.6
Family planning information and services by family planning worker through visits				
	30.2	21.7	31.7	23.4
<b>2000</b>				
Family planning messages or information through mass media				
Radio	27.1	22	27	23
TV	63	37.4	64.6	41.7
Family planning information and services by family planning worker through regular visits				
	31.2	24.9	31.1	26.1
<b>2006</b>				
Family planning messages or information through mass media				
Radio	32.9	16.8	32.5	18.7
TV	40.9	16.5	43.3	19
Family planning information and services by family planning worker through regular visits				
	30.2	21.7	31.7	23.4

**Table 6A:** Cohort responses (%) of source of contraceptive exposure.

Time	Main Source of Contraceptive Exposure			
	Ever users'	Ever non users'	Current users'	Current non users
<b>1990 (age cohort: 25-29)</b>				
Family planning messages or information through mass media				
Radio	34.9	17.6	34.3	19.9
TV	42.9	19	43	22.1
<b>2000 (age cohort: 35-39)</b>				
Family planning messages or information through mass media				
Radio	25.6	20.5	25.5	21.7
TV	62	36.6	65.7	39.8
Family planning information and services by family planning worker through regular visits				
	31.2	24.6	31.2	26
<b>2006 (age cohort: 40-44)</b>				
Family planning messages or information through mass media				
Radio	12.2	7.2	13.9	7.8
TV	49.1	26.3	52.9	31.1
Family planning information and services by family planning worker through regular visits				
	27.5	19.9	29.5	21.2

one reasons are attributed towards supply side. The fear of side effects of contraceptive use (5.4%) in 2006 and no knowledge of contraceptives (10.5%) in 1990 are at the forefront followed by the health concerns (3.6%). These two reasons are indirectly related to FP programme input as compared to contraceptive knowledge, source and cost which are directly related to FP programme. Notably, contraceptive knowledge (no knowledge 2.2% in 2006) has been substantially improved in 2006 as compared to 1990. This improvement might highlight the performance of FP input in Pakistan. However, from programme side knowledge of source (know no source 0.8%) and cost (too much cost 0.8%) of contraception are smaller in proportions among these non-users.

**Fifth evaluation criteria: fertility outcomes**

The final evaluation criterion foresees the fertility outcomes of the four groups. Notably, the as an overall remark the fertility outcomes of contraceptive users (whether ever or current) are higher as compared to non-users. Specifically the mean number of children ever born among ever users (4.75) in 2006 is higher as compared to ever non-users (3.15) (Table 8). The cohort wise analysis also retains the same pattern of fertility outcome (Table 8A).

**Table 7:** Reasons (%) categorized by programme and non-programme factors among non-users for not intending to use contraception in future since 1990s.

Factors	Reason	2006	2000	1990	
<b>Programme</b>	Fear of side effects	5.4	3.4	2.8	
	Health concerns	3.6	3.9	4.6	
	Knows no method	2.2	n.a	10.5	
	Interferes with body's normal process	2	n.a	n.a	
	Costs too much	0.8	1.4	0.6	
	Knows no source	0.8	n.a	0.8	
	Inconvenience to use	0.3	n.a	0.2	
	Family planning facility not available	n.a	3	n.a	
	<b>Subtotal</b>		15.1	11.7	19.5
	<b>Non-programme</b>	Up to God	28.4	n.a	n.a
Can't get pregnant (infertile)		14.5	2.4	7.3	
Husband oppose		9.9	9.1	6.4	
Respondent oppose		7.7	1.1	1.6	
Already had menopausal		6	n.a	4.5	
Religious prohibition		5	6.8	13.2	
Infrequent or no sex		4.2	n.a	1	
Wants more children		2.9	23.2	42.7	
Don't know		2.2	1.4	1.6	
Breastfeeding		1.5	3.7	n.a	
No menstruation since birth		0.9	n.a	n.a	
Others		0.9	7.4	1.9	
Others opposed		0.4	n.a	0.2	
Have no children/newly married		n.a	17.6	n.a	
Natural spacing		n.a	15.6		
Missing	0.4	-	n.a		
<b>Subtotal</b>		<b>84.9</b>	<b>88.3</b>	<b>80.5</b>	
<b>Overall Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	

**Table 8:** Mean number of children ever born and born in five/one year prior to survey.

Time	Ever users'	Ever non users'	Current users'	Current non users
<b>2006</b>				
Children ever born				
	4.75	3.15	4.96	3.5
Children born in five year prior to survey				
	0.97	0.87	0.93	0.91
<b>2000</b>				
Children ever born				
	5.07	3.52	5.17	3.78
Children born in one year prior to survey				
	1.71	1.63	1.74	1.63
<b>1990</b>				
Children ever born				
	5.19	3.82	5.23	3.98
Children born in five year prior to survey				
	1.1	0.93	1.01	0.97

**Table 8A:** Cohort wise mean number of children ever born and born in five/one year prior to survey.

Time	Ever users'	Ever non users'	Current users'	Current non users
<b>1990 (age cohort: 25-29)</b>				
Children ever born				
	3.88	2.93	3.89	3.05
Children born in five year prior to survey				
	1.67	1.29	1.62	1.35
<b>2000 (age cohort: 35-39)</b>				
Children ever born				
	5.94	5.39	6	5.19
Children born in one year prior to survey				
	0.32	0.37	0.31	0.36
<b>2006 (age cohort: 40-44)</b>				
Children ever born				
	6.28	5.36	6.33	5.62
Children born in five year prior to survey				
	0.37	0.49	0.35	0.46

**Discussion**

This article was started with a speculation that program evaluation is not an exact science. If one set of criterion come up with the successful story; the other set of evaluation might give a different impression. This assertion is gently and quantitatively demonstrated in this article by judging a Pakistani case using a new framework.

