

# CAUSES AND POLICY RECOMMENDATIONS FOR LOW CONTRACEPTIVE USE IN PAKISTAN

## Fizza Raza

London School of Economics and Political Science, United Kingdom

According to Pakistan Demographic and Health Survey (2012-13), Pakistan is the sixth most populous country in the world with existing level of unmet demand for family planning services being as high as 20%; however, the Contraceptive Prevalence Rate (CPR) continues to remain lowest in the region of South Asia. This study is undertaken to analyse the factors that hinders the translation of fertility desires into real contraceptive behaviour. It will first examine the existing literature on the issue to analyse the trends in contraceptive use with respect to various background characteristics such as place of residence, level of education and provincial affiliation. The results of research indicate that contraceptive use differentials have reduced with respect to the variables named above, owing to the success of Lady Health Worker (LHW) programme. However, various other socio-economic and psychological factors such as opposition from husbands and mother in laws, fear of side effects and supply side difficulties as indicated by previous studies on same subject continues to hinder the use of contraceptives in the country.

Keywords: Contraceptives, Pakistan, Family Planning, Obstacles.

## Introduction

Pakistan covers an area of 796,095 square kilometers. It has been classified as a low middle-income country, according to the World Blank classification, with the GDP being \$236.6 billion (Bank, 2013) and population mounting up to 184.5 million in 2012-2013 (Pakistan, 2013). The population of the country soon after its partition was 32.5 million in 1951. At that time, it was ranked as 14<sup>th</sup> most populous in the country. Since then, there has been a 5.5 fold increase in the overall population level of the country(PDHS, 2013). According to UN estimates, Pakistan would be the world's fourth largest country in terms of population by 2050, having a population of 308 million (UN, 2013). The main reason suggested for such large increase in the population has been attributed to a smaller decline in its fertility level as compared to other countries.

Figure 1 shows the past trend of fertility patterns of the country. The major fertility decline began following the decade of the 1980s, when TFR fell from 7 children per women to 3.8 in 2012-13 which is still not just above the replacement level of 2.1 children per woman, but also higher than the fertility levels of other countries in the region for instance, TFR in Bangladesh has been reported as 2.3 and 2.8 in India (Kaneda, 2013).



Source: Pakistan Demographic Health Survey 2012-13

Figure 1. Total Fertility Rate

The justification for the higher level of fertility cannot be found in differences in the socio-economic variables between Pakistan and its neighbouring countries (Sultan, Cleland, & Ali, 2002, p. 1168). Pakistan has a higher proportion of urban population i.e., 38% as opposed to Bangladesh (33.5%) and India (32.4%)(UN, 2013). On demographic account, all countries are mid may through demographic transition and have entered the period of youth bulge which is described as the situation in where 20% or more of the country's population is in the age bracket 15-24 years (A. G. Khan, 2010). Nor any other empirical evidence has been found that shows a preference towards larger family size in Pakistan. However, the difference stems from the inability or lack of willingness on part of Pakistani couples to translate their fertility preferences into desired reproductive behaviour. This can be seen from the clear difference that exists in the unmet need for family planning between Pakistan and other countries in the region. It was reported 13.5% for Bangladesh in 2011 (BDHS, 2011) and 13.2% for India (Roy, 2012) whereas the figure is as high as 20.1% for Pakistan (PDHS, 2013).

## History of Family Planning Programmes

In order to curb the high population growth rates of the country, the Family Planning Association of Pakistan was the first Non-Governmental organization to provide family planning (FPAP) services to the women. Soon, thereafter, the government joined hands with FPAP by providing assistance of 0.5 million as part of the first five-year plan (1955-1960) (PDHS, 2013, p. 91). Since the effects of population growth rates on developmental efforts were quite evident; therefore, the population control became one of the main priorities of the government from 1960 onwards. Apart from giving key importance to population control measures in the second five-year plan (1960-1965), the Ayub's government was one of the first among Asian countries to formulate a National Planning Policy in 1962. (Rukanuddin & Hardee-Cleaveland, 1992)

However, the programme initiated then could not bring significant results because, for the next 20 years, family planning did not receive much support from the governments in power. The next Prime Minister, Zulfiqar Ali Bhutto did not have population control as the main priority on the agenda. The reason being, difficult political situation especially the separation of East Pakistan from West Pakistan as result of the bloody war, low economic growth accompanied by the wave of nationalization, two oil price shocks and lastly the association of population control with the agenda of former government of Ayub Khan who happened to be one of the worse political rival of Bhutto's government (Sultan et al., 2002, p. 1168).

Unfortunately, things did not improve with the coming of the military dictatorship of General Zia ul Haq in 1977 which lasted for eleven years. Since the new government enjoyed most of its political

support from the conservative segment who opposed the use of contraceptives and other family planning methods on the basis of religious grounds (A. Khan, 1996), funds from family planning programmes were largely withdrawn. To add on, the promotional campaigns and advertisement of family planning messages were strictly banned(Sultan et al., 2002, p. 1168).

Therefore, due to frequent changes in the political environment and consequently in policy making, the country could not experience positive results in bringing down its fertility levels and increasing the use of contraceptives. It was not until the 1990s when the situation started to change. The early 1990s have been termed as a "turning point" in the history of national family planning policy of the country. Two set of outreach workers, 12000 village-based family planning workers and 33000 lady health workers were appointed under Eight-five year plan (1993-1998) to spread the message of family planning to women residing in rural settings (Hakim & Miller, 2000). Following that, 1995 also witnessed the explosion of the social marketing campaign of contraceptives by the name of "Greenstar". Under the banner of Greenstar, franchised clinics were established all over the urban centers in order to fulfill family planning needs (Toll & Agha, 1999). The number of such clinics has arisen from being 1800 in 1998 to over 7000 in 2014 (Greenstar Social Marketing, n.d.). These efforts resulted in finally bringing down the fertility rate and increasing the contraceptive use in the decade of 1990s as can be seen from Figure 1 and 2.

## **Research Objectives**

Despite the initial efforts of the government, Pakistan still has not reached the level of replacement fertility; the current TFR being 3.8 (PDHS, 2013). There are various forces contributing to high levels of fertility in the country, however, the focus of this paper is on contraceptive use. The following figure shows that contraceptive use has been increasing over time but still not even half of the currently married women use contraception.



*Source: Pakistan Demographic Health Survey 2012-13* **Figure 2.** Percentage of currently married women using any method of contraception

The situation of Pakistan presents a paradox when it comes to the question of contraceptive use. Westoff & Bankole (2000) have given this problem the name of "unmet need for family planning" which can be explained by the discrepancy that exists between the fertility preferences and current use of contraception. The figure for the current unmet need for family planning in Pakistan is 20.1%(PDHS, 2013). The major problem being faced by the country is not just the high level of presence of "preference-use gap" but its maintenance at very high level for decades as shown in figure 3.



