



Research Report October 2013
**Understanding Maternal, Neonatal,
Sexual and Reproductive Health of
Adolescent Girls and Young Mothers'**
for advocacy in Pakistan
A research study conducted by
Care International Pakistan and funded by the
Maternal and Newborn Health Programme
Research and Advocacy Fund (RAF)

CARE International in Pakistan

CARE is a leading humanitarian and development organization fighting global poverty, with a special focus on working alongside poor women because, equipped with the proper resources, women have the power to help whole families and entire communities escape poverty. Women are at the heart of CARE's community-based efforts to improve basic education, prevent the spread of disease, increase access to clean water and sanitation, expand economic opportunity and protect natural resources. CARE also delivers emergency aid to survivors of war and natural disasters, and helps people rebuild their lives.

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Acknowledgment

"Advocating for Improved SRH/MNH Policy and Practice for Marginalised Adolescent Girls and Young Mothers (AIMS)' is a project funded by the Maternal and Newborn Health Programme – Research and Advocacy Fund (RAF), and is implemented by Care International Pakistan in partnership with Rahnuma - Family Planning Association of Pakistan."

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AIMS

In Pakistan many adolescents and young women are pushed into early marriage and early pregnancies, resulting in high rates of maternal and infant mortality and morbidity. Adolescent girls face a number of challenges in accessing essential healthcare due to restrictions on their mobility, low availability of adolescent-friendly services, lack of financial resources and limited information and awareness. This situation is worse for ethnic and religious minorities and those living in remote, underserved feudal and tribally controlled areas. Despite this, the reproductive and sexual health needs of adolescent girls and young mothers (AGYM) between the ages of 15-24 years remain unacknowledged in Pakistan and are conspicuously absent in major policies such as the National Health Policy 2009 and the Youth Policy 2008.

In February 2012 CARE Pakistan started the project titled: 'Advocating for improved maternal newborn health (MNH) and sexual reproductive health (SRH) policy and practice for adolescent girls and young mothers (AIMS).' Implemented in partnership with Rahnuma-Family Planning Association of Pakistan (FPAP), this 14 month initiative combined evidence based research with targeted advocacy to successfully bring about changes in Pakistan's policies regarding MNH and SRH for adolescent girls and young mothers. The AIMS project aimed to increase awareness regarding the specific reproductive and sexual health needs of AGYM, and to advocate for their inclusion in provincial health policies in four provinces of Pakistan by:

- **Conducting research on the knowledge and practices of AGYM, including their priority needs and the barriers impeding their access to MNH and SRH services**
- **Undertaking a comprehensive review and analysis of Pakistan's government policies to identify key gaps regarding the reproductive and sexual health needs of AGYM**
- **Using findings from the research to advocate with key stakeholders for policy change to address the sexual and reproductive health needs of AGYM**

CARE and FPAP used evidence from the project's research to design a targeted advocacy strategy and to engage with key stakeholders including provincial parliamentarians, district officials, community leaders, civil society and media representatives, through a structured process of meetings, workshops and consultations. The report in your hands is one of the outcomes of the project's research component.

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His areas of health intervention programs designing and implementation have been evaluation of Infectious disease surveillance mechanisms, facility based and community based mother and child health promotion programmes, health and nutrition programmes at the district, provincial and federal levels in Pakistan. He has been involved in designing training materials/modules and conducting trainings to various tiers of public health staff in Pakistan for primary health care programs and health care research.

DECLARATION

We have read the report titled: '*Advocating for Improved SRH/MNH Policy and Practice for Marginalised Adolescent Girls and Young Mothers (AIMS)*' and acknowledge and agree with the information, data and findings contained.



Dr. Ahsan Ahmad

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LIST OF ABBREVIATIONS

| | |
|--------------|--|
| ADB | Asian Development Bank |
| ADP | Annual Development Program |
| AGYM | Adolescent Girls and Young Mothers |
| AIMS | Advocating for Improved SRH/ MNH Policy & Practice for the Marginalized Adolescent Girls and Young Mothers (project) |
| BISP | Benazir Income Support Program |
| BRSP | Baluchistan Rural Support Program |
| CCI | Council of Common Interests |
| CDS | Comprehensive Development Strategy |
| CEDAW | Convention on Elimination of all Forms of Discrimination against Women |
| CERD | Committee on the Elimination of All Forms of Racial Discrimination |
| CIP | CARE International Pakistan |
| CM | Chief Minister |
| CPO | Chief Planning Officer |
| CPR | Contraceptive Prevalence Rate |
| CRC | Convention on the Rights of Child |
| DNA | Disaster Needs Assessment |
| DoH | Department of Health |
| ECNEC | Executive Committee of the National Economic Council |
| FP | Family Planning |
| FPAP | Family Planning Association of Pakistan |
| GRAP | Gender Reform Action Plan |
| HIV | Human Immunodeficiency Virus |
| ICPD | International Conference on Population and Development |
| ICYA | Information, Culture & Youth Affairs |
| IEC | Information, Education and Communication |
| INGOs | International Non- Governmental Organizations |
| IPs | Implementing Partners |
| IPH | Institute of Public Health |
| KPK | Khyber Pakhtunkhwa |
| LHV | Lady Health Visitor |
| LHW | Lady Health Worker |
| MDGs | Millennium Development Goals |
| MMR | Maternal Mortality Ratio |
| MNCH | Maternal, Newborn and Child Health |
| MNH | Maternal and Neonatal/Newborn Health |
| MoH | Ministry of Health |
| MoHR | Ministry of Human Rights |
| MoPW | Ministry of Population Welfare |
| MoWD | Ministry of Women Development |
| MTDF | Medium Term Development Framework |
| MWD | Ministry of Women Development |
| NCSW | National Commission on Status of Women |
| NFC | National Finance Commission |
| NGO | Non-governmental Organization |

LIST OF ABBREVIATIONS (contd...)

| | |
|----------------|---|
| NHPU | National Health Policy Unit |
| NHS | National Health Service |
| NIPS | National Institute of Population Studies |
| NYP | National Youth Policies |
| P&D | Planning and Development |
| PC-1 | Planning Commission Proforma 1 |
| PCNA | Post Crises Needs Assessment |
| PCSW | Provincial Commission on Status of Women |
| PDHS | Pakistan Demographic & Health Survey |
| PHC | Primary Healthcare |
| PLHIV | People Living with HIV |
| PMDGP | Punjab Millennium Development Goals Program |
| POL | Petrol, Oil, Lubricant |
| PRSP | Poverty Reduction Strategy Paper |
| PWD | Population Welfare Department |
| RAF | Research and Advocacy Fund |
| RH | Reproductive Health |
| SOP | Standard Operating Procedure |
| SRH | Sexual and Reproductive Health |
| STIs | Sexually Transmitted Infections |
| SWs | Sex Workers |
| TBA | Traditional Birth Attendant |
| TRF | Technical Resource Facility |
| UDHR | Universal Declaration of Human Rights |
| UNFPA | United Nations Population Fund |
| WB | World Bank |
| WDD | Women Development Department |
| WHO | World Health Organization |
| WPF | World Population Foundation |

1 EXECUTIVE SUMMARY

1 EXECUTIVE SUMMARY

BACKGROUND

Adolescent and early age pregnancies are a leading cause of maternal and infant mortality and morbidity in Pakistan. According to the most recent Pakistan Demographic and Health Survey (PDHS 2006-07), nearly half of adolescents and young women are hurled into early marriages (i.e. by the age of 18 years). This is due to the prevalent socio-cultural norms, and resultantly the young married girls experience early age pregnancies, which contribute towards high rates of maternal and infant mortality and morbidity in the country. The draft National Health Policy of 2009 for Pakistan did not include adolescent's health issues nor does the Youth Policy 2008 talk of sexual health; rather, it focuses on the reproductive health needs of married young people above the age of 18. Those young women who are unmarried and under the age of 18 remain invisible, due to lack of policy level focus on this marginalized population group. Upon entering puberty, adolescent girls face more difficulty in accessing healthcare due to limitations on female mobility, lack of access to financial resources, lack of availability of adolescent-friendly services; lack of ability to demand healthcare; lack of voice; lack of information and awareness, and vulnerability to exploitation and violence. These conditions worsen for ethnic and religious minorities

and for those living in remote, underserved, feudal and tribally controlled areas.

CARE International and its partner Rahnuma - FPAP conducted a research and advocacy project that engaged personnel of governmental health department and NGO sector at different levels of governance (district, provincial and federal) to enhance political will, commitment to policy formulation and adequate resource allocation for SRH health needs of young girls (15-24 years old) across the four provinces of Pakistan. Pakistan's progress in achieving MDG 4 & 5 can be paced up through this evidence-based advocacy for decision makers. In the light of the landmark devolution processes that have resulted from the 18th Amendment, (in which the subject of health was transferred from the federal level to the provinces as a function) are now in the driving seat to develop health policies which can create a window of opportunity for better inclusiveness of MNH and Sexual & Reproductive Health (SRH) services in the public sector, and information for poor and marginalised adolescent and young mothers in Pakistan. The present report relates to the research component for the overall research and advocacy project, and presents the findings of barriers for accessing MNH and SRH information and services, among poor and marginalised adolescent girls and young mothers (15-24 years old) in four districts (one from each province) of Pakistan.

METHODOLOGICAL APPROACH

In order to establish the current status of adolescents' sexual and reproductive health status and access to and use of healthcare services, the study employed mixed research methods including quantitative and qualitative components. The quantitative components included face to face structured interviews of 605 AGYM respondents through a community-based household survey, and face to face structured interviews of 307 young women of child bearing age (15-24 years) through a hospital based exit survey across four districts of the country. The qualitative component included 16 Focus Group Discussions (FGDs) with mothers (8 FGDs @ 2 per district) and fathers (8 FGDs @ 2 per district) of adolescent and young married girls, and Key Informant Interviews (KIIs) with care providers (6 LHVs and 6 LHWs, 4 community midwives and 4 TBAs) and four District level Health Managers.

RESULTS AND CONCLUSIONS

Across all the four provinces, and among community and exit survey participants, formal education was less prevalent among married girls as compared to their husbands, with the differential ranging between 18%-32%. Married respondents had a higher mean age than the unmarried respondents in the community survey component of the study, however the difference was found to be not statistically significant. In relation to the distribution of participants according to their economic status, we combined the results of economic status indicators of monthly income, building material of house and number of rooms. It was derived that the highest proportion of economically poor AGYM belonged to Badin, while a higher proportion of participants from Quetta (as compared to other three districts) had better economic status.

One of the key preventive reproductive health needs to reduce menstruation related physiological and psychological morbidity among young married girls is knowledge about menstruation. There is general lack of awareness about menstrual health problems and the appropriate sources for care of married and unmarried girls in the age group of 15-24 years. Low levels of awareness giving to this age group which was most profound in Mardan was reported to be due to socio-cultural barriers related to perceived shame associated with such communication. The most commonly reported source of menses related information for AGYM, was the participant's mother across both the married and the unmarried groups. Fathers were the least common source of such information among the community survey participants

The key curative health needs of AGYM pertain to menstruation related problems (such as irregularity, dysmenorrhea etc.) among the unmarried. Three quarters of unmarried community survey participants of all the districts had suffered some form of menstrual problems/ complications in the past, with menstrual morbidity being least common among unmarried girls of Badin as compared to other districts. Among the married such needs related to early age of marriage complicated with repeated pregnancies, lack of availability of curative services in the government sector, low adoption of family planning methods, and prevalent practice of home based deliveries by TBAs. With reference to reproductive health needs among

the married, this research observed that, based on the history of number of pregnancies and live children, AGYM in Badin and Mardan seemed to have higher needs of Reproductive Health care as compared to AGYMs from Quetta and Muzaffargarh.

There was a wide gap in the awareness about family planning and actual adoption of family planning method. There is high prevalence of awareness of family planning and its potential benefits (76%-91%) among AGYM and their mothers, however, contraceptive prevalence was comparatively much lower (27%-61%). The most important underlying factors for this wide gap was reported to be socio-cultural limitations and misperceptions, the availability and accessibility of FP counselling and services, and a lack of awareness and trust among men.

The use of government health facilities for maternal care, SRH counselling and FP services is low when compared with the utilisation of such services from the private sector. The use of antenatal care was shown to be mostly found in the private health sector's skilled care providers, and there was low utilisation (14%-27%) of natal care from government centres and hospitals. The main underlying factors were identified to be lack of awareness about the available range of reproductive health services at these facilities and accessibility with reference to distance, time of travel and lack of capacity to incur out of pocket expenditures. The degree and type of decision making about the adoption of a specific family planning method indicated that the majority of girls had taken a decision by themselves or jointly with their spouses. This finding which varied in its prevalence across the districts, highlights that among family planning method users, decision making reflects a reasonable level of girl's own participation. However, and conversely, low prevalence of FP use warrants that still the majority of girls were not using FP due to various socio-cultural, economic, availability and accessibility related issues.

The highest proportion of antenatal healthcare utilisation was found in Muzaffargarh followed by Mardan and Quetta among the community survey participants. Among the exit survey participants, district-wise comparison elicited that the highest proportion that received antenatal care was from Quetta, while lowest proportion from this district had utilised hospital care for a reproductive health problem.

The community survey revealed that, except for Muzaffargarh, none of girls from the other three districts

sought Antenatal care from the local Traditional Birth Attendant (TBA/Dai). This was understood to be a positive finding, keeping in view that nearly all of the antenatal care was being received from health facilities (public or private) where commonly care is provided by skilled healthcare providers.

Among community survey respondents who had utilised antenatal care from private health facility, the most common reasons for not doing so from a government health centre was the 'non-cordial attitude' of the staff. Comparatively, among the exit survey participants, among the more commonly reported problems were those relating to patients' use of services from government hospitals was over-crowding and longer waiting times, followed by the amount of expenses incurred in order to reach the hospital. Comparison across the settings for crowdedness, waiting time and expenses, may be differentiated with reference to the level of government facility where the study participants sought care. The community survey participants more commonly referred to government health facility in their vicinity which was primary level centres (i.e. BHUs and RHCs), where over-crowdedness and long wait is less common, while non-cordial staff attitudes was the commoner issue. For the exit survey participants, the selected hospitals were district's highest level referral care centre, where larger catchment population contributes towards higher turnover of patients. This high turnover at district level hospitals is further enhanced with patients' often by-passing primary level centres due to the health sector system's inefficiencies at the said level and non-cordial staff attitudes. Given the two incremental primary and secondary levels of care in a district's healthcare system, it may hence be concluded that staff attitudes and capacities need to be addressed at primary level centres, and mechanisms to reduce patient overload at secondary/referral level facilities need to be done through improved functioning of care giving mechanisms at the primary level.

Findings from the qualitative component helped us to understand that care utilisation from government sector is limited by various factors including

- a. lack of comfort due to bad staff attitudes at primary level,
- b. Social limitations of travelling alone to a nearby health facility especially in

relation to unmarried girls, and for consulting a male care provider for reproductive health issues

- c. Distance and expenses for travel to a secondary/referral level government hospital
- d. Over-crowdedness and long waiting time at secondary level

Giving birth at a government hospital reflected low levels of utilisation by the community survey participants (14%-27%). Among the exit survey participants the awareness about range of services (in relation to delivery) was low (31%-62%). Combining these results from the two surveys, it may be concluded that (similar to the factors narrated above for antenatal care), women were either not aware of delivery services being extended across various levels of government health system, or do not prefer to give birth at government facilities.

Reponses from the community survey and based on the FGD responses of AGYM parents, it is understood that all the types of participants supported the idea of reproductive health education to be given to adolescent girls. The main cited source for extending such education was parents, elderly women of the household and immediate relations (elder sister, sister-in-law). Consultation with healthcare providers, especially the formal sector was not favoured by fathers; however, mothers supported the idea that in case of menstruation related morbidity girls should be able to seek advice and consultations from the healthcare providers. All the parent groups realised the importance of appropriate information sharing, so as to avoid misconceptions and psychological issues among young girls.

Based on information from the qualitative information from care providers, amenorrhea, dysmenorrhea, irregularity of cycles, vaginal discharge (leucorrhoea), were the most common problems faced by unmarried girls. The same inquiry about married girls revealed the problems of abortions, repeated pregnancies, anaemia, vaginal discharge (leucorrhoea), pregnancy and delivery related complications (such as post-partum haemorrhage, uterine prolapse) as the being among the most common SRH problems. One TBA from Quetta understood "young age marriage" as one of the main problems faced by this age group. Given the latter response, it was understood that although TBAs may be classified as commonly illiterate

informal care providers, but based on our discussions, their understanding about SRH issues for AGYM were quite elaborate and appropriate.