Pakistan family planning program has a long history. The administrative mileage of FP starts from the Ministry of Health (MOH) (during the regime of President Ayub Khan) and presently ends up with the joint anarchy of Ministry of Population Welfare



and MOH. The FP programme of Pakistan has been changed roughly five times in its administrative control from its origin. Pakistan's FP programme remained a target oriented programme from its inception. The FP services can be fruitfully reaped if the sufficient demand exists in a society. Previously, sufficient demand (presently latent demand) of contraception is presumed in Pakistan. First of all, we foresee that a sufficient demand does not exist in the mind set of Pakistani society. This assertion is gently understandable if we look at the reasons of no use of contraception among the non-users (Table 8). As quantitative evidence, the findings from the nationally representative survey of Pakistan can be taken for granted. Overall, in 2006, from the supply side a smaller (15.1) percentage of women (who mentioned no use of contraception in future) thought that they would not use contraception because of supply side issues as compared to issues relating non-programme factors (84.9%). Notably, proportion of not using contraception due to programme side issues is gently decreased from 19.5 (1990) to 15.1 (2006) over 16 years. First, among reasons of supply side, the top priority statement of having the fear of side effects by using contraceptives is quite consistent with the choices made previously in selecting the birth control methods for the national FP programme. Previously IUCD and currently sterilization have been used as permanent birth control methods. These methods look to be inadequate from the society's point of view. Patriarchal male dominated society of Pakistan does not correspond with the concept of male sterilization as a matter of social prestige. Similarly, the female sterilization does not correspond within the joint family household where a senior non-sterilized woman is present. Regarding birth control methods lessons should also be learn in addition by understanding the FP success stories of other Islamic countries, for example Islamic republic of Iran. Iran's and Pakistan's FP programme are contemporary in nature. Iran has mainly focused on the use of pills in his first national FP programme and the Iranian Fertility Survey (as a part of World Fertility Survey) had shown the greater use of pills (85%) in 1976 [19].

Another point to note is that the Pakistan FP programme has been religiously discouraged since his glamour period (1965-69). Anti-FP views of religious alliance have created a gap between contraception and Pakistani nation. Ayub Khan's enthusiastic effort to promote population planning has faced a strong protest from religious parties [20]. The religious protest against FP played a key role in the dismissal of Ayub's Government. Literature comments about no change in fertility levels of Pakistan during 1970s but it does not highlight the core reason of no change [21]. The reason of religious prohibition towards contraception is also quite consistent with the 2006 PDHS findings. It is rank sixth (5.0 percent) from the responses of non-users who has intention not to use contraception in future (Table 8). The reason of religious opposition towards FP in Pakistan was rank second (13.2%). This clearly indicates the aftermaths of previous regime particularly Zia's cover of Islamization to protect his regime. A notable shift (from rank two to fifth) in religious perceptions of not using contraceptives is observed. A workable understanding regarding religious alliance should be developed before proposing new population policies. The supports of religious alliance on FP have shown a remarkable success in other Islamic countries, Iran, Jordon, Egypt and Bangladesh for example. In Iran's FP success, the Islamic directive (fatwa) regarding birth control from 'Khomeini' (Iranian ruler in 1980) given at the time of Islamic revolution in Iran had substantially motivated the nation [19]. Similarly, in Jordon, religious leader's favoring perceptions regarding contraception provide another guideline to voice the Pakistani religious alliance [22].

However, in first impression, low contraceptive use (29.9 % in 2006) might pinpoint the failure of FP programme of Pakistan. Previously many researchers have perceived this impression and have declared the Pakistani FP programme as unsuccessful. An understandable paradox emerges by re-looking at Table 8 and particularly noting the levels of contraceptive knowledge. This shows that Pakistani society keeps very high knowledge of contraception. The immediate question is how this knowledge is conceived? The straightest and simple answer is: Pakistani people have got this knowledge from their surroundings. The next relevant question is; who is disseminating this information? The simple answer is: it is spread by FP programme input. These explanations are consistent if we consider the responses shown in Tables 6, 6A, and 7. A smaller proportion (only 2.2%) among the non-users has no knowledge of any birth control methods. Which indicates the contraception knowledge is high and universal in Pakistan.