Figure 3. Percentage of currently married women with unmet need for family planning services

Therefore, the main research objective of this paper is to investigate the reasons behind this paradox. While, 48% of women reported ever use of contraception only 35% are currently using at least one method of contraception (PDHS, 2013); coupled with high levels of unmet demand as shown in figure 3. In light of the situation presented above, the research questions are: What are the latest main factors that inhibit the couples especially women to initiate or continue their use of contraceptive methods? What are the recent trends with respect to contraceptive use among the currently married women in Pakistan? What is the way forward? What practical policies can be implemented by government and other health providers to increase the overall contraceptive use in the country?

## Methodology and Data

The focus of this study is to investigate the various reasons that have acted as an obstacle in increasing the overall contraceptive use in the country. It will be done by adapting Easterlin Synthesis (Easterlin, 1975) framework to review the literature pertaining to the obstacles of contraceptive use. The framework works in a way that it divides any regulation on fertility into two parts; the first one determines the level of motivation to avoid pregnancy, and the second one focuses on the costs of regulating fertility which may not only be restricted to monetary costs but would also encompass the social, psychological and cultural costs. An important thing to note is that both of these factors are not mutually exclusive since motivation to avoid any further births may overlap with hindrances created by various social and cultural factors which are mainly dealt in the second part.

After that, trends in the contraceptive use would be analysed by mainly employing data from the three DHS surveys being undertaken in Pakistan: 1990-91, 2006-07 and 2012-13. These surveys are a national representation of women ever married between the ages 15 to 49 years. The relationship of use of contraceptives over time would be analysed with respect to the background characteristics of the users, mainly a place of residence, education level and the province they belong to. For illustrative purposes, the

line graphs, bar graphs, column charts, and tables would be used in order to present the data in the compact and clear way. The last section would focus on policy recommendations that can be adopted by the government in order to increase the use of contraceptives nationwide.

## **Obstacles to Contraceptive Use**

*Willingness to avoid pregnancy:* The first step to adopting any family method to avoid or postpone childbirth stems from the inner desire of a woman to do so which clearly varies from person to person. Casterline, Sathar, & Haque (2001, p. 7) indicate that an important factor which reduces the motivation to use any birth control methods pertains to the perception of low risk of conceiving. Similar, results have been reached upon in a research study undertaken in province of Luzon, Philippines (Casterline, Perez, & Biddlecom, 1997) and by Westoff and Bankole (1995) in a multi-country analysis of DHS data conducted to investigate the issue of unmet need where weakly held preferences were attached great significance when it comes to the question of preference-use gap.

One of the major determinants of the willingness to avoid pregnancy relates to the women's knowledge of contraception (N. Mahmood & Ringheim, 1996). Sirageldin, Norris, & Hardee (1976) during their research on Pakistan found out that knowledge of contraceptive methods was already quite high back in the 1960s following the establishment of National Family Planning Programme (NFPP) back in 1965. 75% of women living in rural areas and 84% of married females in urban areas were aware of at least one available contraception method. However, the percentage goes down to only 21% in rural settings and 25% for urban areas when it comes to the question of information regarding the cost and point of supply of contraceptives (Sirageldin et al., 1976, p. 145). Hakim, Sultan, and Uddin (2001) reported that along with the rise in contraceptive awareness up to 96% for 2001, an improvement has been seen in knowledge regarding the key sources of supply. 76% of the currently married women reported being aware of the place from where the tubal ligation can be done (Hakim et al., 2001).

Although, the knowledge barrier has been regarded as insignificant by a group of researchers (Cleland & Shah, 1993; Hashmi, Alam, & Sheraz, 1993) when it comes to the issue of low contraceptive use in Pakistan but a thorough review of literature reveals that a major obstacle in increasing the contraceptive use in the country relates to the myths and misconceptions among masses(Casterline et al., 2001). Nishtar, Sami, Alim, Pradhan, and Hasnain (2013) carried out an with the providers of family planning services. The findings of the research exposed a strong resentment towards vasectomy (male sterilization) as it is perceived to create physical weakness and impotency.

*Social Costs: Opposition from husband and mother in law:* Sirageldin et al. (1976) conducted a survey on Pakistani wives during 1968-69 as part of National Family Planning Programme. The result of the survey indicated that 79% of the rural wives reported their husband's disapproval against family planning initiatives. To add on, Stephenson and Hennink (2004) conducted a study on urban poor women of Pakistan by relying on data calculated from a household survey including 5338 married women of reproductive age. The findings concluded that a woman is 10 times more likely to use any contraceptive measure if the husband allows the use of birth control measures (Stephenson & Hennink, 2004, p. 16).

In Pakistan, the traditional joint family system is still widely practiced not only in rural areas but also in urban settings and in such households mother in law is an authoritative figure. Similar trends have been witnessed in India as well (Das Gupta 1985, McNoy 2005). Therefore, the power of major household decisions including the number of children a couple is going to have rested with the mother in law (Jejeebhoy & Sathar, 2001).

Fikree, Khan, Kadir, Sajan, and Rahbar (2001) undertook a three-tier research by conducting interviews with women, their husbands and mother in-laws' living in the slum area of Karachi, Pakistan in order to determine the factors that influence a couple's use of contraceptives. The results of the study indicated that woman's autonomy measured by her ability to influence household decisions and to leave house unaccompanied by a male family member has little impact in influencing her choice of contraception use as compared to her mother in law's view with regard to family planning services. In

addition, women who reported to have discussed the ideal family size and use of family planning methods with their husbands and mother in laws were twice more likely to use contraceptives as compared to those women who did not have any such discussion(Fikree et al., 2001). Also, during multivariate regression, a significant relation was found out between women's contraceptive use and her mother in law's education level (Fikree et al., 2001 p.133). Similar results were reached upon a study conducted in Bangladesh, where Bhuyan (1996) reported a rise in the adoption of family planning methods with an increase in mother in laws' education.

To add on, similar research method was adopted by Masood Kadir, Fikree, Khan and Sajan (2003) to directly interview mother in laws' to know their perception about family planning practices. Apart from confirming the results shown by Fikree et al., (2001) i.e., mother in-laws' have a strong influence in deciding the ideal family size and use of contraception, authors also shed light on various reasons for opposing the adoption of family planning methods. A major one attributes to the fact that husbands and mother in laws have a stronger liking towards larger family size as compared to wife/daughter in law's ideal family size. In a similar manner, both the mother in laws and their sons have smaller difference when it comes to the desire of having more boys which are in line with the belief and practice system of traditional patriarchal societies (Masood Kadir et al., 2003); since male heir is thought to carry the family name and lineage (Stephenson & Hennink, 2004, p. 556). However, since daughter in law has to undergo the pain of pregnancy and then bear the whole responsibility of looking after the children herself, therefore, her perception of ideal family size is smaller as compared to other family members (Masood Kadir et al., 2003).