RECOMMENDATIONS

Policy Level

Non-cordial staff attitudes at the primary care level, and over crowdedness with long waiting times at the secondary level care were the main cited factors for lack of satisfaction from the public sector healthcare services. It is recommended, that health system's strengthening to improve staff attitudes at the primary level would possibly enhance satisfaction among service users. Such strengthening, is also anticipated to increase utilisation rates at the primary level, and resultantly reduce the workload on secondary level facilities thus resulting in less crowdedness and patient waiting times.

Low levels of healthcare utilisation from the public sector (and conversely higher utilisation from private sector) warrants involvement of the private sector for public health program designing and implementation, to promote healthier SRH management by adolescents in rural and peri-urban areas of the country.

There is high social acceptability of TBAs for natal and postnatal care, and the observed high proportion of home based births highlights the importance of such care providers at the community level. Given the premise of successful involvement of TBAs for FP methods promotion in a pilot study in Pakistan, it is proposed that capacity of these providers may be enhanced by SRH programs in and a more inclusive approach to involve TBAs should be adopted by the healthcare system in the country.

Practice Level

Demographic and economic indicators of participants from Sindh province (Badin district), were less favourable as compared to other provinces. It is proposed that focus of SRH related interventions in the province need to be initiated for adolescents with special emphasis towards AGYM of rural areas.

Communication for menarche related information, was least prevalent in KP province (Mardan district) as compared to the other regions. In this regard, mothers were cited to be

the most appropriate source of extending such knowledge across all the provinces. As understood through the socio-cultural norms in the province of KP, it is recommended that mothers of AGYM may be targeted to reduce their apprehensions about such information sharing with adolescent girls, and also to enhance the knowledge of mothers on these aspects.

Advocacy level

Decision making about adoption of a family planning method reflected that the majority of girls had taken a decision by themselves or jointly with their spouses. This dimension highlights that among the users, decision making for family planning reflects reasonable level of girl's own participation. However, and conversely, low prevalence of FP use warrants that still the majority of girls were not using FP due to various socio-cultural, economic, availability and accessibility related issues. These patterns of FP services utilisation need to be advocated with planners to target the accessibility aspects.

A small proportion of community survey participants were aware of sexually transmitted diseases, amongst whom not all having correct knowledge, reflected that indeed this age group of women have been a neglected segment of the population with reference to awareness raising programs on sexually transmitted diseases, AIDS and reproductive health issues. It also highlights the importance of making this segment of the population aware about such sexual and reproductive health issues from a public health point of view. This is important since this population segment is in its early phase of reproductive health life, and by making them knowledgeable, can bring forth tremendous benefits for the future generations as well as facilitate in reducing the burden of disease from STIs in the country.

As understood through this research, parents and care providers carry the realisation that SRH related information should be shared with adolescent girls. Given such receptiveness and positive deviance towards imparting of SRH knowledge (especially among the fathers) may be used as a window of opportunity for SRH related programmes. This window may be targeted towards enhancement of knowledge and better menstrual hygiene management by adolescents through targeting of AGYM directly and indirectly (via their parents) through awareness campaigns and community mobilisation activities.

2 BACKGROUND

2 BACKGROUND

Adolescent pregnancies are a leading cause of maternal and infant mortality and morbidity in Pakistan. Many adolescents and young women are hurled into early marriages and early pregnancies contributing to high rates of maternal and infant mortality and morbidity^{1, 2}. According to the Pakistan Demographic and Household Survey (PDHS) 13% of girls in the country are married by the time they are 15 and 40% by age 18³. The draft National Health Policy 2009, which was specifically devised to highlight and address the needs of youth in the country, did not include adolescent's health issues in its ambit, rather it mentioned reproductive health needs of young people above the age of 18 and those who are married. Resultantly, those under 18 and unmarried fall through the policy gap and remain invisible from a programmatic perspective. Upon entering puberty, adolescent girls face more difficulty in accessing healthcare due to limitations on female mobility, lack of access to financial resources, lack of availability of adolescent-friendly services; lack of ability to demand healthcare; lack of voice; lack of information and awareness and vulnerability to exploitation and violence. These conditions worsen for the ethnic and religious minorities and those living in remote, underserved, feudal and tribally controlled areas.

- 1 Population Council, 2000-2001. Adolescents and Youth in Pakistan, A Nationally Representative Survey, p. 82-89, retrieved on August 5th 2013 from <http://www.popcouncil.org/pdfs/ayp0102.pdf>
- 2 Pakistan statistics retrieved on August 5th 2013 from http://www.UNICEF.org/infobycountry/pakistan_pakistan_statistics.html
- 3 GoP, Government of Pakistan, 2008. Pakistan Demographic and Health Survey.

Pakistan has a high maternal mortality ratio (276/100,000 live births), infant mortality rate (78/1000 live births) and under five mortality rate (94/1,000 live births) combined with high fertility (4.1 births per women) . Skilled birth attendance has slightly improved from 18% in later 1990s to 39% in 2005-2009; whereas, antenatal care coverage is still 28% (4 visits) . However, issues pertaining to the social exclusion and marginalisation of religious, ethnic, poorer income quintiles, living in remote and underserved areas of Pakistan and under the strong tribal and feudal influence have not been adequately addressed.

Gender-based disparities embedded in local social structures exacerbate the marginalisation of adolescent and young mothers. Social norms enforce segregation between the sexes as means of preserving a girl's honour and as a consequence, adolescent girls are less educated, lack access to credible Sexual & Reproductive Health (SRH) information and are generally married early, which means that they bear a comparatively heavy burden of Maternal & Neonatal Health (MNH) and SRH related issues. Yet, their plight is neither adequately researched nor such research translates into policy. The draft National Health Policy 2009 for Pakistan⁴ addresses the concerns of MNH to some extent; however, it does not include adolescent's health issues. Similarly, the draft National Youth Policy 2008⁵ for the country talks of sexual health rather mentions reproductive health needs of young people above the age of 18 and married. The Health Policy lacks SRH rights perspective – only the right to access affordable services is mentioned.

The World Population Foundation (WPF) conducted a study in 2010 with the aim to analyse the status of Sexual and Reproductive Health and Rights of young people in Pakistan⁶. Their findings revealed extreme discrimination against marginalised communities and limited realisation of young people's SRH Rights. Reproductive Health advocates have yet to achieve any substantial results at the policy level on the issue of unsafe abortions. The research also pointed out an acute absence of understanding among the young girls regarding their right to decide whether or not they wanted to conceive, and that decisions on the size of the family as well as use of contraceptives were solely considered men's domain. The study recommended institutionalising reproductive health education to

facilitate adults to understand what young people already know and adding to their existing knowledge and correcting any misinformation they may have. The study also recommended that the civil society organisations should undertake mass level advocacy efforts which target and collaborate with marginalised groups in order to bring change at the level of policy and legislation to ensure the provision of basic human rights to these marginalised populations.

CARE International and its partner Rahnuma - FPAP conducted this project as an research and advocacy initiative comprising of three components; firstly a policy review, secondly a secondary review of existing literature, and thirdly an empirical research leading to development and conduct of advocacy activities. The present report pertains to the research conducted as part of the third component. The advocacy component (not part of this report) endeavoured to engage health department personnel at different levels of governance to enhance political will, commitment to policy formulation and adequate resource allocation for SRH health needs of young girls (15-24 years old) across the four provinces of Pakistan. It was envisioned that Pakistan's progress in achieving MDG 4 & 5 could be paced up through this evidence-based advocacy for decision makers. This research was all the more pertinent, in the light of most recent land mark devolution process emanating from the 18th amendment in the country. Through this devolution, the provinces were now in the driving seat to develop health policies which could create a window of opportunity for better inclusiveness of MNH and Sexual & Reproductive Health (SRH) services and information for poor and marginalised adolescent and young mothers in Pakistan.

This research was important and unique in a sense that it focused on marginalised adolescents and young mothers – poor, belonging to ethnic/religious minorities, scheduled caste, victims of child/early marriages, living in hard to reach and under-served areas, and have no voice to influence the policy makers because of their identity-based characteristics, geographical location, gender-based disparities and low socio-economic status. During the implementation phase, the project benefitted considerably from CARE and its partner FPAP-Rahnuma's extensive

4 Government of Pakistan, 2009. Draft National Health Policy. Retrieved on August 3rd 2013 from www.pc.gov.pk/Policies/Health.doc

5 Government of Pakistan, 2009. Draft National Youth Policy. Available at URL www.moya.gov.pk/national_youth_policy.html?

6 Foundation, W. P. (2010). A Research Study on status of Sexual and Reproductive Health and Rights of Young People in Pakistan. Available at URL www.wppak.org/pdfs/SRHR_Report_2010.

working history in the study districts and their good standing and credibility among local communities, inclusive of ethnic and religious minorities.

2.1 OBJECTIVES

2.1.1 Primary Objective

To determine the barriers for MNH and SRH information and services, among poor and marginalised adolescent girls and young mothers (15-24 years old) in Pakistan.

2.1.2 Secondary Objectives

1. To identify the gaps in health policy in responding to and prioritising the marginalised and poor adolescent girls and young mothers' SRH needs
2. To determine the gaps in the governance and functioning of health service delivery system including the gaps in capacities of community-based health providers, in responding to the MNH and SRH needs of the marginalised and poor adolescent girls and young mothers.
3. To identify the gaps in knowledge and practices among the marginalised and poor adolescent girls and young mothers concerning SRH service availability and use.
4. To determine the preventive and curative reproductive health needs of young women of child bearing age (15-24 years) in Pakistan.
5. To identify and determine the perceptions and expectations of young women of child bearing age regarding the SRH needs and required healthcare services for themselves
6. To determine and estimate the available health services and their utilisation patterns for young women of child bearing age with the context of quantity, quality, accessibility and health seeking behaviours and practices.

2.2 STUDY OUTCOMES

2.2.1 Primary outcomes of interest

1. Increased understanding on barriers and underlying factors impeding the poor and marginalised adolescent girls and young mothers' access to SRH services;

2. Increased understanding among health policy makers concerning the SRH information and services needed by the marginalised adolescent girls and young mothers;
3. Recommendations made to policy makers on how to make the health service delivery system more conducive to respond to SRH needs of adolescent girls and young mothers.

2.2.2 Secondary outcomes

1. MNH and SRH needs of the poor and marginalised adolescent girls and young mothers placed high on the agenda of the policy makers at the provincial level
2. Civil society organisations, networks, media and other stakeholders equipped with evidence-based information to lobby and advocate with the policy makers so as to better respond to the SRH needs of marginalised adolescent girls and young mothers.
3. Identification of the determinants related to SRH services' availability, access and knowledge in project's selected rural areas.

3 METHODS

3

METHODS

3.1 Project Areas

The research districts were Badin (Sindh), Muzaffargarh (Punjab), Mardan (KPK province) and Quetta (Balochistan). The selection of these districts was based on:

1. Bringing in at least one district from each province to make the research representative for respective provinces.
2. To bring cross comparison between provinces in research findings, (similarities and diversity).
3. The said districts are CARE's partner, Rahnuma-FPAP's operational areas, where they have a longstanding relationship with communities and key stakeholders around SRH issues.
4. These districts also have a good mix of the diverse segments of society, ethnic and religious minorities, scheduled castes, ranges in socio-economic status, feudal and tribal structures etc.

3.1.1 Mardan

Mardan is geographically one of the central districts of KP province, with an agriculture based economy. The male literacy ratio is much higher at 54% compared to 18% for women. Mostly there are separate educational institutes for girls and boys, reflecting the conservative nature of the populace, where interaction between the two sexes is considered to be socio-culturally not appropriate. The population is largely poor and relatively uneducated, however recent years have seen major improvements in education, health and infrastructure⁷.

3.1.2 Badin

Badin is an agricultural and industrial district that is geographically located in the south part of Sindh province, and bordering the Arabian Sea. The district has better literacy among the urban segments of its population, however, the rural populace is largely uneducated. Sugarcane and oil drilling are the mainstays of its economy. In the urban area, poor ambient air quality, supply of contaminated water, unsafe disposal of municipal waste and solid waste, unsafe disposal of infectious hospital waste and congested houses have created severe environmental degradation. Rural areas are badly affected by water

7 Wikipedia, 2013. Mardan, Pakistan. Available at URL <http://en.wikipedia.org/wiki/Mardan> and <http://www.pbs.gov.pk/content/district-glance-mardan>

logging, salinity and non-availability of pure drinking water⁸.

3.1.3 Quetta

Quetta district which is geographically located in the northern part of the Balochistan, is the largest city in, and the provincial capital of, the province. The population of the city is estimated to be nearly 2.8 million, which makes it the 6th largest city in Pakistan. The district is inhabited by diverse Pushtun, Baloch and Hazara ethnicities with diverse respective socio-cultural norms and lifestyles with the former considered to be more conservative, similar to the populations residing in KP province of Pakistan⁹.

3.1.4 Muzaffargarh

Muzaffargarh district is geographically located in south-western Punjab, adjacent to the bank of the Chenab River, and is one of oldest districts of Punjab. The district is famous for sweet mangoes and nuts. Wheat, cotton and sugarcane are major crops of this area. The area has a low literacy rate that is considered to be one of the lowest in the country. There is large differential between the literacy among males (41%) and females (15%) , with the latter faring poorly against this demographic indicator in the district¹⁰.

3.2 Process of Assignment

The project essentially had three stages: 1) Conduct public policy and secondary data review, 2) Generating evidence for current sexual and reproductive health situation among 15-24 year old; and 3) Evidence-based advocacy campaign to focus on young girls and mothers SRH rights and health needs. The respective process steps for conducting the above mentioned stages of the project are listed and detailed as below.

1. Conduct public policy and secondary data review
 - a. Stakeholder analysis and qualitative mapping
 - b. Rigorous review and analysis of secondary data
2. Establishing current status – Situational analysis
 - a. Population based survey
 - b. Health facility-based exit survey
 - c. Key informants interviews

d. Focus group discussions

3. Evidence-based advocacy campaign to focus on young girls and mothers SRH rights and health needs.

The current report pertains to the results of the 2nd phase of study in which quantitative and qualitative research methods were adopted to establish the current status of sexual and reproductive health among 15-24 year old women across the four provinces.

3.3 Establishing current status – Situational analysis

The situation analysis segment of this project, entailed establishment of the current status of SRH and MNH related knowledge, attitude, practices and care utilisation patterns. Establishment of current status among the selected districts, involved mixed research methods including quantitative and qualitative components. The quantitative component was comprised of a community-based survey of young women of child bearing age (15-24 years) across four districts of the country. The qualitative component included Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs).

3.3.1 Quantitative household based cross sectional survey

3.3.1.1 Information

Information in this survey was acquired from the eligible participant women (married and unmarried young girls 15-24 years old) through a survey specific tool. The tool was developed in view of the above mentioned research objectives, internationally recommended and nationally adopted sexual and reproductive health indicators, and in light of existing research initiatives carried out in Pakistan. Information collection through this tool focused on the following domains

1. Socio-demographic and economic characteristics of participants.
2. Reproductive and/or obstetric history.
3. Healthcare use for SRH needs.
4. Perceptions and expectations of young women of child bearing age with reference to SRH related health seeking behaviours and practices.

8 Wikipedia, 2013. Badin, Pakistan. Available at URL <http://en.wikipedia.org/wiki/Badin>

9 Wikipedia, 2013. Quetta, Pakistan. Available at URL <http://en.wikipedia.org/wiki/Quetta>

10 Wikipedia, 2013. Muzaffargarh, Pakistan. Available at URL <http://en.wikipedia.org/wiki/Muzaffargarh> and <http://www.pbs.gov.pk/content/district-glance-muzaffargarh>

5. Health seeking behaviours and practices from geographical, economic and sociocultural perspectives of availability, accessibility and utilisation in the context of marginalised segments of the population.

3.3.1.2 Sample Size Calculation

To conduct the cross sectional survey, a sample size calculation irrespective of the overall population size, was conducted with the use of PASS version 11 software to yield results in accordance with the specified objectives. This sample size calculation was done to acquire a conservative sample of adolescent and young girls of reproductive age (15-24 years) which would then be able to reveal statistically significant results. To conduct the sample size calculation, existing estimates pertaining to the domains of study hypotheses were researched for Pakistan. Among these domains, to our knowledge there were currently no available previous estimates for the perceptions and expectations of young women with pertinence to sexual and reproductive health needs. However, existing estimates on prevalence of pregnancy in the given age group are available, that are considered to be a proxy indicator for sexual and reproductive health needs, health seeking and utilisation for such services in this segment of the population. In Pakistan nearly 10% of the young women and adolescent girls are either pregnant with their first pregnancy or have had their first child. Considering this prevalence estimate and utilising the statistical assumptions of a confidence interval of 95% (i.e. Type I error (α) of 5%) and a bound on error of 6 % (i.e. Type II error), the calculated sample size was at-least 384 young and adolescent women¹¹.