From the non-programme factors, the top priority reason of not using contraception was the response that 'it is up to God' (28.4%) in 2006 followed by the fear of infertility (14.5%: Table 7). in 1990, demand for more children (42.7%) was the main reason of not using contraceptives which is currently at rank 7 (Table 7). The possible explanation is: the response 'up to God' was not clearly asked in 1990-PDHS women's questionnaire indeed an option of 'others' reason was provided (for details see question numbers 337-338 of women's questionnaire). This shows a firm belief of a Pakistani woman to have more children in 1990s. This firm belief has been translated into 'up to God' in the past sixteen years. In sum, four non-programme reasons for no contraceptive use namely: up to god, fear of infertility, want more children and respondent oppose herself; explains that higher demand for fertility exists in Pakistan indeed the more demand for contraception which was assumed in previous research.

In additions to programme and non-program factors the findings regarding the fertility outcomes of women contraceptive users in Pakistan are higher as compared to non-users.

All these assertions high light a conclusive statement: FP programme of Pakistan is not unsuccessful indeed it is at more than satisfactory level. Speaking under the strategy of information education and communication (IEC), Pakistan's FP programme has effectively delivered the information, it delivered the education at the above satisfactory level, and communication needs some more strategic input. However, the decision to accept either the Pakistan family planning program complete failure or limited success is left on optimistic, pessimistic or neutralist reader. The present investigations based on proposed framework to look at the Pakistan's family planning story further suggest that a detailed look on the non-program factors is still required.

## References

1. Scriven M. Perspectives of curriculum evaluation. Chicago: Rand McBally. 1967.
2. Ali M, Cleland J. Contraceptive Discontinuation in Six Developing Countries: A Cause-Specific Analysis. *International Family Planning Perspectives*. 1999;21(3):92-7.
3. Chernichovsky D, Jon A. Cost Recovery and the True Cost-Effectiveness of Contraceptive Provision', *International Family Planning Perspectives*. 1993;19(4):129-33.
4. Mensch B, Fisher A, Askew I, Ajayi A. Using Situation Analysis Data to Assess the Functioning of Family Planning Clinics in Nigeria, Tanzania, and Zimbabwe. *Stud Fam Plann*. 1994;25(1):18-31.

5. Simmons GB, Balk D, Faiz KK. Cost-Effectiveness Analysis of Family Planning Programs in Rural Bangladesh: Evidence from Matlab. *Stud Fam Plann.* 1991;22(2):83-101.
6. Lapham RJ, Mauldin WP. National Family Planning Programs: Review and Evaluation. *Studies in Family Planning.* 1972;3(3):29-52.
7. United Nations Manual IX: The Methodology of Measuring the Impact of Family Planning Programmes on Fertility, New York: United Nations. 1979.
8. Nasir JA, Hinde A, Padmadas S. What can Proximate determinants of fertility can tell us about fertility transition in Pakistan. *Pak J Commer Soc Sci.* 2015;9(3):799-15.
9. Robinson WC. Family Planning in Pakistan 1955-1977: A Review. *The Pakistan Development Review.* 1978;17(2):233-47.
10. Robinson WC, Shah MA, Shah NM. The Family Planning Program in Pakistan: What Went Wrong? *International Family Planning Perspectives.* 1981;7(3):85-92.
11. Robinson WC. The "New Beginning" in Pakistan's Family Planning Programme. *Pak Dev Rev.* 1987;26(1):107-18.
12. Rukanuddin AR, Hardee-Cleaveland K. Can Family Planning Succeed in Pakistan? *International Family Planning Perspectives.* 1992;18(3):109-21.
13. Mahmood N, Ali SM. Population Planning in Pakistan: Issues in Implementation and its Impact. *Pak Dev Rev.* 1997;36(4):875-88.
14. Ali SM, Zahid GM. Population Planning in Pakistan: How to Meet the Challenge?. *The Pakistan Development Review.* 1998;37(4):523-40.
15. National Institute of Population Studies [Pakistan] and ICF International Pakistan Demographic and Health Survey 2012-03, Islamabad, Pakistan, and Calverton, Maryland, USA: NIPS and ICF International. 2013.
16. National Institute of Population Studies [Pakistan] and Macro International Inc. Pakistan Demographic and Health Survey 2006-07, Islamabad, Pakistan: National Institute of Population Studies Pakistan and Macro International Inc. 2008.
17. National Institute of Population Studies [Pakistan] and Macro International Inc Pakistan Demographic and Health Survey 1990-91, Islamabad, Pakistan: National Institute of Population Studies and Macro International Inc. 1992.
18. Hakeem A, Sultan M, din Fu. Pakistan Reproductive Health and Family Planning Survey 2000-01: Preliminary Report, Islamabad, Pakistan. 2001.
19. Aghajanian A. Family Planning and Contraceptive Use in Iran, 1967-1992'. *International Family Planning Perspectives.* 1994;20(2):66-9.
20. Khan A. Policy-making in Pakistan's population programme. *Health Policy and Planning.* 1996;11(1):30-51.
21. Shah IH, Pullum TW, Irfan, M. Fertility in Pakistan during the 1970s. *J Biosoc Sci.* 1986;18(02):215-29.
22. Underwood C. Islamic Precepts and Family Planning: The Perceptions of Jordanian Religious Leaders and Their Constituents. *International Family Planning Perspectives.* 2000;26(3):110-36.