To add on, religious reasons are also quoted by the mother in laws as a major reason for forbidding their daughter in laws from using any modern methods of contraception. Masood Kadir et al. (2003, p. 551) found out that while 75% of mother in laws and sons in the sample size agreed that Islam does not allow family planning, the counter viewpoint was only propagated by only 3% where both husband and mother in laws believed that Islam favourably looks upon contraception and other family planning measures. Furthermore, Mir and Shaikh (2013) found out that in rural areas, religious reasons were one of the main reasons given by men for not adapting any modern methods of contraception.

Similar results were found in a quantitative study undertaken by National Institute of Population Studies that cited that in those communities where Ulemas (Religious leaders) allowed the use of contraceptives, women were 1.7 times more likely to opt for any birth control method as compared to those communities where Ulemas did not in favoured the use of such measures (Raza, 2012). To add on, Agha (2010) collected information on psychological factors that have the ability to affect the contraceptive use. The results of the research clearly pointed out that perception of support from in-laws was a major determinant affecting the intention to use contraceptives of married women.

However, Casterline et al., (2001) who undertook the study on Punjab based on 1996 household survey data have reached different conclusions. The research conducted interviews with wives and their husbands separately asking both similar sets of questions regarding the contraception behaviour. In those cases, where wives reported that their husbands are against the use of any contraceptives, 61% of the husbands' explicitly denied any opposition to the family planning methods. Therefore, the authors have concluded that in many cases miscommunication and absence of spousal communication have to lead the women into wrongly believing that their husbands disapprove the use of contraceptives (Casterline et.al., 2001, p 26).

*Side Effects:* A large amount of empirical evidence has been collected from diverse settings that recognize the health concerns as a major obstacle to contraceptive use worldwide (Asturias de Barrios et al., 1998; Casterline et al., 1997; Stash, 1999). Specifically talking about in the context of Pakistan, Casterline et al. (2001) discusses how the side effects affect the use of contraceptives. The users are not only afraid of physical harm they may experience as a result of using contraceptives but are also concerned about the financial loss and time that would be incurred in dealing with the side effects. Women also fear that it may create a problem in spousal sexual relations. For instance, in some settings side effects are not just interpreted in terms of medical reasons but instead seen upon as a sign of divine

disapproval for intruding in the matters to be decided by God i.e., no of children to be born (Casterline et al., 2001, p. 11).

Pakistan is already amongst one of the few countries with very low Contraceptive Prevalence Rate i.e., 35% (PDHS 2012-13) and one of the major challenged being faced by the national family planning programme to increase the CPR pertains to the high level of discontinuation rate (A. Mahmood & Naz, 2012). The following table shows the high discontinuation rate faced by the country over time with regard to limiters and spacers.

One of the major reasons contributing to the excessive discontinuation of contraceptive use pertains to the real/perceived fear of side effects of modern contraceptives, especially the reversible ones mainly including IUDs, condoms, and pills. In a study conducted by USAID to evaluate the contraceptive use patterns in Pakistan, it was found that side effects were cited as a major reason(43%) for discontinuation of contraceptive use in limiters and second largest reason(26%) for spacers (A. Mahmood & Naz, 2012). Moreover, the latest report of PDHS (2012-13) uncovered the fact that out of total contraceptive use, 37% users discontinue within 12 months of initiation of a method; out of which, 10 percent of discontinuals occur due to the side effects faced by the users.

*Supply Side Issues:* The last barrier that will be discussed in this section relates to the supply side. Access to health services especially the reproductive ones remains a critical issue in developing countries(Robey, Ross, & Bhushan, 1996), Pakistan being no exception. A large number of studies have concluded that difficulties in accessing the family planning services act as a major source in increasing the unmet demand and the problem is more severe in rural settings as compared to the urban areas (Rosen & Conly, 1996); (Rukanuddin & Hardee-Cleaveland, 1992). These results are backed up with empirical evidence by N. Mahmood and Ringheim (1996) who found out that the women's knowledge of key supply points of family planning services is the most important determinant of contraceptive use.

There are mainly four service delivery points of contraceptives under the public sector; Lady Health Workers, Family Welfare Centers, Rural Health Centers and Basic Health Units (USAID, 2013). The Central Warehouse (CWH) for the Countrywide stock of contraceptives is located in Karachi. It comes under the Planning and Development Division of Federal Government. On quarterly basis, the contraceptives are supplied from CWH to Executive District Officers (EDOs) of Health Departments, Punjab Rural Support Programme (PRSP) and to District Population Welfare Offices (DPWOs). While the FWCs and NGOs get their supply of contraceptives from DPWOs, EDOs are the major supplier for the programme of Lady Health Workers, RHCs, and BHUs. The table below shows the percentage of various service delivery points with at least one method of contraception available in 2012.





Figure 4. Percentage of facilities with at least one method of contraception available

While FWCs have the best record of keeping adequate stock of contraception, the reason behind this success can be attributed to their long-term association with the agenda of family planning programme; and their main role being the provider of family planning services (USAID, 2013). RHCs and BHUs and PRSP facilities have modest levels of supply of contraception, the main reason being pointed out in USAID (2013) report is associated with the overall low stock of contraceptives available in CWH, therefore, the method of rationing was adopted while distributing the supplies and consequently many of the facilities did not get their due share.

The above figure shows an alarming situation as far as the LHW programme is concerned, almost half of the workers were not equipped with even one method of contraception. The main reason for this major non-availability relates to the transportation issues being involved in the delivery of stock from CWH to PPIU and then to the districts from where the LHWs get their due share of supplies from the lady health supervisor they are attached to. This long channel of transportation cause delays and inefficiencies. Even when CWH has an adequate stock available, it might not be available to LHW since they are dependent on intra-district transport network as well for the final delivery of the stock (USAID, 2013).

LHWs programme has a widespread network of more than 90,000 workers, covering 60% of the total population of the country which mostly includes the rural dwellers (Hafeez, Mohamud, Shiekh, Shah, & Jooma, 2011). The CPR is 50% higher in the areas covered by the programme as compared to those where it is not operational (Coren, 2005). However, there exist various functional difficulties including management issues with the programme that has been creating supply side barriers for improving the overall contraceptive usage rate.

Despite its major success, the LHW programme still remains unsuccessful in fulfilling its main objective of increasing CPR in rural areas from 22% to 42% and in urban from 40% to 58% (OPMG, 2009). While there have been practical difficulties as well, social and cultural reasons are also responsible for this. Mumtaz (2012) by carrying out a quantitative study in a district of Punjab, Attock found out that women who were from the Biradri (family clan) of LHW reported the frequency of visits, timely supply of condoms and overall satisfaction twice more than other women, irrespective of their house location. The study shows how gendered and socioeconomic hierarchies construct various obstacles for the LHWs to provide door to door service. Since they are also subject to same mobility restrictions like other females, their profession is not given due respect rather they are looked upon in the community especially from the people of a higher caste.