To accommodate for the departure from simple random sampling approach for sample selection, and in accordance with the proposed multi-stage cluster sampling strategy, the initially calculated sample size was then amplified by multiplying it with the design effect constant of 1.5, thus yielding a size of at-least 576 young and adolescent women. The hence calculated sample size was then further enhanced by a percentage of 5% to accommodate for possible non-response/refusal/non-availability among the eligible study participants. The overall sample size for the baseline survey, was thus proposed to be at-least 605 young and adolescent women.

3.3.1.3 Sampling Strategy

To conduct the cross sectional survey of at-least 605 adolescent girls and young married (AGYM) women, a multi-stage cluster sampling strategy was adopted. There were two stages of sample selection in which equal number of eligible women were interviewed from each selected district.

To implement the 1st stage of the sampling methodology, the list of all rural Union councils and urban towns along with respective revenue villages/electoral wards in the selected districts was obtained at the district level. Simple random sampling approach was then used to select three village locations in the rural areas and three wards in the urban areas per district.

To implement the 2nd stage of sampling methodology, across each selected village/ward households were selected with the use of systematic sampling with a random start approach. Equal numbers of survey participants were selected for each of the district across the four provinces (i.e. 151 young women per district). The number of households selected for peri-urban and rural areas was based on the probability proportion to size technique. In this technique the selection of 151 survey participants/district across urban and rural areas in a district was done in a manner, so that it approximated to the proportional representation in the survey according to the urban: rural population ratio for the respective district.

Household selection in a village/ward was conducted through a random start and following the right hand rule to contact eligible households (i.e. those having at least one young adolescent girl or young woman). The random start was performed with the methodology of moving to the largest mosque/local market or important landmark within the village/ward. A ballpoint pen was then used to drop it in a free fall manner. The direction, in which the writing tip of this ball point pen indicated, was the direction in which the contact with the first household was conducted. Following the right hand rule and moving in this direction, households with a systematic interval of at-least one household were then selected. Households where an eligible survey participant was not available, the next adjacent household on the right side became eligible for the survey conduct.

3.3.2 Facility-based cross-sectional exit survey

The public sector facility-based cross sectional survey was done in order to assess the perceptions of young women and

11 Lwanga, S. K. and S. Lemeshow (1991). Sample size determination in health studies: a practical manual Geneva, WHO.

adolescent clients about the quality of care (that included antenatal, natal, postnatal, Family Planning, SRH counselling) and access to selected public sector healthcare facility in the four districts. The target public sector health facilities were the district headquarters hospital (DHQ) in Mardan, Muzaffargarh and Badin, and Civil hospital in Quetta. These facilities were selected keeping in view the large catchment area of the facilities which caters for both urban and rural segments of the population in the respective districts. Eligible participants were young adolescent girls and women (15-24 years old) who had sought OPD based care from the obstetrics and gynaecology department and/or the family planning services point in the respective healthcare facilities.

3.3.2.1 Sample selection

Interviews were conducted when the client was exiting after utilising the services from the Outdoor Patient Department (OPD) of the above mentioned selected District level hospitals. The selection of clients was done from the list of OPD patients. Every eligible client from these lists was requested for the interview about client's perceptions. A structured and pre-tested tool based on questions about the quality and access to SRH was developed to interview the clients when they were exiting from the facility.

3.3.2.2 Sample Size Calculation

To acquire statistically significant results for client perspectives through the exit survey, a sample size calculation was conducted with the use of PASS version 11 software. The assumptions used for this calculation were based on the known instance/prevalence of 15% maternal morbidity among women during the maternal period¹². No such age-group specific (15-24 years) morbidity estimates among young and adolescent girls age were available for Pakistan. We used the assumptions of Type I error (α) to be 5% (i.e. 95% confidence interval of the point estimate), bound on error (i.e. precision) to be within + 8% of the point estimate, for a two sided hypothesis testing, while accommodating for possible asymptotic (non-normal distribution) nature of the characteristics among women of child bearing age. The calculated sample size was 307 women who would possibly be using facility care for reproductive health/SRH services. The derived sample size

was then divided equally across the four above mentioned selected facilities. For every health facility 77 clients were interviewed during the exit survey, to achieve the overall required sample of at-least 307 participants.

3.3.3 Key Informant Interviews

To ascertain the insights of healthcare providers and health managers, KIIs were conducted in each district with

1. Executive District Officer (EDO-Health)
2. Lady Health Workers - LHWs (one rural – one urban)
3. Traditional Birth Attendants – TBAs (one rural – one urban)
4. Medical Officers/Gynaecologist in the Obstetrics and Gynaecology Departments of the respective healthcare facilities (at-least one per health facility) .

The EDO Health, being the departmental head at the district level were accessed based on permission letters acquired from the respective provincial health departments and with the facilitation of Rahnuma-FPAP teams. These interviews acquired information with reference to SRH needs of AGYM and the availability of healthcare to these segments of the population in the district. Queries were made about existing gaps and suggestions for improving the existing healthcare provision mechanisms.

Lady Health Workers were interviewed from the same selected union councils in the districts, from where FGDs with parents of AGYM were conducted. Selection of LHWs was done through simple random sampling approach with the use of list of all LHWs in the selected Union councils (UCs). Opinions about the SRH needs of AGYM were inquired and their perspective about gaps and strengths in the existing healthcare provision mechanisms were explored from these respondents.

In the absence of any consolidated lists of TBAs being available at the UC level, help for identification of these care providers was sought from the selected LHWs. The TBAs were interviewed for similar domains as for the LHWs. They were additionally inquired about the socio-cultural practices related to SRH, and the range of services these TBAs render for AGYM in their communities. Suggestions were also sought to improve the existing healthcare provision for SRH in their localities. Medical Officers/Gynaecologist in the Obstetrics and Gynaecology Departments of selected public

12 Ali Moazzam, Bhatti Ayaz Mohammad, Rizwan Humayun, Hashim Saima, Kuroiwa Chushi. Emergency obstetric care availability, accessibility and utilization in eight districts in Pakistan's North West Frontier Province. J Ayub Med Coll Abbottabad 2006; 18(4).

sector health centres were interviewed for the range of SRH services being extended to AGYM at their hospital. Insights were sought about the problems and the enablers faced by these care providers, and the service utilisers, for accessibility of young girls for such services. Suggestions were also acquired to improve the existing healthcare provision mechanisms.

3.3.4 Focus Group Discussions

There were a total 4 FGDs (8-10 participants each) conducted per district;

1. FGD with Fathers of AGYM – one rural – one urban
2. FGD with Mothers of AGYM– one rural – one urban

FGD in one district = 4

Total FGDs = 4 x 4 = 16

3.4 Survey Instruments

Draft instruments for the quantitative (structured face to face interviewer administered instrument) and qualitative (semi-structured interviewer administered instrument) components, were developed in English, translated in Urdu and presented to RAF team for review and feedback. After incorporating the received feedback final version of instrument were developed in Urdu. The survey instruments are attached as Annexure to this document. Final questionnaires were developed by considering the following characteristics:

- i. It is clear and understandable and responses are simple to record;
- ii. It is easy to assign codes to the open-ended questions (if any); and
- iii. No section is left open to allow for ambiguity while writing responses.

3.5 Selection of Field Teams

To ensure that quality data was collected, the following steps were followed for composition and selection of field teams. From the available database of FPAP, enumerators were identified and interviewed. The enumerators were selected based on following criteria:

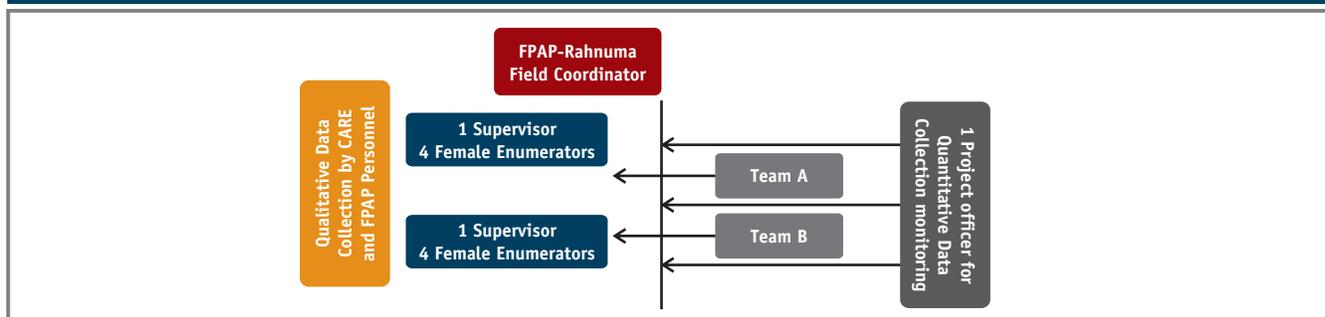
- i. Education, minimum of higher secondary school or above;
- ii. A local of the district;
- iii. Understanding of the health sector and related issues;
- iv. Well versed with local languages and geography;
- v. Prior field research experience; and
- vi. Pleasant personality, dedication, and honesty.

3.6 Field Teams Composition and Training

To conduct the field activities, local data collection teams were selected from each district. There were two teams selected per district comprising of three members which included two experienced female data collectors who were supported by an experienced male facilitator/supervisor in the field. Overall supervision of field data collection were monitored by FPAP-Rahnuma district based project officers, while the CARE team members made district visits for the purpose.

District based teams were trained for two days on the study specific tools at the district level. One such training was held each in Mardan, Muzaffargarh, Badin and Quetta. The training included review and discussions on the questionnaires, methodologies of conducting face to face interviews including non-use of leading phrases/questions, and the ethical conduct of research. Participants were also trained on the sampling methodologies for the conduct of

FIGURE 1: DISTRICT DATA COLLECTION TEAM STRUCTURE



community-based and the exit survey.

It was ensured during the training that each team member develops his/her own comprehensive data collection notes and guiding points for ease during data collection in the field, while maintaining uniformity and consistency of approach. The notes were developed in their handwritings and its contents were finalised after detailed discussions on each of the indicators of the data collection tools.

3.7 Data Management

3.7.1 Quantitative Data Entry and Cleaning

Study specific data entry programs were designed in EPI Info Version 6.4 software. These programs and software were installed at two computers of the DS office. Access to the entry program and the computerised data set was permitted for the data entry personnel and research team members only. The computer files were password protected.

3.7.2 Qualitative Data Storage

The observations of KIIs and FGDs were retained under lock and key at the CARE office.

3.7.3 Data Analysis

The data analysis for qualitative information was conducted through triangulation techniques. The interviews were recorded through field notes. These notes were then transcribed verbatim and thematically to derive broader premises and contexts. The findings were formulated theme-wise in a narrative manner for presenting the qualitative results in the report.

The data analysis for quantitative component was conducted through SPSS version 19 software. Descriptive and inferential analyses were conducted. In descriptive analysis frequencies, proportions and means with standard deviations were derived to understand and describe the survey participants and their characteristics. At the second stage of analysis cross-tabulation correlation analysis were applied.

3.7.4 Quality Control

During data collection, survey supervisors observed and checked most of the forms to ensure that interviewers were collecting and recording data accurately, and that forms were filled in completely. Supervisors checked the forms before the interviewers left the cluster so that they could be corrected, if required. Additionally random monitoring

checks were carried out by monitors from CARE and FPAP team members. Members of the CARE research team also participated and conducted a few of the FGDs and KIIs in each of the districts.

3.8 Ethical Considerations

3.8.1 Informed consent

Informed verbal and/or written consent was sought from the survey, KII and FGD participants. A plain language statement in the beginning of the survey and FGD tools was used to introduce the research and its purpose to the participants, and permission to administer the tool/questionnaire was requested. It was ensured that research participants had the right to refuse to participate in the beginning or at any stage during the conduct of the interview or discussion sessions.

3.8.2 Confidentiality

Each participant was given a unique survey identification number. The personal information of any of the participants was not revealed to anybody, besides the research team members. Within the data collection team members, no provision of sharing data on collected information about participants was permitted.

4 RESULTS

4 RESULTS

4.1 Community Survey

4.1.1 Demographic and Socio-economic characteristics

The study was able to achieve the required sample size during the quantitative household survey. The distribution

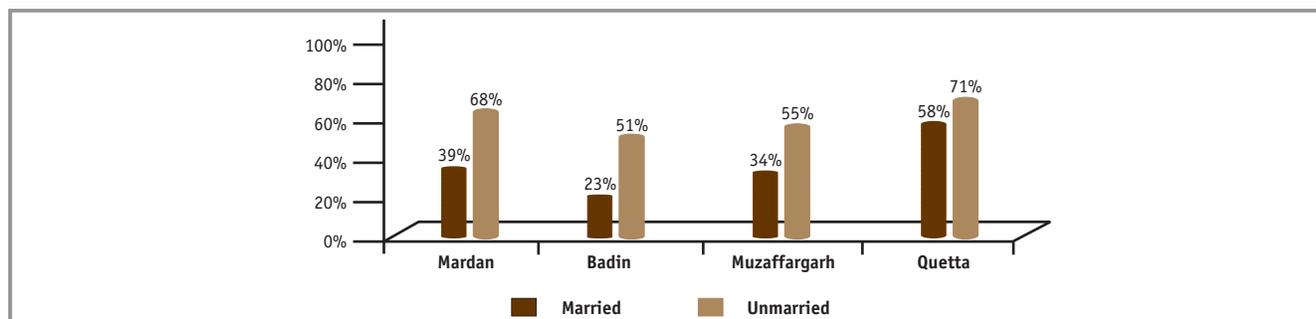
of participants reflects that there was nearly equal representation for the unmarried and married adolescent and young mothers (49% and 51% respectively) in the study sample. The districts of Muzaffargarh and Mardan had higher proportional contribution in the overall sample (Table 1).

Age of the AGYM was inquired during the household survey. The mean age of the participants was then calculated. It was found that the married respondents had a higher mean age than the unmarried respondents in the study (Table 1); however the result was not statistically significantly

TABLE 1: DISTRICT-WISE DISTRIBUTION OF HOUSEHOLD SURVEY PARTICIPANTS AND MEAN AGE

| DISTRICT | DISTRIBUTION OF PARTICIPANTS | | | | | | AGE OF RESPONDENTS | | | |
|--------------|------------------------------|------------|------------|------------|------------|------------|--------------------|----------|-----------|----------|
| | EVER MARRIED | | UNMARRIED | | TOTAL | | EVER MARRIED | | UNMARRIED | |
| | # | % | # | % | # | % | Mean | SD | Mean | SD |
| Mardan | 126 | 29 | 102 | 25 | 228 | 27 | 22 | 2 | 17 | 2 |
| Badin | 48 | 18 | 80 | 20 | 158 | 19 | 23 | 2 | 17 | 3 |
| Muzaffargarh | 151 | 35 | 152 | 37 | 303 | 36 | 22 | 2 | 18 | 3 |
| Quetta | 74 | 17 | 77 | 19 | 151 | 18 | 21 | 3 | 18 | 3 |
| Total | 429 | 100 | 411 | 100 | 840 | 100 | 22 | 2 | 18 | 3 |

FIGURE 2: EDUCATED MARRIED AND UNMARRIED AGYM IN COMMUNITY SURVEY*



different.

Current marital status among the ever married participants revealed that nearly all of them were currently married. There were no widowed or divorced/separated participants in Muzaffargarh and Quetta, while a small proportion of them were represented in the sample from Badin and Mardan. Considering the similarity of mean age and proportions for current marital status, it may be deduced that participants did not vary across the provinces with reference to these demographic markers.

Education (as defined through ability to read and write their

name) among participants was assessed through a dichotomous variable of being literate or illiterate (Figure 2). Among the literate, the level of education was subsequently ascertained through multi-category responses, which inquired about formal schooling.

It was found that the highest proportion of literate participants belonged to Quetta (both married and unmarried) followed by the district of Mardan. The lowest prevalence of formal education was found in Badin. Level of education revealed that despite the women being literate, the large majority in both the groups had had no formal

* The bar proportions do not approximate to 100% because they represent only the educated in a district among married and unmarried

schooling and were only able to read and write their name (Figure 3). Nearly one fifth of the married and one sixth of the unmarried girls had only primary level education, while a

dismally small proportion of the participants had education of post-secondary level (14% among married and 9% among unmarried).