To add on, Kamran, Khan, and Tasneem (2014)cites that the involvement of lady health workers on projects other than family planning especially polio eradication has diverted the attention from their main project. This has resulted in an increase in nonavailability of LHWs at health clinics and therefore makes it difficult for the people to acquire knowledge about contraceptives and use them when needed the most (Kamran et al., 2014, p. 16).

Moreover, physical accessibility may also play an important role determining the use of contraceptives. Sultan et al. (2002) undertook a study on the rural areas of the country and found out that women who lived within the distance of 5 kilometers from two community health centers had higher chances of using a modern method of contraception. The reason being, as the distance increases, the cost of travel rises and so does the likelihood of women facing higher socio-cultural barriers. The most important one being the issue of "purdah" meaning a woman should better remain within the boundaries of her house in order to avoid coming into contact with any outside (the one who is not part of the family) male member (Lasee & McCormick, 1996).

Another supply-side barrier relates to the lack of knowledge about the proper use is not just restricted to the users of contraceptives but also encompass the providers as well. Nishtar et al. (2013) found out that few of the providers themselves were not convinced about the usefulness of the modern methods of contraceptives. For instance, one of the interviewee in an exploratory qualitative research conducted in the Korangi town of Karachi stated:

"I don't recommend contraceptive methods like IUCD, injections, and pills to youth females and maximum I counsel them for using condoms or natural family planning methods" (Nishtar et al., 2013, p. 5).

## **Trends in Contraceptive Use**

*Place of Residence:* Figure 5 shows that over time the differences in contraceptive use with regard to the place of residence have reduced. While, the contraceptive use, undoubtedly remains high over time in urban settings as compared to rural areas, the growth in contraceptive use has been higher in rural areas, especially in the decade of 1990s and early 2000s. This can be attributed to the successful implementation of LHW projects in rural areas of the country with the objective of increasing CPR by providing door to door service (Douthwaite & Ward, 2005). A study undertaken by Sultan et al. (2002) to assess this new approach adopted by the government found that women who were living within the distance of 5 km from community-based worker were 1.74 times more likely to use a method of contraception than their other counterparts. Therefore, as LHW programme helped to reduce the physical accessibility barrier to avail family planning services in rural settings as well so this resulted in a higher growth in the use of contraception in rural as compared to urban areas. Moreover, women in rural areas now have more exposure to media promoting family planning messages which has also played a key role in increasing the use of contraceptives in rural residents(Carton & Agha, 2012).



Source: Pakistan Demographic and Health Survey 2012-13

Figure 5. Percentage of any method and modern method of Contraception among currently married women in rural and urban areas

To add on, it is not much difficult to explain a higher use of contraceptives in urban settings relative to the rural ones. The most important socio-economic factor that affects fertility decisions is female education (Saleem & Bobak, 2005). In that context, literacy levels are higher in urban settings, 28% of women in urban areas have secondary education as opposed to only 13% in rural areas(PDHS, 2013) which can help explain higher CPR in urban centres as education has a positive correlation with contraception use (Lasee & McCormick, 1996), discussed in detail in the following section.

*Education:* Now we will analyse the change in trends of contraception use with respect to the level of women's education; since it remains one of the most important factors in the list of socio-economic factors determining the utilization of family planning services (Magadi, Madise, & Rodrigues, 2000; Obermeyer, 1993). This is because the rise in female's education operates through both direct as well as indirect means. Apart from simply raising awareness about the health issues, educated females enjoy increased autonomy in household decision-making. They have control over at least those decisions that

affect their health directly (Obermeyer, 1993) as opposed to illiterate females who are totally dependent upon the will of their husbands and mother in laws in any decision.

However, it is important to recognise that the belief that illiterate people do not want to limit the size of the family is a mere misconception. As Figure 6 shows that females with no education have experienced a lager increase in the use of contraceptives as compared to women having some education. This goes back to the issue of rising in awareness created by LHWs especially in rural areas (Douthwaite & Ward, 2005). However, the main problem with no or less education is that these women are not exactly aware of the various contraception methods, their use, availability and possible side effects which inhibit them from translating their fertility preferences into reality (Kamran et al., 2014).



Source: Pakistan Demographic and Health Survey 2012-13

*Trends by sub-national regions:* Figure 7 shows that there exist significant differences in use of contraceptives in various provinces of the country. Punjab has the highest use of contraceptives and has maintained its position till now. One of the main reasons being high coverage ratio of LHW programme which covers 55% of the population(UNDP, 2011c).Moreover, research shows that over time one of the major obstacles of husband's opposition (N. Mahmood & Ringheim, 1996) has been losing its importance in this province. In International Conference on Family Planning conducted in Ethopia, Kamran, Sathar, Ashfaq and Ashraf (2013) presented their research results of increasing the involvement of men in reproductive and fertility issues have brought about positive results. A qualitative study was undertaken in five districts of Punjab based on FALAH data by conducting focus groups and in-depth interviews of sample male population. The findings of the study were that overall there has been a positive change in the attitude of men towards family planning methods. They are more inclined to use contraceptives. However, the basic obstacles they face now include lack of knowledge about certain FP methods, fear of side effects and inadequate provision of family planning and contraception providers (Kamran et al., 2013).

Figure 6. Use of modern method of contraception among currently married women (15-49 years) with varying level of education



Source: Pakistan Demographic and Health 2012-13

Figure 7. Trends in Contraceptive use with respect to provinces

Sindh is the second most populous province of Punjab. However, it suffers from a major problem of low coverage of LHW which is only 46% for this province, while the national average is 83% (PMDGR, 2012). Moreover, there also exists the issue of inconsistencies in coverage within the districts. While Naushero Feroz (87%) and Tando Allah Yar (80%) are on the better end of a spectrum, Karachi and Jacobabad suffer from low coverage rates, as low as 21% and 26% (UNDP, 2012). Moreover, pronounced differences have been reported in CPR between rural and urban areas. MICS (2008) cited while 46% of urban married women are using contraceptives, the stat goes down to only 20% for their rural counterparts. The major reasons being identified were strict purdah observance, high rates of illiteracy and poverty found in interior areas of rural Sindh.

KPK has achieved an almost similar level of CPR as Sindh despite having low literacy rate(52% as opposed to 60%) (PSLM, 2012) and being far away from Central Warehouse, the key supply point of all contraceptives(USAID, 2013). The main reason being broader coverage of LHW in the province; it serves around 58% of the population. Overall, the LHW coverage is not as skewed amongst the district as it is in the case of Sindh. More than half of the districts enjoy the coverage ratio of at least 50% or more (UNDP, 2011b, p. 54). However, this percentage goes down to quarter in the Upper Dir and Hungu districts and is almost negligible in an area of Kohistan because of really low levels of female literacy which makes it difficult to hire and train local women to work as LHW. Moreover, conservative society and other cultural reasons make it even more difficult for such program to operate(UNDP, 2011b).