FIGURE 3: LEVEL OF EDUCATION AMONG MARRIED AND UNMARRIED

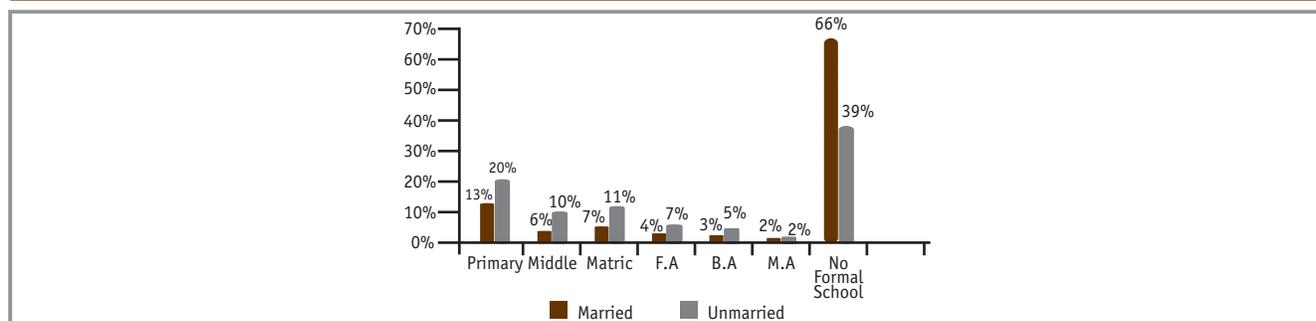


TABLE 2: DISTRICT-WISE COMPARISON OF HUSBAND AND GIRL'S EDUCATION STATUS (% EDUCATED)

| DISTRICT | GIRLS (%) | HUSBANDS (%) | DIFFERENTIAL (%) |
|--------------|-----------|--------------|------------------|
| Mardan | 39 | 64 | 25 |
| Badin | 23 | 55 | 32 |
| Muzaffargarh | 34 | 52 | 18 |
| Quetta | 58 | 84 | 26 |

Among the married participants, husband's education status was inquired. It was found that nearly two thirds of the husbands (62%) had received formal education and conversely slightly more than one third had no such education. When the information was stratified according to the district, it was found that similar to the trend in girls, the highest proportion of educated husbands were from Quetta (84%) while the lowest such proportion belonged to

Muzaffargarh (52%).

Across all the districts the proportion of married educated girls was lower than that of the husbands', with the differential ranging between 18%-32%. This comparison (Table 2) showed that across all the four provinces education was less prevalent among married girls as compared to their husbands, with those belonging to Badin faring the poorest across the four study districts.

TABLE 3: MEAN MONTHLY HOUSEHOLD INCOME BY MARITAL STATUS

| MONTHLY HOUSEHOLD INCOME (Pak Rupees) | Married | | Unmarried | |
|---------------------------------------|---------|----|-----------|----|
| | # | % | # | % |
| < 6,000 | 202 | 47 | 143 | 35 |
| 6000 to < 15,000 | 165 | 39 | 216 | 53 |
| > 15,000 | 62 | 14 | 52 | 13 |

To explore household characteristics, the number of family members was ascertained from the community survey participants. The responses were then analysed through the summary measure of mean and standard deviation. It was observed that in each district the mean family size of the married participants was smaller than the unmarried girls. It is understood that, the reason for married young girls having smaller family sizes is that they are more commonly living in their own homes i.e. in a nuclear family structure, while the unmarried live in their parent's/family home which

according to the socio-cultural norms may be extended or joint family structures. The largest mean family size was derived to be for married participants of Quetta, while the smallest was also for Quetta representing the unmarried girls of the district.

As depicted through previous empirical research on Reproductive Health in Pakistani settings, access to health services for females in the country is often dependent on the decision making by male members or household heads. To understand such dynamics in our study population, the sex

of the head of the household was inquired to further understand the household characteristics. It was found in both the married and unmarried groups that the vast

majority had a male household head, and the proportion of female households was low and similar across the two groups.

FIGURE 4: SEX OF HOUSEHOLD HEAD BY MARITAL STATUS

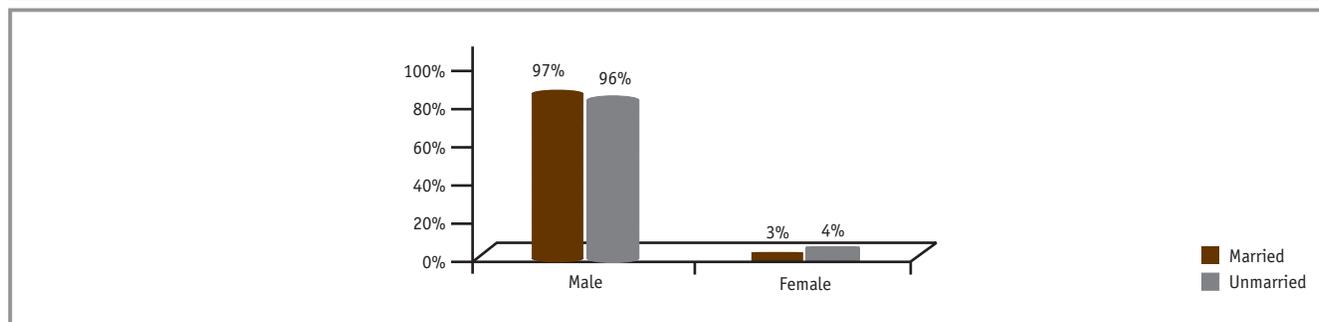
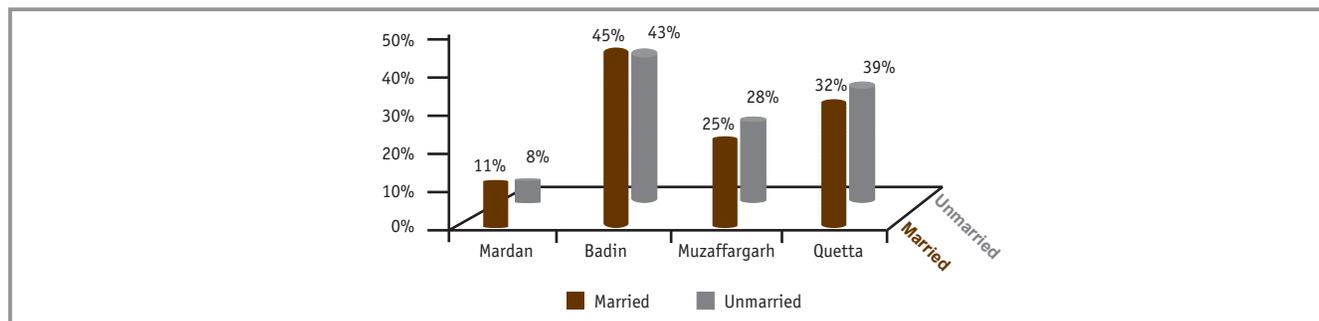


FIGURE 5: DISTRICT AND MARITAL STATUS-WISE COMPARISON OF "ANYONE TOLD ABOUT MENSES"



Economic status of households was assessed by asking about the average monthly household income from all sources. The acquired information was then categorised into three dataset based categories (< Rs 6,000, 6,000-<15,000 and > 15,000) to compare them across the segments of married and unmarried adolescent and young women of 15-24 years age. It was found that among the unmarried nearly half of the households had an income of 6,000-<15,000 while a slightly lower proportion (47%) among married belonged to the <Rs 6,000 category. The proportion belonging to the highest income category of > Rs 15,000 was similar across both the groups. These findings were similar to the national figures, which reflect that nearly one third of the country's population belongs to lowest economic categories.

4.1.2 Menarche and its awareness

Age at menarche was inquired from the community survey respondents. It was observed that the mean age of menarche among the married was 13 years and among the unmarried was 12 years. Overall mean age was found to be

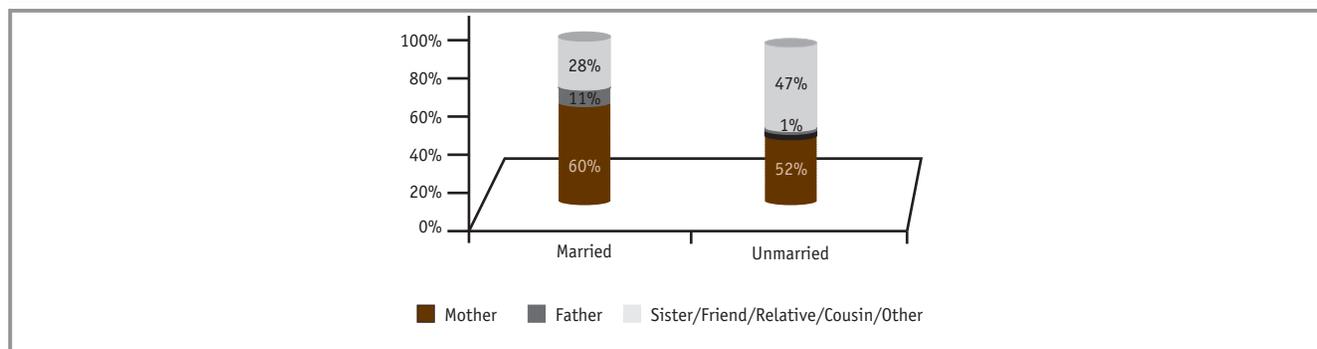
13 years. The lowest age of menarche (12 years) was observed for unmarried girls belonging to Mardan and Quetta. The difference in these mean ages, were however, found to be statistically not significant.

Knowledge about menses before/at the time of menarche was inquired from the participants. This was asked with reference to "anyone told about menses" to ascertain the proportion of married and unmarried girls who were informed about the phenomenon of menses (Figure 5). The said indicator was quantified to gauge the prevalence of such communication to make the young girls aware about this physiological occurrence across the study districts. It was found that such communication was least prevalent in Mardan and most prevalent in Badin. The proportion of unmarried girls who were made aware about menarche was lower than that of the married girls in the districts of Mardan and Badin, and vice versa for the remaining two districts. Through this finding, it may be extrapolated that in KP province such communication is least prevalent as compared to other parts of the country.

TABLE 4: DISTRICT AND MARITAL WISE AGE AT MENARCHE

| DISTRICT | MARRIED | UNMARRIED |
|--------------|-----------|-----------|
| | Mean (SD) | Mean (SD) |
| Mardan | 13 (1) | 12 (3) |
| Badin | 13 (1) | 13 (2) |
| Muzaffargarh | 13 (1) | 13 (2) |
| Quetta | 14 (1) | 12 (4) |

FIGURE 6: SOURCE OF COMMUNICATION “WHO TOLD ABOUT ADOLESCENCE”



To further investigate communication about menarche and physiologic changes at the time of puberty (including breast enlargement, pubic and axillary hair), the community survey participants were inquired about adolescence and its physiologic changes and if they were made aware about such changes. It was found that similar to the responses for menarche, the lowest prevalence of such communication was in Mardan. The proportions for being made aware for the domains of menarche and adolescence were similar across all the districts except Badin, where a higher proportion of girls was made aware about menarche as compared to puberty changes in adolescence).

Among those who were made aware about adolescence and puberty, the source of such communication was inquired. The most commonly reported source was the participant's mother across both the married and the unmarried groups.

In view of small numbers of those being made aware by people other than parents the various categories of sister, cousin, relative and friend were merged together (Figure 6). As is understandable in the context of socio-cultural norms, Fathers were the least prevalent source of such information among the community survey participants.

4.1.3 SRH history and management among unmarried

The unmarried community survey participants were inquired about their menstrual history. In this regard, these participants were first inquired about any menstruation related health problems suffered during the past. Inquiry was made with reference to painful menstruation (Dysmenorrhea), vaginal discharge, anxiety/sadness around menses, irregular periods, excessive bleeding during menses and longer duration of menses. Menstrual problems as cited

FIGURE 7: DISTRICT-WISE PROPORTIONAL DISTRIBUTION FOR HISTORY OF MENSTRUAL PROBLEMS AMONG UNMARRIED

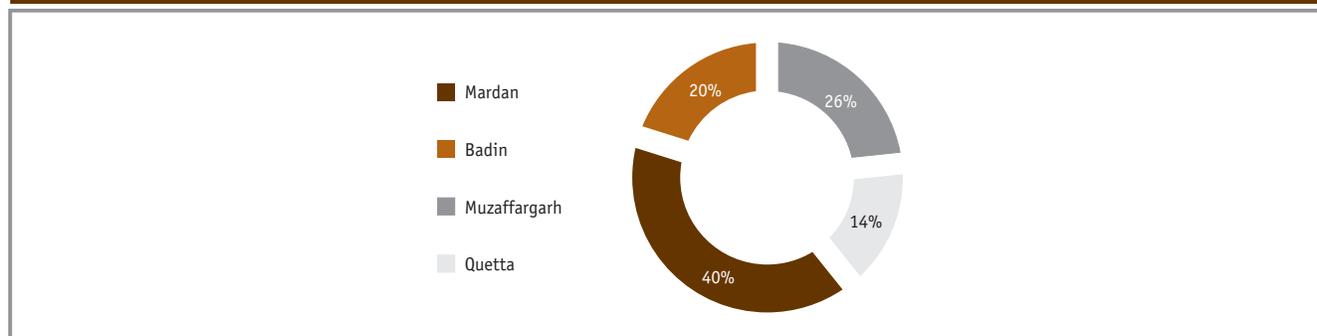


FIGURE 8: DISTRICT-WISE REPORTED PREVALENCE OF MENSTRUAL PROBLEMS AMONG UNMARRIED

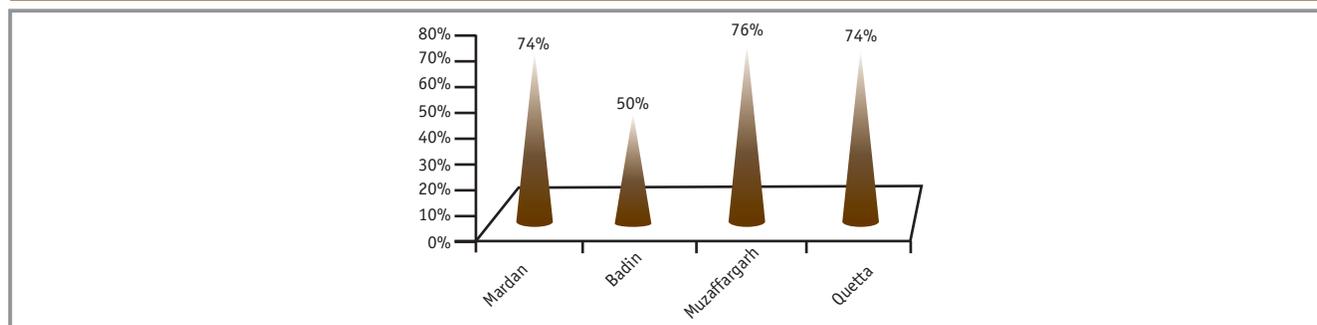


FIGURE 9: DISTRICT-WISE PROPORTION OF THOSE WHO SOUGHT ADVICE FOR MENSTRUAL HEALTH PROBLEM

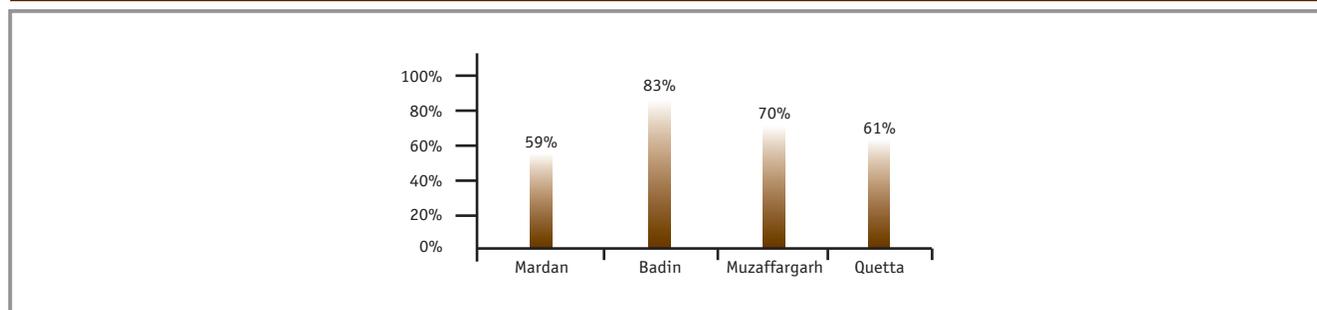


TABLE 5: SOURCE OF ADVICE FOR MENSTRUAL HEALTH PROBLEMS

| Got Advice About Menstrual Problem From | DISTRICT | | | | | | | | | |
|---|-----------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
| | Mardan | | Badin | | Mzgarh | | Quetta | | Total | |
| | # | % | # | % | # | % | # | % | # | % |
| Parents | 32 | 73 | 21 | 64 | 54 | 67 | 24 | 69 | 131 | 68 |
| Sister / Cousin / Friend | 7 | 16 | 9 | 27 | 24 | 30 | 3 | 9 | 43 | 22 |
| Relative | 0 | 0 | 3 | 9 | 1 | 1 | 1 | 3 | 5 | 3 |
| LHW | 3 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 2 |
| Lady Doctor | 2 | 5 | 0 | 0 | 1 | 1 | 7 | 20 | 10 | 5 |
| Total | 44 | 100 | 33 | 100 | 81 | 100 | 35 | 100 | 193 | 100 |

by the respondents, irrespective of clinical diagnosis were recorded.

The acquired information was then analysed in two ways. Firstly, among all the reported menstrual health problems in the past, the proportional contribution by the districts was portrayed (Figure 8), while secondly the district-wise reported prevalence of such problems was analysed (Figure 7). It was revealed that among the districts, the highest proportion of menstrual problems was from Muzaffargarh. This was followed by Mardan and Quetta, while Badin contributed the least. This possibly could be the result of the menstrual hygiene related practices in Muzaffargarh to be less hygienic as compared to other districts.

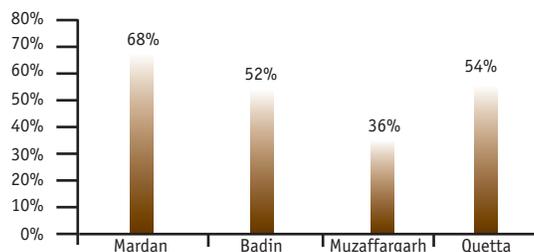
The reported prevalence revealed that except Badin, three quarters of unmarried girls of all the other districts had

suffered some form of menstrual problems/complications in the past (Figure 7). Combining the two results, it was hence derived that menstrual morbidity was least common among unmarried girls of Badin as compared to other districts.

A district-wise comparison reflected that the highest proportion of girls who sought advice for menstrual health problem belonged to Badin, followed by Muzaffargarh, Quetta and Mardan respectively. Combining this finding with the ones related to awareness about menses and adolescence, it can be deduced that among the four districts, Mardan fared the poorest with reference to communication about menses, adolescence and health problems related to these.

Among those who reported of menstrual health problems, inquiry about seeking advice from somebody for the

FIGURE 10: DISTRICT-WISE PROPORTION OF GIRLS WHO VISITED A HEALTHCARE CENTER FOR MENSTRUAL HEALTH PROBLEM



problem. It was reported that overall about two thirds of the girls had sought advice while the remaining one third had not done so. Those who had acquired advice for their menstrual health problem were asked about the person from whom such help was sought (.). The most common person pursued for this purpose was parents, followed by sister, cousin or friend. A small proportion reported about LHWs and Lady Doctor (8%).

A district-wise comparison about source of advice about menstrual health problems revealed that across all the districts, parents was the most common source. There was no consultation with lady doctors in Badin, while the highest proportion of one fifth of the girls contacted them in Quetta.

Girls who faced a menstrual health problem in the past were also inquired about their health seeking behaviour/practice. This was asked with reference to the menstrual health problem cited by them. It was found that nearly two thirds (68%) of the girls from Mardan, nearly half in Badin and Quetta (52% and 54% respectively), and only one third (36%) in Muzaffargarh visited a healthcare centre/provider for menstrual health problem (Figure 10).

Those who had visited a healthcare centre were then requested to share information about the type of health facility. Overall nearly one third (37%) of the girls (married and unmarried) had visited a government health facility and nearly two third's (63%) had gone to a private health facility.

A district-wise comparison revealed that healthcare utilisation from Government health facility was less than that of the private sector across all the districts). This proportion was the lowest in Muzaffargarh and the highest in Badin.

Those girls who had visited a private health facility were inquired for the reason(s) cited for not going to a public

sector entity. It was reported that nearly one quarter (23%) of them did not have a government health centre in their vicinity, while nearly one sixth of them (17%) cited bad attitude of the public sector care providers at these facilities (.). A small proportion of these respondents (7%) also narrated non-availability of female healthcare providers (LHV or Lady Doctor) in the government health centre, as the reason for not going there.

4.1.4 Reproductive health history among married

Married participants in the community survey were asked about their obstetric history in the past. The inquiry was made with reference to number of pregnancies in the past (including current pregnancy if applicable), number of deliveries and live children). District-wise comparison was conducted to analyse the information through the summary measures of mean and standard deviation (SD). The proportion of nulliparous married girls (i.e. those who have never had a pregnancy in the past and also not currently pregnant) was only 7%. It was found that the mean number of pregnancies in the past was higher in Mardan and Badin as compared to Muzaffargarh in this age group of 15-24 year olds. Mean number of live children as stratified across sex of the child was the same for all the four districts. Keeping the age group of adolescent and young girls in mind, the mean finding of 3 pregnancies reflects a heavy reproductive health burden for the married girls of Mardan and Badin. The findings if viewed from the lens of reproductive health needs, reflects that AGYM in Badin and Mardan have relatively higher needs than their contemporaries from Quetta and Muzaffargarh.

Current pregnancy status to gauge the current reproductive health needs of the married community survey participants' was inquired. One fifth of the married participants (20%) reported to be currently pregnant. It was found that nearly

FIGURE 11: DISTRICT-WISE PROPORTION OF CURRENTLY PREGNANT GIRLS

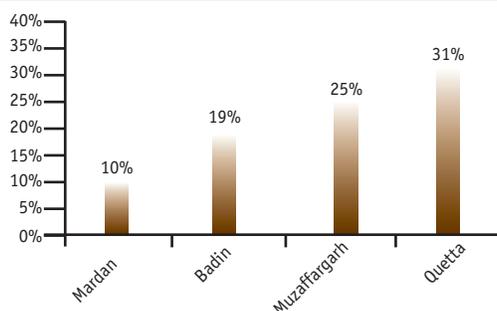


TABLE 6: ANTENATAL CARE AMONG THE CURRENTLY PREGNANT

| Antenatal Examination during Current Pregnancy | DISTRICT | | | | | | | | | |
|--|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| | Mardan | | Badin | | Mzgarh | | Quetta | | Total | |
| | # | % | # | % | # | % | # | % | # | % |
| Yes | 9 | 75 | 9 | 60 | 30 | 81 | 16 | 70 | 64 | 74 |
| No | 3 | 25 | 6 | 40 | 7 | 19 | 7 | 30 | 23 | 26 |
| Total | 12 | 100 | 15 | 100 | 37 | 100 | 23 | 100 | 87 | 100 |

TABLE 7: TETANUS TOXOID VACCINATION DURING PREGNANCY (CURRENT OR PAST)

| TT Injection | DISTRICT | | | | | | | | | |
|--------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| | Mardan | | Badin | | Mzgarh | | Quetta | | Total | |
| | # | % | # | % | # | % | # | % | # | % |
| Yes | 93 | 80 | 48 | 63 | 109 | 78 | 42 | 64 | 292 | 74 |
| No | 23 | 20 | 28 | 37 | 25 | 22 | 24 | 36 | 105 | 26 |
| Total | 116 | 100 | 76 | 100 | 139 | 100 | 66 | 100 | 397 | 100 |

FIGURE 12: SOURCE OF HEALTHCARE UTILIZED FOR PREGNANCY RELATED MORBIDITY

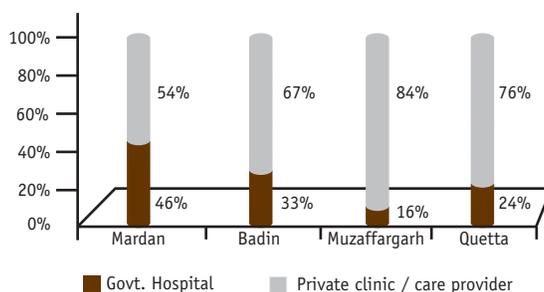
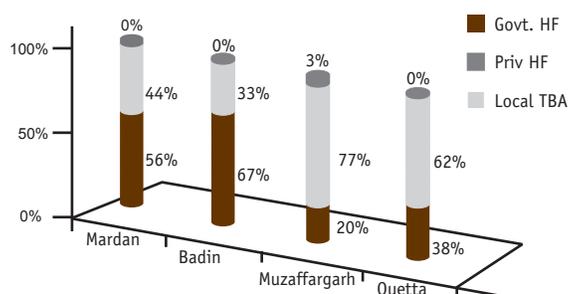


FIGURE 13: TYPE OF HEALTH FACILITY/CARE PROVIDER CONSULTED FOR ANC



two thirds of the married participants in Quetta (31%) were currently pregnant, followed by Muzaffargarh and Badin. The lowest prevalence of pregnancy was reported from Mardan (Figure 11).

4.1.5 Maternal health and care utilisation among married

Antenatal care

Currently pregnant participants were asked about their healthcare seeking and utilisation for antenatal care during their last/most recent pregnancy. It was encouraging that nearly three quarters of these young married girls (74%) had sought antenatal care (ANC) during the current pregnancy (Table 6). The highest proportion of this positive health seeking behaviour was found in Muzaffargarh (81%) followed by Mardan (75%) and Quetta (70%).

To understand the pattern of antenatal care utilisation, the currently pregnant participants were asked about the source of antenatal care (Figure 13). It was reported that use of public sector care was low in Quetta (38%) and Muzaffargarh, while the same was encouraging for Badin and Mardan (67% and 56% respectively). Except for the district Muzaffargarh, none of the other district's girls had sought such care from local Traditional Birth Attendant (TBA/Dai). This was understood to be a positive finding, keeping in view that nearly all of the antenatal care was being received from health facilities where commonly care is extended by skilled healthcare providers. Among those who had utilised antenatal care from private health facility, the

reasons for not doing so from a government health centre were inquired. Similar to the reasons cited by unmarried girls for menstrual health problem (17%), bad staff attitude, was cited by nearly one fifth (20%) of the married participants to be the main reason for not going to a government run health facility.

To further understand the SRH needs and their fulfilment through the healthcare system for the married girls, Tetanus toxoid (TT) vaccination during pregnancy was inquired from all those who had been pregnant in the past or were currently pregnant. Similar to the results for ANC, it was found that overall nearly three quarters of the girls had received TT during pregnancy (Table 7). The pattern across districts for such care was also similar to that for antenatal care, with a higher proportion in Muzaffargarh and Mardan receiving TT vaccination while the lowest level of utilisation was seen for Badin. Given that among the subset of currently pregnant girls who would have not been eligible for TT vaccination (i.e. less than 6 months pregnant), it is anticipated that possibly the recorded utilisation of TT vaccination may be even higher.

Married participants were asked about their experience of pregnancy related morbidity (such as vaginal discharge, bleeding/spotting per vaginum, excessive vomiting, abdominal pain, oedema etc.) during the current or the most recent pregnancy in the past (Figure 14). It was found that the highest proportion of girls reporting such morbidity during pregnancy belonged to Quetta followed by Mardan. These women were subsequently asked about their

FIGURE 14: DISTRICT-WISE PROPORTION OF MATERNAL MORBIDITY DURING CURRENT OR LAST PREGNANCY

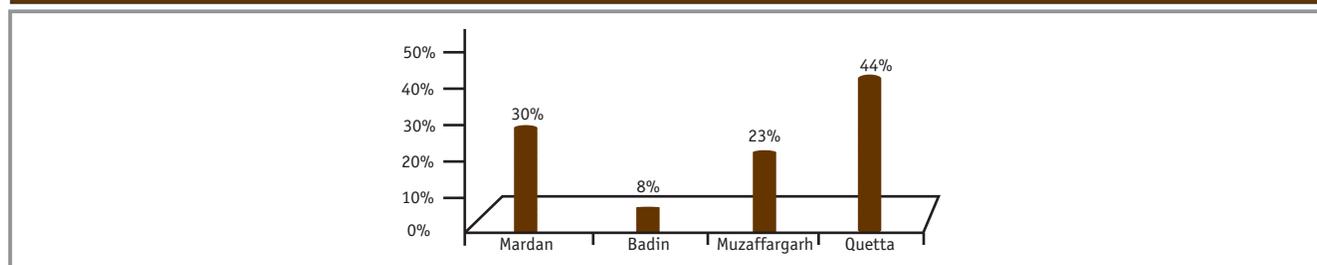


TABLE 8: PLACE OF DELIVERY FOR THE MOST RECENT PREGNANCY IN THE PAST

| PLACE OF LAST DELIVERY | DISTRICT | | | | |
|------------------------|-----------------|---------------|-----------------|----------------|----------------|
| | Mardan n=113 | Badin n=76 | Mzgarh n=133 | Quetta n=60 | Total n=382 |
| | % | % | % | % | % |
| Govt Hospital | 14 | 16 | 13 | 27 | 16 |
| Private Hospital | 30 | 40 | 29 | 55 | 36 |
| Husband's Home | 43 | 34 | 35 | 12 | 34 |
| Parents Home | 5 | 7 | 13 | 2 | 8 |
| Others | 7 | 4 | 11 | 5 | 7 |
| Total | 100 | 100 | 100 | 100 | 100 |

healthcare seeking for the said morbidity. It was reported that among those who sought treatment, the majority had done so from the private sector (71%). Among these the lowest proportion of girls who visited a government health facility belonged to Muzaffargarh (16%), while the highest proportion was observed for Mardan (46%). Nearly one third of the girls in Badin and about one quarter of them in Quetta utilised the public sector care (Figure 12). Private sector users were asked about their reasons for not visiting a government sector facility). The single most commonly cited reason in this regard was absence of healthcare facility in the vicinity (15%), followed by non-cordial attitude of staff members at the government centre. Keeping in view the results for menses related complications and the current results, it may hence be understood that staff attitude is one

of the key factors affecting the public sector healthcare utilisation negatively.

Natal care

Information from married women was acquired with reference to their natal care use for the last recent pregnancy in the past. Questions were asked about the place of delivery, birth attendant and any birth related complication faced at the time of delivery or within first 6 weeks of the postpartum period. It was reported that among those who had delivered, only one sixth of them had done so at a government health facility, less than half of them (42%) had delivered at home (husband's or parents), with nearly one third of them delivering at a private centre/hospital.

Type of birth attendant (Figure 15) revealed that except

FIGURE 15: TYPE OF BIRTH ATTENDANT FOR THE MOST RECENT DELIVERY IN THE PAST

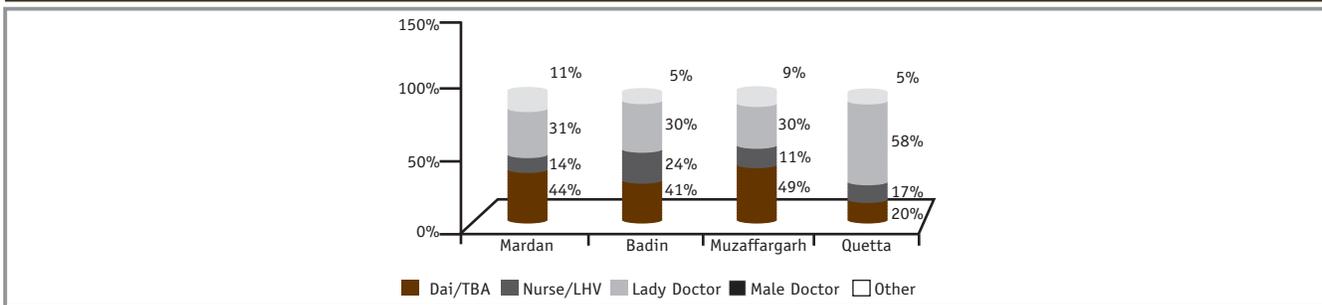
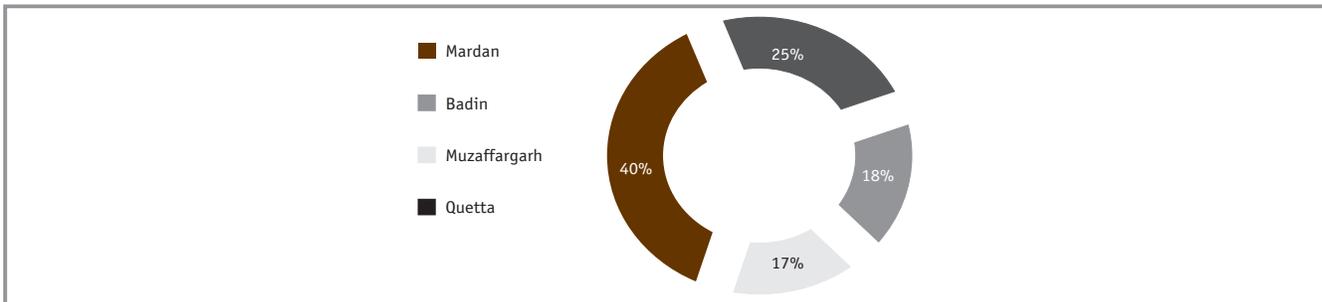


FIGURE 16: DISTRICT-WISE PROPORTIONAL DISTRIBUTION OF DELIVERY RELATED AND POSTPARTUM HEALTH COMPLICATION



Quetta (which had 20% Dai based deliveries), the proportion of deliveries conducted by traditional birth attendants/dai's was between 41%-49% of the total deliveries. This finding was concurrent with the fact that a similar proportion of girls delivered at homes, where there is high probability of being attended by a Dai. This reflected as 49% home based deliveries in Mardan, 41% in Badin, 47% in Muzaffargarh and only 12% in Quetta.