To add on, a difficult political situation of the area coupled with the problem of internally displaced people has diverted the attention as well as funds of the provincial government from improved health specifically rising the use of contraceptives to other issues mainly provision of improved security to the citizens(PMDGR, 2012).

Balochistan has the lowest CPR amongst all provinces and the trend has remained the same since forever. According to the first (UNDP, 2011a) report to check the progress of Balochistan with respect to the Millennium Development Goals(MDGs), it was found out that only one-third of the population has access to LHW services. It is the biggest province in terms of area, encompassing a land of 347,190 square kilometers but is least densely populated, having a sparse population of 8.8 million(UN, 2013). Therefore, it becomes difficult to provide family planning services to such widely spread sparse population, on top of that, the rugged terrain and rough topography have created serious infrastructural problems for both clients and health service providers.

Only 28% of province's population has access to LHWs as opposed to the national average of 83% (PMDGR, 2012); with only two districts, Chaghi (88%) and Kharan (81%) matching the national average level. Apart from that, the overall coverage ratio is highly skewed over the whole region. Quetta, the most densely populated district has 55% coverage ratio, whereas, in 12 districts only 30% of the population has accessibility to LHWs, and the ratio goes even below than 10% for three districts (Dera Bugti. Qila Abdullah and Lolahlai) (UNDP, 2011a).

## **Discussion and Policy Recommendations**

This paper has shed light on various obstacles to contraceptive use that are responsible for low CPR in the country. The analysis with respect to the sub-national regions in the previous section highlights that both supply, as well as demand-side reasons, are equally responsible for contraceptive differentials between different regions of the country. Sindh despite having higher literacy rate than KPK could not maintain a high differential in its contraceptive use because of low coverage ratio of lady health workers in the respective province.

**Obtaining Religious Support:** The earlier section on obstacles to contraceptive use clearly mentions that one of the main reasons for an opposition of contraceptive use by husbands and mother in laws is based on religious grounds. It is commonly believed that Islam does not allow the use of contraceptives or other family planning methods especially the modern ones to limit the size of the family (Mir & Shaikh, 2013). This situation can however, be easily dealt by getting a verdict from religious leaders which explicitly states that family planning is consistent with the principles of Islam as done by Iran where family planning was quoted be a social responsibility of all individuals in the weekly Friday sermons by Imam(the one who leads the prayers- highly respected figure) of mosques (Ayesha Khan, 2012, p. 2). Few efforts have already been made in this regard, FALAH, USAID funded a project, tried involving Ulemas (Religious leaders) to promote the family planning methods, with a strong emphasis on birth spacing for the health benefits of both mother and child (A. Mahmood, Arshad, & Sadiq, 2009).

Furthermore, there exist various misconceptions with regard to family planning from it being regarded as a strategy adopted by Western countries to limit the Muslim population and family planning being equated to infanticide. Family Advancement for Life and Health (FALAH) conducted training workshops for reproductive health service providers, the administrative staff and faculty members of medical colleges to clarify any misconceptions on the issue of family planning with regard to Islamic practices. During the end of the session videos of prominent religious scholars were shown who endorsed the use of family planning practices. A positive feedback was received by a faculty of medical colleges who accepted that such workshops and training sessions have helped them overcome many of their misconceptions which are definitely in future going to help them in convincing their student, future doctors, to actively endorse the use of family planning methods (Ali Muhammad Mir, 2013).

While these training sessions were useful in removing the misconceptions in mind of medical practitioners and faculty and staff of medical colleges, on a general scale until now not much work has been done to gain the support of religious scholars in favour of FP services. Pakistan needs to follow the suit of its fellow Muslim countries, while the case of Iran and Bangladesh has already been mentioned. Egypt obtained the "Fatwas" endorsing the use of contraceptives from religious heads Al-Azhar University, a prestigious and well-known name in the world of Muslim learning. Moreover, Morocco was one of the first Islamic countries to organise a conference as early as in 1971 by the name of "Rabbat Conference" to highlight the fact that measures of FPP are in line with the teachings of Islam (Ali Muhammad Mir, 2013). Therefore, the immediate steps that government should undertake to increase the religious acceptance of the use of contraceptives are as follows:

• Use of sermons, held after congregational prayers on Fridays to encourage and promote the use of birth control measures.

- Extensive use of print and electronic media to show that prominent religious leaders of different sects highly endorse the modern methods of contraception.
- Conducting awareness and training workshops not just for the general public but also for health providers to remove any misconceptions as done by FALAH.

*Motivating the young couples:* A positive relationship has been observed between a rise in contraceptive use, larger number of children alive and rise in parity(Demographic, 1992; DSouza, 2003). According to PDHS (2013), the mean age of marrying is 19.5 years for females and 24.7 years for males. While people tend to marry at a younger age, however, the stats show that use of contraceptives at teenage is lower in Pakistan as compared to the advanced countries (Saxena, Oakeshott, & Hilton, 2002). This shows there is a need to promote the family planning practices among youngsters so they start the use of contraceptives since the beginning of their married life, make informed reproductive decisions and avoid any unplanned pregnancies or births (Bibi, Memon, Memon, & Bibi, 2008).

An effective way to introduce the methods of contraception in young couples could be through the creation of awareness regarding pregnancy spacing techniques (A. G. Khan, 2010). Following that, the pregnancy spacing methods should be available at both rural and urban health centers. The FP awareness campaigns have been promoting the gap of at last 36 months or more between the two births. According to PDHS (2013), 69% of births happen within 36 month period from the birth of the last child and 37% occur in the interval of even less than 24 months. These trends indicate that in order to bring down fertility levels and increase the use of contraceptives there is a dire need to promote the idea of pregnancy spacing, especially among young couples. In rural areas, LHWs can be used to spread the message. Moreover, display of education material on health centers can also help to increase the awareness regarding pregnancy spacing ;as pointed by Hamid and Stephenson (2006, p. 74) that women visiting those health clinics that had educational material on display were more likely to opt for a modern method of contraception then women visiting other clinics.

*Widening the target audience*: The section dealing with obstacles to contraceptive use has highlighted that the opposition in family planning measures by husbands has remained one of the major determinants of low contraceptive use (N. Mahmood & Ringheim, 1996). However, the research shows that in recent few years, positive change has been witnessed in an attitude of male members towards the use of family planning services especially in the province of Punjab (Kamran et al., 2014). The main reason cited by researchers for changing behaviour patterns include the rise in the cost of living coupled with the desire to provide high-quality education and health services to the existing.