About one sixth of the girls reported a delivery related or postpartum health complication (17%). These included

fever, heavy postpartum bleeding, abdominal cramps, breast related problems such as inverted nipples etc. District-wise proportional distribution of the reported morbidity due to delivery or post-partum period revealed that the highest proportional contribution was from Quetta followed by Mardan (Figure 16).

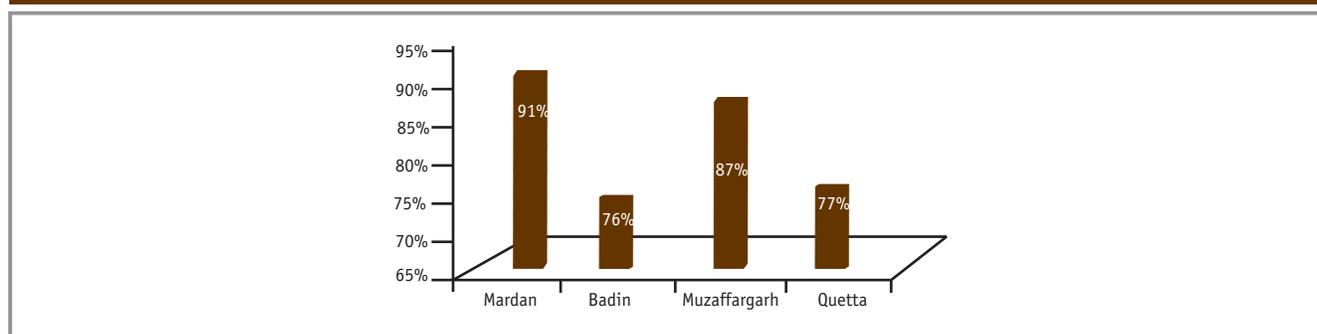
4.1.6 Family Planning – knowledge and practice

Information about knowledge and practice of family planning was acquired from the married young women. Their

TABLE 9: TYPE OF FAMILY PLANNING METHOD USED BY EVER USERS

| FAMILY PLANNING METHOD | DISTRICT | | | | |
|------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=69 | Badin n=30 | Mzgarh n=35 | Quetta n=21 | Total n=155 |
| | % | % | % | % | % |
| Condom | 25 | 20 | 31 | 24 | 25 |
| Withdrawal | 36 | 7 | 0 | 0 | 17 |
| Pills | 15 | 33 | 11 | 52 | 23 |
| IUCD | 4 | 10 | 26 | 10 | 11 |
| Injection | 20 | 30 | 31 | 14 | 24 |
| Total | 100 | 100 | 100 | 100 | 100 |

FIGURE 17: AWARENESS ABOUT FAMILY PLANNING



awareness was asked, which revealed that the majority of young married girls had ever heard about family planning, with the highest proportion (91%) from Mardan followed by Muzaffargarh (87%, with more than three quarters of the girls from Badin and Quetta being aware (Figure 17).

Ever use of family planning was asked from the married participants. It was reported that overall 43% of the participants had ever used a family planning method. A district-wise distribution revealed that the highest ever use was reported from Mardan (61%), while the lowest

FIGURE 18: EVER USE OF FAMILY PLANNING METHOD

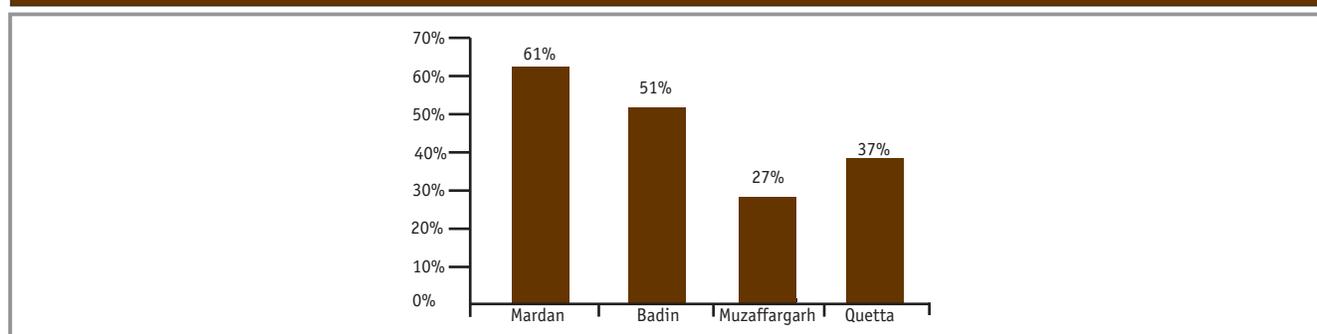


TABLE 10: SOURCE OF FAMILY PLANNING METHOD USED BY EVER USERS

| FAMILY PLANNING METHOD | DISTRICT | | | | |
|-------------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=69 | Badin n=30 | Mzgarh n=35 | Quetta n=21 | Total n=155 |
| | % | % | % | % | % |
| Govt. Hospital | 44 | 30 | 11 | 24 | 24 |
| Private Hospital | 13 | 13 | 43 | 48 | 48 |
| Private Nurse / LHV | 9 | 10 | 3 | 10 | 10 |
| Population Welfare Department | 12 | 37 | 34 | 5 | 5 |
| Others | 23 | 10 | 9 | 14 | 14 |
| Total | 100 | 100 | 100 | 100 | 100 |

TABLE 11: DECISION MAKING FOR FAMILY PLANNING METHOD USED BY EVER USERS

| FAMILY PLANNING METHOD | DISTRICT | | | | |
|------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=69 | Badin n=30 | Mzgarh n=35 | Quetta n=21 | Total n=155 |
| | % | % | % | % | % |
| Self | 23 | 20 | 29 | 38 | 26 |
| Husband | 26 | 30 | 17 | 14 | 23 |
| Self & Husband Both | 51 | 47 | 54 | 43 | 50 |
| Mother In Law | 0 | 3 | 0 | 0 | 1 |
| Others | 0 | 0 | 0 | 5 | 1 |
| Total | 100 | 100 | 100 | 100 | 100 |

proportion was reported from Muzaffargarh (Figure 18). Those who had ever used a family planning method were then inquired about the type of method used, the source from where the method was acquired, and who made the decision (at the household level) for adoption of a family planning method.

Among ever users and with reference of modern contraception methods, it was reported that one quarter of the couples had used condoms (25%), a similar proportion (24%) had been injection users, a slightly lesser proportion of contraceptive pills users (23%), IUCD (11%). Nearly one-sixth (17%) of them reported to have adopted the traditional method of withdrawal. A district-wise comparison revealed that the highest method reported amongst all the districts was for contraceptive pills use by girls from Quetta (52%). Use of condoms was somewhat consistently reported across all the districts with prevalence of use ranging between 20%-31%. A similar pattern was observed for injections use across the districts).

There were no reported cases of withdrawal method use from Muzaffargarh and Quetta, and the highest reported use of this traditional method was from Mardan (36%). Source of the used family planning method was inquired from the married women (Table 10).

It was reported that nearly one third of the users (31%) had acquired the contraception materials from a government health facility/hospital and about one quarter from a private hospital.

Role of women in decision making at the household level is considered to be an important marker to understand the social status of women in a given setting. . Decision making about family planning revealed that nearly one quarter of the girls (26%) had the autonomy to make decisions herself (Table 11). Less than one quarter of the women (23%) of the married respondents told that their husbands were the decision maker in this regard. Such decision making by both husband and wife together (considered to reflect better marital harmony and autonomy for the woman) showed that nearly half of the couples took such collective decisions. In this category, the said proportion was highest for Muzaffargarh (54%) and the lowest for Quetta (43%).

4.1.7 Knowledge about sexually transmitted diseases

Community survey participants (both married and unmarried) were asked about their knowledge of sexually transmitted diseases. This was asked with reference to having ever heard of sexually transmitted diseases or not. The results when compared across the districts and marital

FIGURE 19: DISTRICT-WISE DISTRIBUTION OF “HEARD OF SEXUAL TRANSMITTED DISEASES”

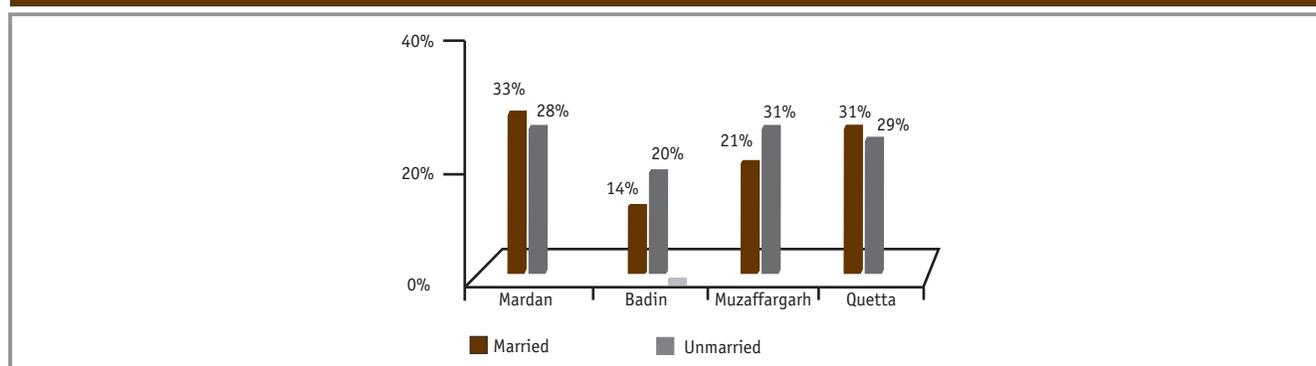
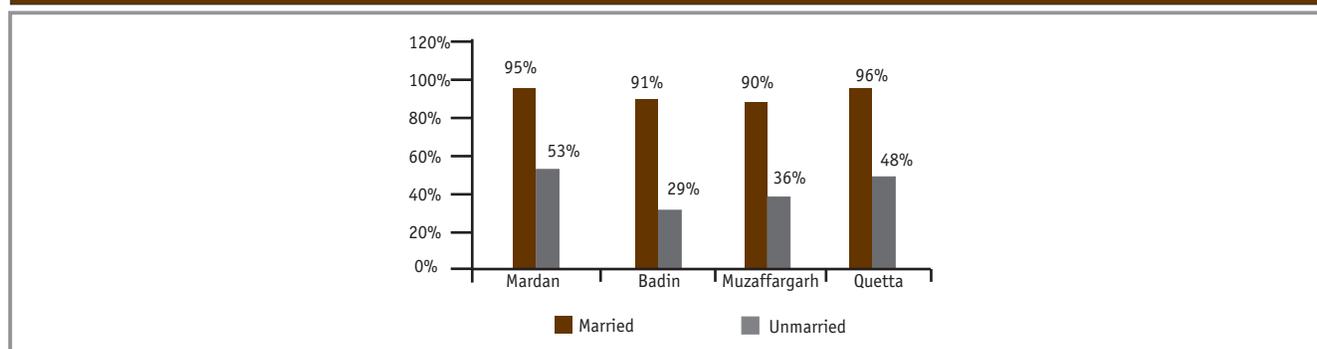


FIGURE 20: AWARENESS ABOUT AIDS



status of participants reflect that in Badin and Muzaffargarh a higher proportion of unmarried women knew about such diseases (such as vaginal warts, AIDS) as compared to the married participants from these districts (Figure 19). The opposite was true for the districts of Quetta and Mardan. To further explore the awareness about sexually transmitted diseases, a specific query about having ever heard about AIDS was made from both the married and unmarried participants who had heard about sexually transmitted diseases. It was found that the awareness among the married participants was at-least 42 percent points more than the unmarried participants across the four districts with the highest differential of 62 percent points for Badin. Conversely, the awareness among married showed encouraging results with more than 90% of the married girls across all the four districts being aware of the disease (Figure 20).

In this subset of study participants who had heard about sexual diseases and AIDS, specific query about what is AIDS in your opinion. Among these girls nearly one quarter among the unmarried (28%) and one sixth among the married (14%) did not know that AIDS is a sexually transmitted

disease. Given that a small proportion of the study participants were aware of sexually transmitted diseases, amongst whom not all having correct knowledge, reflects that indeed this age group of women have been a neglected segment of the population with reference to awareness raising programs on sexually transmitted diseases, AIDS and reproductive health issues. It also highlights the importance of making this segment of the population aware about such sexual and reproductive health issues from a public health point of view. This is important since this population segment is in its early phase of reproductive health life, and by making them knowledgeable, can bring forth tremendous benefits for the future generations as well as facilitate in reducing the burden of disease from STIs in the country.

4.1.8 Opinions about Sexual and Reproductive Health Education

Adolescent girls and young married women were asked about their opinion related to sexual and reproductive health education.

It was recorded that a high proportion of AGYM were of the

TABLE 12: OPINION OF MARRIED ABOUT BEST SOURCE OF REPRODUCTIVE HEALTH EDUCATION

| REPRODUCTIVE HEALTH INFORMATION TO YOUNG AND CHILDREN | | DISTRICT | | | | |
|---|---------------------|-----------------|---------------|-----------------|----------------|----------------|
| | | Mardan n=126 | Badin n=78 | Mzgarh n=151 | Quetta n=74 | Total n=429 |
| | | % | % | % | % | % |
| BEST SOURCE | Parents | 81 | 92 | 91 | 91 | 88 |
| | Friends / Relatives | 15 | 0 | 6 | 2 | 7 |
| | School / Teacher | 5 | 3 | 1 | 6 | 4 |
| | Others | 0 | 5 | 2 | 2 | 2 |
| | Total | 100 | 100.0 | 100 | 100 | 100 |
| IN SCHOOL | Yes | 72 | 32 | 56 | 89 | 62 |
| | No | 22 | 24 | 29 | 8 | 23 |
| | Don't Know | 6 | 44 | 15 | 3 | 15 |
| | Total | 100.0 | 100 | 100 | 100 | 100 |

FIGURE 21: SEXUAL AND REPRODUCTIVE HEALTH EDUCATION SHOULD BE GIVEN TO YOUNG PEOPLE

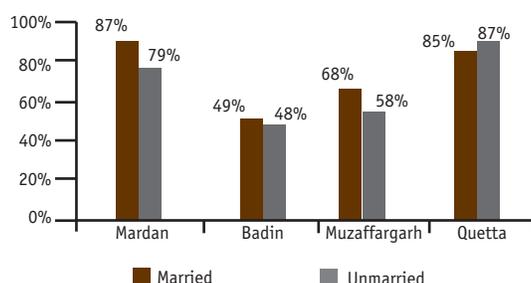


TABLE 13: OPINION OF UNMARRIED ABOUT BEST SOURCE OF REPRODUCTIVE HEALTH EDUCATION

| BEST SOURCE OF REPRODUCTIVE HEALTH INFORMATION | DISTRICT | | | | |
|--|-----------------|---------------|-----------------|----------------|----------------|
| | Mardan n=102 | Badin n=80 | Mzgarh n=152 | Quetta n=77 | Total n=411 |
| | % | % | % | % | % |
| Family Member | 90 | 98 | 99 | 96 | 96 |
| Other than Family Members | 0 | 0 | 1 | 0 | 1 |
| Media | 5 | 0 | 0 | 0 | 1 |
| Others | 5 | 2 | 0 | 4 | 2 |
| Total | 100 | 100 | 100 | 100 | 100 |
| BEST SOURCE OF REPRODUCTIVE HEALTH INFORMATION | Mardan | Badin | Mzgarh | Quetta | Total |
| | % | % | % | % | % |
| | Yes | 72 | 51 | 59 | 83 |
| No | 27 | 19 | 32 | 14 | 25 |
| Don't Know | 2 | 30 | 9 | 3 | 10 |
| Total | 100 | 100 | 100 | 100 | 100 |

opinion that such education should be given to young people (Figure 21). The said opinion was highly prevalent in Mardan and Quetta among both the married and unmarried strata of the community survey. The proportion that was in favour of this education was less than half for Badin and nearly two thirds in Muzaffargarh.

Those who carried such opinion about Sexual and Reproductive health information were then asked about the most appropriate source of extending such education.