Since the men from Punjab have developed a preference for smaller family sizes; there is a need to seize this opportunity as earliest as possible. Currently, due to supply inadequacies, the male members are unable to translate their preferences into reality. From the complete absence of family planning services in few areas to poor quality in others including the inability of the service providers to deal with the side effects has served as the main deterrent in increasing the contraceptive use and fulfilling the preference-use gap.

There is a need to develop an FPP with the main focus on male population. The starting point for such programme should be Punjab and then spread its roots to other provinces as well. It can have male health workers equivalent to LHWs as suggested by men themselves in the study undertaken by Kamran et al. (2014) in few districts of Punjab. They would act in a similar manner as LHWs apart from educating men regarding various methods of birth control, their method of use and possible side effects; they will also serve as the main supply point in the area.

To add on, Agha (2010) discusses the concept of "complementary target audience ", meaning in addition to the females, the family planning promotional and awareness campaigns should target the husbands and mother in laws as well. The similar issue has been highlighted in the past as well. For instance, a study conducted in 5 districts of Punjab under the Population Council, Islamabad back in 1997 pointed the fact that the general view of male opposition towards family planning initiatives stems from their lack of knowledge (Ali 1999). It is skepticism regarding different types of contraception and their side effects rather than opposition(Kamran et al., 2014).

Masood Kadir et al. (2003) suggested that apart from husbands, Mother in laws should also be part of the information and education campaigns regarding family planning. A quicker way to achieve this is that when LHW makes a visit to a home, apart from the wife the mother in law should also be made aware of the uses of contraceptives and the importance of having smaller family size.

*Tackling side effects:* In order to overcome the obstacle of health concerns that mainly pertain to the side effects caused by the use of contraceptives, it is important to ensure that the users are making informed choices. PDHS (2013)describes informed choice as knowledge and awareness regarding available modern contraceptives, their potential problems and what should be done in case any side effects are being experienced by the user. While 34% of the current users reported to have knowledge regarding the potential side effects or the problems associated with the method they were currently using, only 28% had knowledge regarding what should be the next step if they suffer from any side effects(PDHS, 2013, p. 99). There are two interesting points regarding these trends. Firstly, these figures have equal distribution with regard to the place of residence, meaning there is no difference in the statistics of informed choice in both rural and urban areas. Secondly, there has been no improvement in these figures since the last DHS almost 7 years ago as shown by the graph below, instead, a slight downfall can be seen in rural areas with respect to both indicators of informed choice.

Although, rural areas are at par with urban areas when it comes to the question of informed choice, however, as a whole the percentage of currently married women having knowledge regarding the demerits associated with the current method of contraception and how to deal with its side effects is not very encouraging(PDHS, 2013). This brings us to the question of what can be done to raise the awareness regarding the side effects of modern methods and their treatment.

Firstly, the LHWs can be used to transmit this information. At the time when they introduce a woman to different techniques of contraception, at the same time they should give them a detailed briefing on their side effects and how to deal with them. Weekly or monthly lessons can be held by an LHW in her area which is going to result in time-saving for LHW as well and at the same time, the desired objective would also be achieved.

While the urban women usually rely on private health centers for the treatment of side effects, in rural areas both public as well as private health facilities are being relied upon, depending upon the fact that which one is more accessible both physically as well as economically(A. Mahmood & Naz, 2012). However, an alarming fact to be noted is that 56% of the women reported that they did not go for treatment of side effects; out of which 49 % said that they did not believe that there was a need to visit a medical practitioner while 31% cited the cost reasons for not getting a treatment (PDHS, 2013). The cost related problems can be dealt with providing subsidies for reproductive health in order to make it accessible for both rich and poor alike. Pakistan is a low middle-income country and like other developing countries suffers from the problem of scarce resources. However, due to the military dictatorships in power for quite a long time, the allocation of a budget has been highly biased in favour of the defense expenditure as opposed to the health and education. However, since 2008, democratic governments have been in power whose mandate includes improved provision of health services, so it should not be difficult to get a reasonable funding for improving maternal health since it is a crucial part of MDGs as well.

While subsidies should be given for reproductive health to make it accessible for everyone. The former reason again indicates the need of raising awareness amongst women to visit health center regularly or at least when they are subject to any health problem including the side effects of contraception.

*Supply-side intervention:* Figure 7 shows the supply side issues with current service delivery points. The major issue with the LHW programme is its long chain of supply. The first recommendation is to cut the intermediaries; secondly, the supervisors themselves should take the responsibility of delivery of the supply to all the LHWs in their area. Moreover, the level of buffer stock should be increased so in case there are delays in the delivery of new supply, the LHWs would not run out of stock.

As far as the mobility problem of LHWs is concerned, few solutions have already been suggested and worked upon, the most common being an accompanying partner (Mumtaz, 2012). A partner does not have to be another LHW but may be an elderly woman from the community who can serve as a travel partner of LHW. By doing so, even nonbiradri areas where most of the LHWs feel uncomfortable visiting at the moment might become more accessible and the women of those households would also get family planning services on their doorstep (Mumtaz, 2012, p. 56).

## Conclusion

This paper discusses the obstacles to contraceptive use in Pakistan. Although a vast majority of the literature already exists on this subject, the main purpose of this paper was to focus on those issues that are currently acting as the main constraint in improving the contraceptive use in the country. As discussed above, the era of the 1990s saw a sharp rise in the CPR. The rate got more than doubled from 12% in 1990-91 to 28% in 2000-01(PMDGR, 2012). However, since then the growth has slowed down in the overall use of contraceptives, with the current level being 35.4% (PDHS, 2013).

The last two decades present a paradoxical situation as far as the contraceptive usage is concerned. On one hand, there exist high levels of unmet demand for family planning, on the other hand, these fertility preferences have failed to translate into real reproductive behaviour as CPR in Pakistan continues to remain the lowest in the region (Ayesha Khan, 2012). Therefore, the factors contributing to this "preference-use gap" are discussed and analysed upon. It has been found that apart from husbands, a strong influence of the mother in laws on household decision making acts as a major obstacle in preventing the wives/daughter in laws to initiate the use of contraceptives (Masood Kadir et al., 2003).

Moreover, the paper highlights that while knowledge about the use of contraceptives is universal, according to PDHS(2013). 97% of currently married women are aware of at least one method of contraception, there exists information gap regarding the side effects caused by the use of modern methods and their treatment. This has acted as a major barrier for many women to continue their use of contraceptives, hence, also help explain the wide gap that exists between the ever users and current users of contraceptives.

Supply-side barriers also continue to be a major hindrance for those who want to use any modern methods of contraception. Apart from females, men have also pointed to the fact they do not have access to health providers who apart from just supplying them condoms and pills may actually help them in overcoming various misconceptions associated with the use of contraceptives (Kamran et al., 2014). The access to LHWs was used as the main variable to explain the differences that exist between provinces with respect to the contraceptive use. The regions that have high coverage ratio by LHWs reported higher CPR as compared to the ones with less accessibility to LHWs.