It was recorded that among the married respondents, the majority (88%) considered the parents to be the most important and best source for extending such education to young people and children).

Among these married women nearly two thirds of them were of the opinion that such education should be given in schools.

Among the unmarried, the vast majority (96%) were of the opinion that immediate family members are the best source for sexual and reproductive health education with reference

to cultural suitability and privacy). This proportion was 8 percentage points higher than the married respondents. With reference to opinion about SRH education at the school level, nearly two thirds of them (65%) were in favour of such a practice.

4.2 Hospital based exit Survey

4.2.1 Demographic and Socio-economic characteristics

The study was able to achieve the required sample size during the quantitative hospital based exit survey. The distribution of participants reflects that the large majority of exit survey participants (90%) were married. Keeping in view the sampling methodology for equal distribution of sample across the four study districts, these results show a balanced representation of exit survey participants across these four hospital locations. There was small representation of unmarried and widows in the study sample, with none of exit survey respondents being a

TABLE 14: DISTRICT-WISE DISTRIBUTION FOR AVERAGE MONTHLY HOUSEHOLD INCOME AMONG EXIT SURVEY PARTICIPANTS

| Average Monthly HH Income (Pak Rupees) | DISTRICT | | | | |
|--|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=82 | Badin n=70 | Mzgarh n=78 | Quetta n=77 | Total n=307 |
| | % | % | % | % | % |
| < 6000 | 44 | 60 | 13 | 18 | 33 |
| 6001 - 15000 | 29 | 29 | 63 | 48 | 42 |
| > 15000 | 23 | 1 | 24 | 13 | 16 |
| Don't Know | 4 | 10 | 0 | 21 | 8 |
| Total | 100 | 100 | 100 | 100 | 100 |

TABLE 15: DISTRICT-WISE MEAN NUMBER OF PREGNANCIES AND CHILDREN

| DISTRICT | NO OF CHILDREN | | PREGNANCIES | |
|--------------|----------------|--|-------------|--|
| | Mean (SD) | | Mean (SD) | |
| | | | | |
| Mardan | 2(2) | | 3(2) | |
| Badin | 2(3) | | 3(1) | |
| Muzaffargarh | 1(1) | | 2(2) | |
| Quetta | 2(2) | | 2(2) | |
| Total | 2 (2) | | 3(2) | |

TABLE 16: DISTRICT-WISE COMPARISON OF HUSBAND AND GIRL'S EDUCATION STATUS AMONG EXIT SURVEY PARTICIPANTS (% EDUCATED)

| DISTRICT | GIRLS (%) | HUSBANDS (%) | DIFFERENTIAL (%) |
|--------------|-----------|--------------|------------------|
| Mardan | 42 | 49 | 7 |
| Badin | 13 | 34 | 21 |
| Muzaffargarh | 45 | 58 | 13 |
| Quetta | 54 | 75 | 21 |

widow/separated for Muzaffargarh and Badin).

Age of the AGYM was inquired during the exit survey. The mean age of the participants was then used as a summary measure to understand this demographic feature. It was found that the across all the four districts, the mean age was 22 years (Standard deviation of 3 years). The same held true for the overall mean age and standard deviation of the exit survey respondents.

To assess the economic status of exit survey respondents, questions related to mean household income (Pak Rupees) was inquired. It was found that one third of the study respondents had low monthly household income (<Rs 6,000 per month). A district-wise comparison showed that the proportion belonging to lowest income category was more in Badin as compared to all other districts (Table 14). Interestingly nearly one fifth of the respondents from Quetta and one tenth in Badin were not knowledgeable about the average household income. This indicated that a higher proportion of women in these two districts, possibly

had little contribution in economic activity at the household level and did not have a role in relation to the income and decisions about its spending.

Education status among exit survey participants and about their husbands was inquired. The said information set was then used to compare the prevalence of literacy among them. Similar to the results observed for community survey, it was observed that across all the districts a higher proportion of husbands were educated (i.e. received formal schooling) as compared to their spouses. This differential was highest in Badin and Quetta. Lowest prevalence of education among exit survey participants was observed for Badin.

To further understand the economic status, questions related to type of building material of house and number of rooms were asked. Those living in Kacha houses (made of mud only) were considered to be of lower economic status, while those with Pukka house were understood to reflect better economic status (Table 17). Based on this criterion, it

TABLE 17: DISTRICT-WISE DISTRIBUTION FOR TYPE OF BUILDING MATERIAL OF HOUSE AMONG EXIT SURVEY PARTICIPANTS

| TYPE OF BUILDING MATERIAL | DISTRICT | | | | |
|---------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=82 | Badin n=70 | Mzgarh n=78 | Quetta n=77 | Total n=307 |
| | % | % | % | % | % |
| Kacha | 46 | 83 | 17 | 40 | 46 |
| Pakka | 42 | 6 | 47 | 47 | 36 |
| Kacha & Pakka Mix | 12 | 11 | 36 | 13 | 18 |
| Total | 100 | 100 | 100 | 100 | 100 |

TABLE 18: DISTRICT-WISE DISTRIBUTION FOR NUMBER OF ROOMS IN HOUSE AMONG EXIT SURVEY PARTICIPANTS

| NUMBER OF ROOMS | DISTRICT | | | | |
|-----------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=82 | Badin n=70 | Mzgarh n=78 | Quetta n=77 | Total n=307 |
| | % | % | % | % | % |
| One room | 27 | 63 | 27 | 4 | 29 |
| 2-3 rooms | 43 | 36 | 58 | 65 | 51 |
| > 3 rooms | 30 | 1 | 15 | 31 | 20 |
| Total | 100 | 100 | 100 | 100 | 100 |

was reported that nearly half of the respondents belonged to lower economic status (46%), and nearly one third (36%) had better economic status. The proportion of AGYM living in Kacha houses was the highest in Badin district, followed by Mardan.

Number of rooms in the house was categorised to describe the economic status further. Those living in one room only houses were considered to be poor, while those with more than three rooms were considered richer. It was found that overall, more than one quarter of the respondents (29%) were living in one room houses. This proportion was the highest in Badin and the lowest for Quetta (Table 18).

Combining the results of the economic status indicators of monthly income, building material of house and number of rooms, it was derived that the highest proportion of economically poor AGYM belonged to Badin. Conversely

based on these indicators, it was also understood that a higher proportion of participants from Quetta (as compared to other three districts) had better economic status.

4.2.2 Health care services awareness and utilisation

Adolescent girls and young married women visiting the selected healthcare facilities were inquired if this was their first visit. Nearly two thirds of the respondents from Mardan (62%) and less than one third (31%) in Quetta were visiting for the first time (Figure 24). This possibly reflected less common practice towards utilisation of the selected government run hospitals for SHRH services by women in Mardan and Badin as compared to Quetta.

Among the exit survey AGYM, awareness about the hospital's reproductive health services was inquired. As was assumed during the design phase of the research, our results

FIGURE 22: DISTRICT-WISE AWARENESS AMONG SERVICE UTILIZERS THAT REPRODUCTIVE HEALTHCARE IS PROVIDED AT THE HOSPITAL

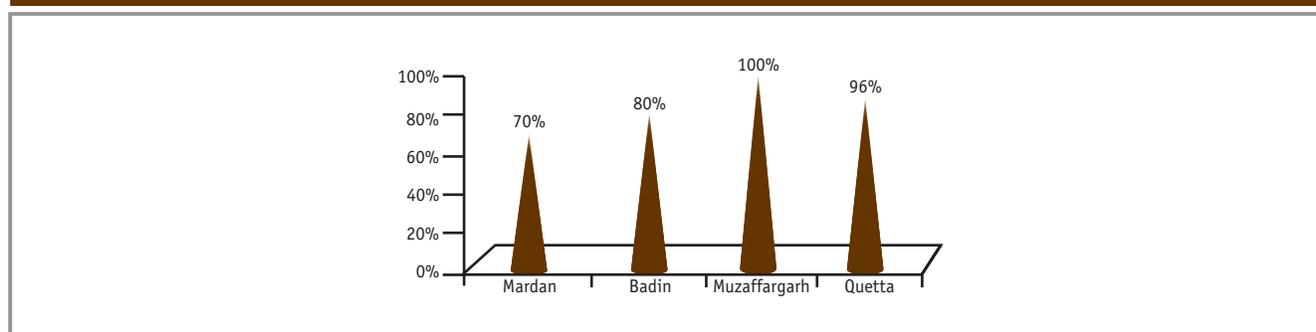


FIGURE 23 : DISTRICT-WISE PROPORTION OF FIRST TIME VISIT TO HEALTH FACILITY

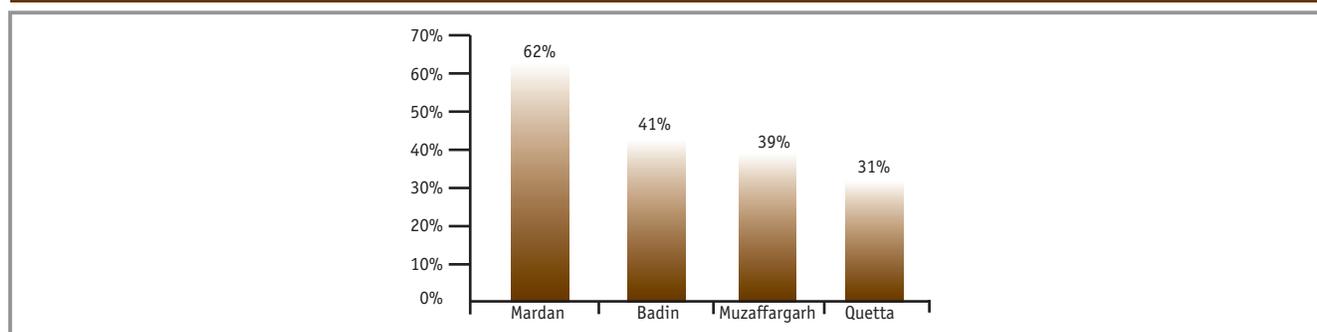


TABLE 19: DISTRICT-WISE DISTRIBUTION FOR PURPOSE OF VISITING HOSPITAL AMONG EXIT SURVEY PARTICIPANTS

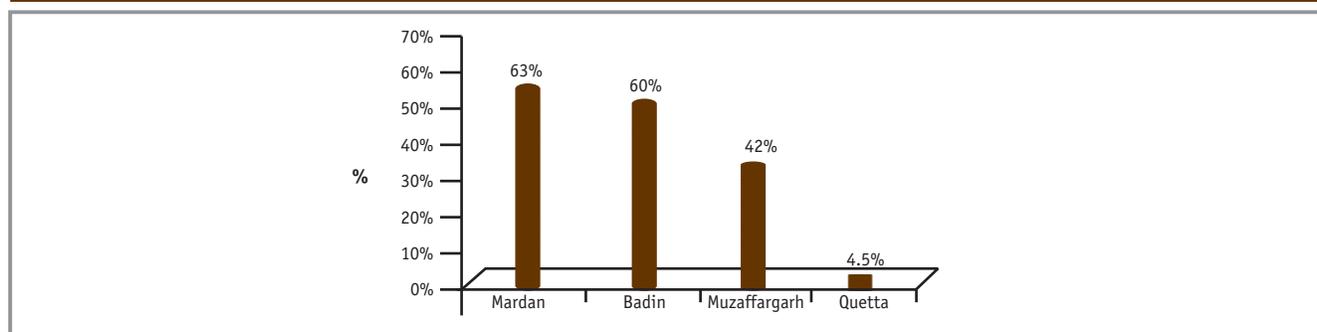
| PURPOSE OF VISIT | DISTRICT | | | | |
|-----------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=82 | Badin n=70 | Mzgarh n=78 | Quetta n=77 | Total n=307 |
| | % | % | % | % | % |
| Antenatal Examination | 32 | 26 | 40 | 43 | 35 |
| Vaccination | 9 | 29 | 1 | 0 | 9 |
| Postnatal Examination | 5 | 24 | 17 | 4 | 12 |
| Family Planning | 7 | 0 | 1 | 4 | 3 |
| Reproductive Health Problem | 38 | 20 | 40 | 12 | 28 |
| Others | 10 | 1 | 1 | 38 | 13 |
| Total | 100 | 100 | 100 | 100 | 100 |

reflected that the majority of women across all the four districts knew that the said hospital provided reproductive health services. All the women in Muzaffargarh knew about this, while comparatively lesser proportions in Badin and Mardan were aware in this regard (Figure 23).

Those who were aware of such services provision in the hospital were further asked about their knowledge of types of reproductive healthcare being extended at the said facility. It was reported that nearly half (51%) of the respondents knew that “care for women specific diseases” (proxy indicator for women's reproductive healthcare) was provided at the hospital (.). Nearly one quarter (28%) of these respondents shared knowledge about provision of antenatal care at the hospital, while lesser proportion cited

natal (11%) and postnatal care (2%). The latter results reflect low levels of knowledge among the hospital service utilisers with reference to natal and postnatal care. This low prevalence of knowledge is understood to logically translate towards less utilisation of natal and postnatal care by AGYM at these district level governments' referral health facilities. In relation to the pattern for service use, the respondents were asked as to what type of service they had utilised at the hospital on the day of the interview. It was reported that nearly one third of the respondents (35%) had sought antenatal care, followed by nearly one fourth (28%) who had consultation with a doctor and/or an LHV for reproductive health problem. Family planning was the least utilised (3%) service at the selected hospitals across the

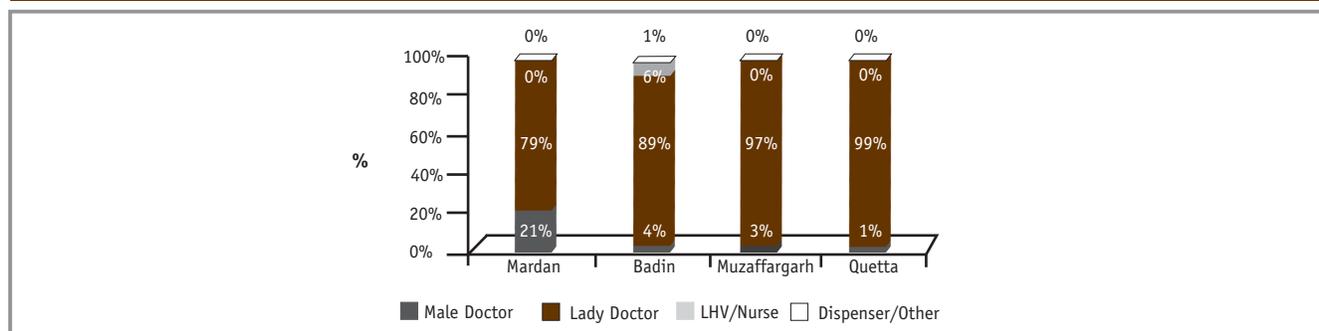
FIGURE 24 : PROPORTION OF THOSE WHO WERE VISITING THE HOSPITAL FIRST TIME FOR THE USE OF CITED TYPE OF SERVICES



districts. A district-wise comparison elicited that the highest proportion that got antenatal care was from Quetta (43%), while lowest proportion (12%) from this district had utilised hospital care for a reproductive health problem). Among the exit survey respondents, the frequency of use for the cited type of service was inquired. It was found that nearly two thirds of the AGYM in Mardan had utilised the said service from this hospital for the first time (63%), while a similar proportion belonged to Badin (60%). The lowest percentage was recorded for Quetta, meaning that AGYM included in exit survey from Quetta were more frequent users of the selected government health facility as compared to the participants from other districts (Figure 25). These hospital service utilisers who were included in the exit survey were asked to share information about who had

advised about use of service(s) from the given health facility). Advice of husband (39%) was reported by more than one third of the respondents. Nearly one fifth of the participants were given advice in this regard by their mother-in-law/father-in-law (19%), and nearly one sixth reported the same with reference to their own parents (16%) or brother/sister/sister-in-law (15%). Analysing this from the context of social status of women and the influences on her reproductive care utilisation, it can be understood that more than half (58%) were advised to visit the selected hospital by either their husband or parents-in-laws. This reflects that the majority of care utilisers sought the requisite services as per advice of their in-laws and possibly themselves had lesser influence in choosing the site for seeking reproductive healthcare.

FIGURE 25 : TYPE OF CARE PROVIDER CONSULTED AT THE HOSPITAL



Type of care provider consulted at the hospital was inquired from those exiting the facility. It was reported that the majority across all the four districts had sought advice/treatment from a lady doctor. This proportion was the highest for Quetta (99%) followed by Muzaffargarh (97%). Negligible proportion had consulted male doctor for reproductive health related care in Badin, Muzaffargarh and Quetta, however, interestingly (given the relatively conservative nature of social norms in KPK province) nearly one fifth (21%) of AGYM from Mardan had consulted a male doctor (Figure 26).