Moving on, trends in contraceptive use show a decline in rural-urban and educational differences, owing to the successful implementation of LHW programme that aims door to door provision of maternal health including family planning services. On the supply side, it is recommended to cut the intermediaries to reduce the transportation delays, an inclusion of husbands and mother in laws in family planning campaigns and promotion of the use of contraceptives among young couples.

## **Bibliogrpahy**

- 1. Agha, Sohail. (2010). Intentions to use contraceptives in Pakistan: implications for behavior change campaigns. *BMC public health*, 10(1), 450.
- Ali, Mohamed M, & Cleland, John. (2010). Oral contraceptive discontinuation and its aftermath in 19 developing countries. *Contraception*, 81(1), 22-29.
- 3. Ali Muhammad Mir, Gul Rashida Shaikh. (2013). Islam and family planning: changing perceptions of health care providers and medical faculty in Pakistan. *Global Health: Science and Practice*, *1*(2), 228-236.

- 4. Asturias de Barrios, Linda, Mejía de Rodas, I, Nieves, Isabel, Matute, Jorge, & Yinger, NV. (1998). Unmet need for family planning in a peri-urban community of Guatemala City.
- Ayesha Khan, Adnan Khan. (2012). What Pakistan can learn from Iran, Bangladesh and India on Family Planning Programms? In Research and Development Solutions (Ed.). Islamabad: USAID.
- 6. Bank, World. (2013). Pakistan. Country Profile. Retrieved 2 August 2014
- BDHS. (2011). Bangladesh Demographic and Health Survey 2011. In National Institute of Population Research and Training & (Eds.). Dhaka, Bangladesh: Measure DHS ,ICF International ,Calverton, Maryland, U.S.A.
- 8. Bhuyan, KC. (1996). Fertility Differentials According to Socio-Economic Status and Family Planning Adoption in Rural Bangladesh. *Sankhyā: The Indian Journal of Statistics, Series B*, 302-322.
- 9. Bibi, Seema, Memon, Amna, Memon, Zehra, & Bibi, Misbah. (2008). Contraceptive knowledge and practices in two districts of Sindh, Pakistan: a hospital based study. *JPMA*. *The Journal of the Pakistan Medical Association*, 58(5), 254.
- 10. Carton, Thomas W, & Agha, Sohail. (2012). Changes in contraceptive use and method mix in Pakistan: 1990– 91 to 2006–07. *Health policy and planning*, 27(2), 166-174.
- 11. Casterline, John B, Perez, Aurora E, & Biddlecom, Ann E. (1997). Factors underlying unmet need for family planning in the Philippines. *Studies in Family Planning*, 173-191.
- 12. Casterline, John B, Sathar, Zeba A, & Haque, Minhaj. (2001). Obstacles to contraceptive use in Pakistan: A study in Punjab. *Studies in family planning*, *32*(2), 95-110.
- 13. Cleland, John G, & Shah, Iqbal H. (1993). High fertility in Bangladesh, Nepal and Pakistan: Motives vs means: The revolution in Asian fertility: Dimensions, causes and implications. Oxford: Clarendon Press.
- 14. Coren, C. (2005). Doorstep delivery increases adoption of contraceptives in rural areas of Pakistan. *International Family Planning Perspectives*, 31(2), 95-96.
- 15. Demographic, Pakistan. (1992). Health Survey 1990-91. Islamabad: National Institute of Population Studies.
- 16. Douthwaite, Megan, & Ward, Patrick. (2005). Increasing contraceptive use in rural Pakistan: an evaluation of the Lady Health Worker Programme. *Health policy and planning*, 20(2), 117-123.
- 17. DSouza, Rennie M. (2003). Factors influencing the use of contraception in an urban slum in Karachi Pakistan. *Journal of health and population in developing countries*, 10.
- 18. Dyson, Tim. (2010). Population and development: the demographic transition: Zed Books.
- 19. Easterlin, Richard A. (1975). An economic framework for fertility analysis. Studies in family planning, 54-63.
- Fikree, Fariyal F, Khan, Amanullah, Kadir, Muhammad Masood, Sajan, Fatima, & Rahbar, Mohammad H. (2001). What influences contraceptive use among young women in urban squatter settlements of Karachi, Pakistan? *International Family Planning Perspectives*, 130-136.
- 21. Ghani, Ejaz. (2012). Urbanization in Pakistan: Challenges and Options Paper presented at the Global Development Network's 13th Annual Global Development Conference, Central European University.
- 22. GreenstarSocialMarketing. (n.d.). Harnessing the private sector for a healthier Pakistan. *Greenstar Social Marketing*.
- 23. Hafeez, Assad, Mohamud, Bile Khalif, Shiekh, Mobasher Riaz, Shah, Syed Ayyaz Imran, & Jooma, Rashid. (2011). Lady health workers programme in Pakistan: challenges, achievements and the way forward. *JPMA-Journal of the Pakistan Medical Association*, *61*(3), 210.
- 24. Hakim, Abdul, & Miller, Peter C. (2000). Family planning in Pakistan: a turning point. *Fertility Transition in South Asia*.
- 25. Hakim, Abdul, Sultan, Mehboob, & Uddin, F. (2001). Pakistan Reproductive Health and Family Planning Survey. 2000-01. *Preliminary Report. National Institute of Population Studies. Islamabad.*
- 26. Hamid, Saima, & Stephenson, Rob. (2006). Provider and health facility influences on contraceptive adoption in urban Pakistan. *International family planning perspectives*, 71-78.
- 27. Hashmi, Sultan S, Alam, Khushnood, & Sheraz, Aysha. (1993). Non-users and unmet need for contraception. *Islamabad, Pakistan: National Institute of Population Studies*.
- 28. Jejeebhoy, Shireen J, & Sathar, Zeba A. (2001). Women's autonomy in India and Pakistan: the influence of religion and region. *Population and development review*, 27(4), 687-712.
- 29. Kamal, Nashid. (2000). The influence of husbands on contraceptive use by Bangladeshi women. *Health Policy and Planning*, *15*(1), 43-51.

- 30. Kamran, Iram, Khan, Mumraiz, & Tasneem, Zeba. (2014). Involving men in Reoroductive and Fertility issues: Insights from Punjab: Population Council, The World Bank.
- 31. Kamran, Iram, Sathar, Zeba, Ashfaq, Seemin, & Ashraf, Muhammad. (2013). *Involving husbands in family planning program- evidence of their readiness*. Paper presented at the International Conference of Family Planning Adis Ababa, Ethopia.
- 32. Kaneda, Carl Haub; Toshiko. (2013). 2013 World Population Data Sheet. Washington DC: Population Reference Bureau
- 33. Kazi, Shahnaz, & Sathar, Z. (2001). Explaining fertility in rural Punjab: The relative roles of gender and development: Oxford: Oxford University Press.
- 34. Khan, Abdul Ghaffar. (2010). Pakistan Report. Islamabad: Gillespie Foundation.
- 35. Khan, Ayesha. (1996). Policy-making in Pakistan's population programme. *Health Policy and Planning, 11*(1), 30-51.
- 36. Lasee, Ashraf, & McCormick, Joseph B. (1996). Demographic and socio-economic determinants of contraceptive use in a low income community of Karachi. *Journal-Pakistan Medical Association, 46*, 228-230.
- Magadi, Monica Akinyi, Madise, Nyovani Janet, & Rodrigues, Roberto Nascimento. (2000). Frequency and timing of antenatal care in Kenya: explaining the variations between women of different communities. *Social Science & Medicine*, 51(4), 551-561.
- 38. Mahmood, Arshad, Arshad, Muhammad Jamil, & Sadiq, Maqsood. (2009). Situation Analysis of Health Facilities with Special Reference to Family Planning Services in Pakistan Islamabad: USAID.
- 39. Mahmood, Arshad, & Naz, Saman. (2012). Contraceptive Use Dynamics in Pakistan. *Population Council, Islamabad.*
- 40. Mahmood, Naushin, & Ringheim, Karin. (1996). Factors affecting contraceptive use in Pakistan. *The Pakistan Development Review*, 1-22.
- 41. Masood Kadir, Muhammad, Fikree, Fariyal F, Khan, Amanullah, & Sajan, Fatima. (2003). Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of biosocial science*, 35(04), 545-558.
- 42. Mills, Samuel, Bos, Ed, & Suzuki, Emi. (2010). Unmet need for contraception.
- 43. Mir, Ali Mohammad, & Shaikh, Gul Rashida. (2013). Islam and family planning: changing perceptions of health care providers and medical faculty in Pakistan. *Global Health: Science and Practice*, 1(2), 228-236.
- 44. Mishra, Vinod K, Retherford, Robert D, Nair, P Sadasivan, & Feeney, Griffith. (1999). Reasons for discontinuing and not intending to use contraception in India.
- 45. Mumtaz, Zubia. (2012). Gender and social geography: impact on lady health workers mobility in Pakistan. *BMC health services research*, *12*(1), 360.
- 46. Nishtar, Noureen Aleem, Sami, Neelofar, Alim, Sabina, Pradhan, Nousheen, & Hasnain, Farid Ul. (2013). Determinants of contraceptives use amongst youth: an exploratory study with family planning service providers in Karachi Pakistan. *Global journal of health science*, *5*(3), p1.
- 47. Obermeyer, Carla Makhlouf. (1993). Culture, maternal health care, and women's status: a comparison of Morocco and Tunisia. *Studies in family planning*, 354-365.
- 48. OPMG, Oxford Policy Management Group. (2009). Lady health worker programme: Third party evaluation of performance.
- 49. Pakistan, Government of. (2013). Pakistan Economic Survey 2012-13. Islamabad: Pakistan: Finance Division, Economic Advisor's Wing.
- 50. PDHS. (2013). Pakistan Demographic and Health Survey,2012-13. Islamabad: Pakistan: National Institute of Population Studies NIPS ;Measure DHS, ICF International, Calverton.
- 51. PMDGR. (2012). Pakistan Millenium Development Goals Report. Islamabad: Planning Commission, Government of Pakistan.
- 52. PSLM. (2012). Pakistan Social and Living Standards Measurement (PSLM) Survey 2011-12. Islamabad: UNESCO.
- 53. Rahman, Mizanur, DaVanzo, Julie, & Razzaque, Abdur. (2003). When will bangladesh reach replacementlevel fertility? The role of education and family planning services.
- 54. Raza, Hassan and Sheraz, Aysha and Zafar, Rabia, . (2012). Effect of Islamic Perception on Family Planning Practices *OIDA International Journal of Sustainable Development*, 05(03), 85-96.

- 55. Robey, Bryant, Ross, John, & Bhushan, Indu. (1996). Meeting unmet need: new strategies. *Population Reports. Series J: Family Planning Programs*(43), 1-35.
- 56. Rosen, James E, & Conly, Shanti R. (1996). Pakistans population program: the challenge ahead.
- 57. Roy, Malabika. (2012). Renewed focus on family planning in India (Division of Reproductive and Child Health, Trans.). New Delhi: Indian Council of Medical Research.
- 58. Rukanuddin, Abdul Razzaque, & Hardee-Cleaveland, Karen. (1992). Can family planning succeed in Pakistan? *International Family Planning Perspectives*, 109-121.
- 59. Saleem, Shabana, & Bobak, Martin. (2005). Women's autonomy, education and contraception use in Pakistan: a national study. *Reproductive health*, *2*(8), 1-8.
- 60. Saxena, Sonia, Oakeshott, Pippa, & Hilton, Sean. (2002). Contraceptive use among South Asian women attending general practices in southwest London. *British journal of general practice*, 52(478), 392-394.
- 61. Sirageldin, Ismail, Norris, Douglas, & Hardee, J Gilbert. (1976). Family planning in Pakistan: An analysis of some factors constraining use. *Studies in Family Planning*, 144-154.
- 62. Stash, Sharon. (1999). Explanations of unmet need for contraception in Chitwan, Nepal. *Studies in family planning*, 30(4), 267-287.
- 63. Stephenson, Rob, & Hennink, Monique. (2004). Barriers to family planning use amongst the urban poor in Pakistan.
- 64. Sultan, Mehboob, Cleland, John G, & Ali, Mohamed M. (2002). Assessment of a new approach to family planning services in rural Pakistan. *American Journal of Public Health*, 92(7), 1168-1172.
- 65. Toll, K, & Agha, S. (1999). Country watch: Pakistan. Sexual health exchange(1), 7.
- 66. UN. (2013). World Population Prospects, The 2012 Revision. New York: Department for Economic and Social Affairs.
- 67. UNDP. (2011a). Balochistan MDG Report 2011. Islamabad: United Nations Development Programme.
- 68. UNDP. (2011b). KPK- MDG Report. Islamabad: United Nations Development Programme.
- 69. UNDP. (2011c). Punjab MDG Report 2011. Islamabad: United Nations Development Programme.
- 70. UNDP. (2012). Report on the status of millennium development goals Sindh. Karachi.
- 71. USAID. (2013). Pakistan: Stock Analysis at Service Delivery Points for USAID-Supported Contraceptives *Deliver Project*.
- 72. Westoff, Charles F, & Bankole, Akinrinola. (1995). Unmet need: 1990-1994 *Demographicand Health Surveys Comparative Studies*. Calverton: Macro International.
- 73. Westoff, Charles F, & Bankole, Akinrinola. (2000). Trends in the demand for family limitation in developing countries. *International family planning Perspectives*, 56-97.