4.2.3 Satisfaction with hospital services

Opinion about satisfaction about care at the given hospital was inquired from the context of their overall satisfaction as a dichotomous response of yes and no. Those who responded in affirmative or negative with reference to satisfaction were then asked about the reason(s) for their opinion.

It was reported that the majority of AGYM in the exit survey were satisfied with the services provided at the hospital). The highest dissatisfaction was reported from Quetta and Badin (6%), followed by Muzaffargarh (5%).

The most important reason for satisfaction among those who were satisfied was inquired.

It was reported that for service users, the care providers' attitude was one of the most commonly reported reason for satisfaction (41%), followed by provision of useful information (28%) and care provider's technical skills (21%). A district-wise comparison reflected that in relation to care provider's attitude the highest proportion of this reason was cited from Badin. None of the respondents from Muzaffargarh cited care provider's communication skills as the reason for satisfaction, while nearly two thirds of the respondents (61%) from Muzaffargarh cited provision of useful information).

TABLE 20: DISTRICT-WISE DISTRIBUTION FOR MOST IMPORTANT REASON FOR SATISFACTION ABOUT SERVICES AT HOSPITAL AMONG EXIT SURVEY PARTICIPANTS (N=293)

| REASON | DISTRICT | | | | |
|--------------------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=81 | Badin n=66 | Mzgarh n=74 | Quetta n=72 | Total n=293 |
| | % | % | % | % | % |
| Care provider's technical Skills | 36 | 14 | 20 | 13 | 21 |
| Care provider's Attitude | 38 | 55 | 19 | 54 | 41 |
| Care provider's Communication skills | 9 | 15 | 0 | 13 | 9 |
| Provide useful Information | 17 | 14 | 61 | 19 | 28 |
| Others | 0 | 3 | 0 | 1 | 1 |
| Total | 100 | 100 | 100 | 100 | 100 |

FIGURE 26 : OPINION ABOUT THE ATTITUDE OF HOSPITAL STAFF MEMBERS

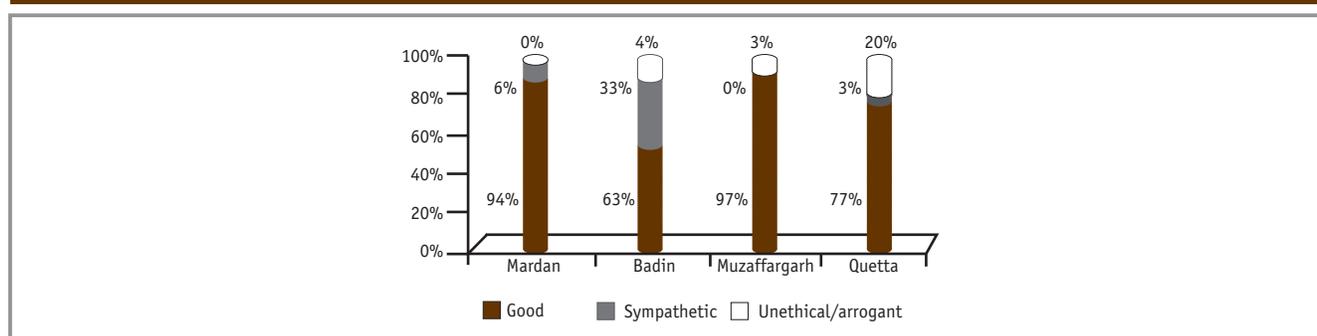


TABLE 21: TABLE : DISTRICT-WISE DISTRIBUTION FOR CITED DIFFICULTIES IN UTILIZING SERVICES AT HOSPITAL AMONG EXIT SURVEY PARTICIPANTS*

| DIFFICULTIES IN HOSPITAL | DISTRICT | | | | |
|------------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=82 | Badin n=70 | Mzgarh n=78 | Quetta n=77 | Total n=307 |
| | % | % | % | % | % |
| Long Wait | 6 | 96 | 55 | 71 | 55 |
| Over Crowded | 26 | 96 | 59 | 71 | 62 |
| No Practitioner Available | 1 | 16 | 13 | 25 | 13 |
| Practitioner's Attitude | 1 | 29 | 3 | 18 | 12 |
| Expensive | 4 | 82 | 1 | 65 | 36 |
| Service Unavailability | 2 | 31 | 4 | 14 | 12 |
| Not Clean | 1 | 24 | 0 | 17 | 10 |
| In Appropriate Waiting Place | 1 | 27 | 4 | 30 | 15 |
| No Water Available | 1 | 20 | 8 | 33 | 15 |
| No Latrine Available | 1 | 17 | 3 | 23 | 11 |
| Open Examination Place | 2 | 36 | 1 | 16 | 13 |

*Multiple response query, hence percentages do not add to 100

Similar to the inquiry about satisfaction, respondents who cited their dissatisfaction were asked about the most important reason for such an opinion.

Given the small number of such respondents, it was reported that all unsatisfied participants from Mardan cited "unsympathetic attitude" as the most important reason. Such reason was however not cited from Badin and Muzaffargarh. Nearly half of the unsatisfied females from

Badin cited "no proper information or treatment", while the remaining half from the district considered "not examined properly" as their reason for dissatisfaction.

Opinion from all exit survey respondents about the attitude of hospital staff members was inquired. The responses were recorded according to three categories of good, sympathetic and unethical/arrogant (Figure 27).

The majority of respondents viewed the attitude of staff

members to be good, with the highest proportion of this category recorded for the district of Muzaffargarh (97%) and the lowest (63%) for Badin. About one third of the respondents from Badin considered the attitude to be sympathetic, while said category was minimally represented across the other three districts. About one fifth of the respondents (20%) from Quetta considered the staff attitudes to be unethical/arrogant, while the same was minimally reported by respondents of other districts.

In further continuation to the inquiry about satisfaction, the survey respondents were asked about the difficulties they faced during their visit to the hospital for services utilisation. These answers were recorded through a multiple response mechanism. The most commonly reported difficulty was over crowdedness (61%) at the hospital followed by long waiting time (55%). The least cited factor pertained to lack of cleanliness (10%). A district-wise distribution of difficulties narrated by the respondents revealed that except the district of Mardan the majority of respondents reported multiple difficulties at the hospital, with women from Badin having the most difficulty with

reference to long wait time and over crowdedness (96%), followed by Quetta (71%). The majority of respondents from Badin and Quetta (82% and 65% respectively) also gave economic reason of healthcare being expensive; however participants from the other two districts did not perceive it to be so. This reason pertained to economic accessibility for the service utilisers and it can be deduced that a higher proportion of AGYM of Badin and Quetta perceived the government hospital services to be not ideally accessible with reference to economic factors.

4.2.4 Provision of support services at hospital besides consultation

Provision of services at the hospital was further investigated with reference to prescription and conduct of any pathological test, and provision of prescribed medicine as a result of consultation.

It was reported that more than half of all the respondents across all four districts had been advised a test based on their consultation at the hospital (Figure 28). This ratio was the highest for Mardan and the lowest for Muzaffargarh

FIGURE 27 : PROPORTION OF WOMEN WHO WERE ADVISED A PATHOLOGY TEST AS A RESULT OFF CONSULTATION AT HOSPITAL

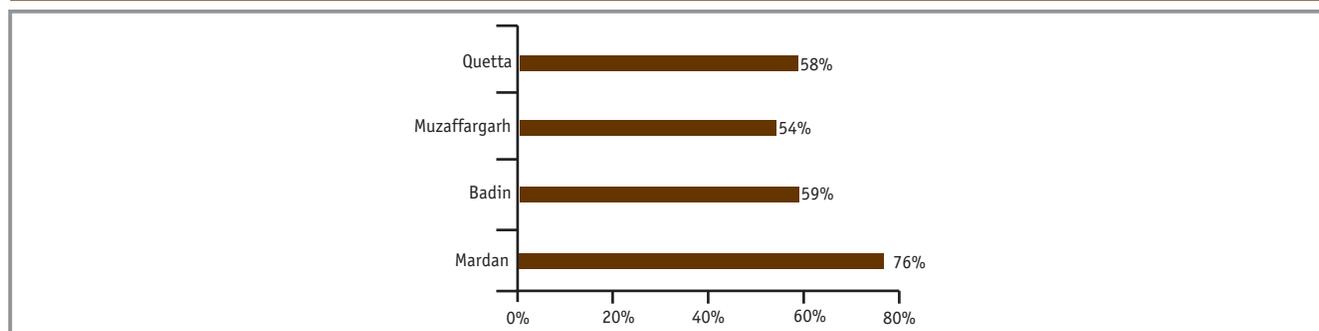


FIGURE 28: PLACE FROM WHERE PATHOLOGY TEST WAS DONE

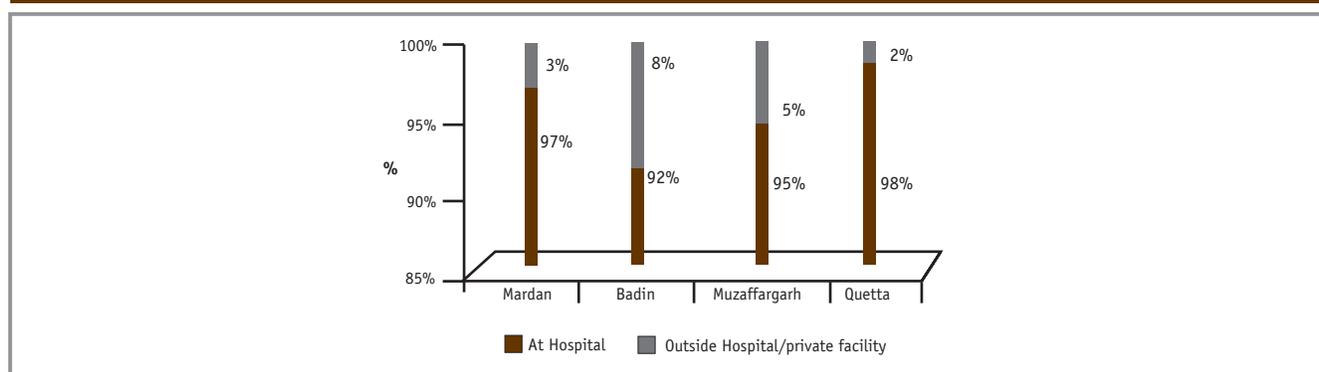


FIGURE 29: DISTRICT-WISE PROPORTION OF THOSE WHO RECEIVED THE PRESCRIBED MEDICINE FROM THE GOVERNMENT HOSPITAL

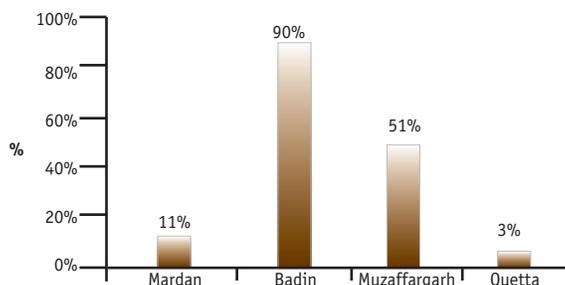


TABLE 22: DISTRICT-WISE MEAN DISTANCE AND TRAVEL TIME TO GOVERNMENT HOSPITAL

| DISTRICT | DISTANCE (KILOMETERS) | TIME (MINUTES) |
|--------------|-----------------------|----------------|
| | Mean (SD) | Mean (SD) |
| Mardan | 14(11) | 37(28) |
| Badin | 19(14) | 56(33) |
| Muzaffargarh | 18(16) | 42(36) |
| Quetta | 5(6) | 56(34) |
| Total | 14(13) | 47(34) |

(74% and 54% respectively).

Respondents, who then had the said pathology test conducted, were asked about the place from where the said investigation was done. The responses were recorded as the test being done at the hospital or outside the hospital/at private facility.

It was recorded that across all the hospitals the vast majority of respondents had their pathology investigation (including blood, urine sample based tests for complete picture, glucose, albumin etc. conducted at the government hospital (Figure 29).

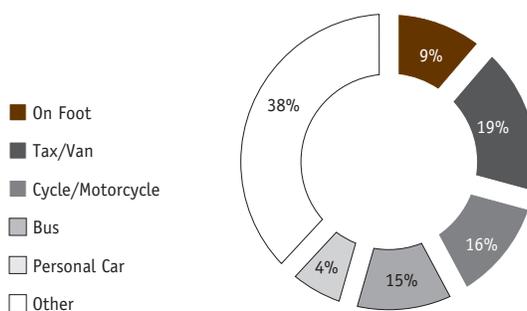
The highest proportion of AGYM, who reported the test from outside hospital belonged to Badin (8%) followed by Muzaffargarh (5%). Given the above results, it can be

understood that the selected government hospitals across all the districts catered well for the pathology investigation requirements of those who came to utilise services from there.

When asked about the provision of medicines that were prescribed during consultation at the hospital, the results were diverse across the districts with the majority in Badin (90%) had received the medicines from the same government hospital (Figure 30). The said proportions were however low for the districts of Mardan and Quetta (11% and 3% respectively).

Combining the results for support medical services with reference to pathology tests and provision of medicines, it can be understood that the majority of lab tests were

FIGURE 30: MODE OF TRAVEL USED TO COME TO GOVERNMENT HOSPITAL



conducted at the government hospital across all the districts, however medicines provision in Muzaffargarh and Quetta was low.

4.2.5 Geographical accessibility of government hospital

Accessibility of respondents to the health facility was investigated with reference to the geographical distance, time required for travel, the means of transport used, cost of travel and difficulties faced.

It was reported that the highest mean distance to be travelled to reach the said government hospital was in Badin (18 km), followed by Muzaffargarh (19 km) and Mardan. Least distance was travelled by respondents from Quetta). When analysed with reference to the time of travel, it was reported that despite the distance being the smallest, the mean travel time of Quetta was longest (56 minutes) and the same mean time was recorded for Badin. Least time

consuming travel was narrated by participants from Mardan. Mode of transport used to reach the government hospital revealed that nearly one fifth of the participants had travelled by a taxi/van (19%), followed by those who travelled on foot (15%). Personal car was the least reported means of transport (Figure 31).

The stated cost for travel reflected quite high expenses (given the economic profile of exit survey participants) with the highest cost reported for Badin, followed by Quetta. It was interesting to understand through these results that, Quetta being the comparatively most urbanised among the selected districts, had the least travel distance but the highest travel time and second highest cost of travel (Table 23). Combining these factors of accessibility, it may be understood that more travel time and cost may contribute negatively towards utilisation of healthcare from government hospitals in settings like Quetta and other similar areas of the country.

TABLE 23: DISTRICT-WISE MEAN COST FOR TRAVEL TO GOVERNMENT HOSPITAL

| DISTRICT | COST (PAK RUPEES) | |
|--------------|-------------------|--------------|
| | Mean | (SD) |
| Mardan | 127 | (341) |
| Badin | 298 | (349) |
| Muzaffargarh | 115 | (129) |
| Quetta | 229 | (120) |
| Total | 186 | (266) |

TABLE 24: DISTRICT-WISE DISTRIBUTION FOR KEY DIFFICULTY IN REACHING THE GOVERNMENT HEALTH FACILITY

| DIFFICULTIES | DISTRICT | | | | |
|----------------------------|----------------|---------------|----------------|----------------|----------------|
| | Mardan n=70 | Badin n=59 | Mzgarh n=71 | Quetta n=74 | Total n=274 |
| | % | % | % | % | % |
| Expenditures | 16 | 25 | 4 | 50 | 24 |
| Time | 3 | 48 | 23 | 34 | 26 |
| Family Permission | 23 | 3 | 1 | 1 | 7 |
| Limited Resource of Travel | 17 | 17 | 30 | 8 | 18 |
| No One to accompany | 33 | 7 | 23 | 4 | 17 |
| Others | 9 | 0 | 20 | 3 | 8 |
| Total | 100 | 100 | 100 | 100 | 100 |

Lastly the exit survey participants were inquired about accessibility factors with reference to the main difficulty faced when coming to the government hospital (Table 24). Nearly one fourth of the respondents reported the required time (26%) and expenses (24%) as the key difficulty for coming to the hospital. Social reason of requiring a chaperon to accompany them to the hospital (i.e. not allowed to travel alone to the hospital) was most commonly

reported from Mardan (33%) followed by respondents from Muzaffargarh (23%).

4.3 In-Depth Interviews of LHVs, LHWs, CMWs and TBAs

To ascertain the perspective of community level care providers, lady health workers, lady health visitors,

community midwives and TBAs/Dais were included in the research. In-depth interviews of a total of 20 such participants were conducted across the four districts. These included 6 LHVs and 6 LHWs, 4 community midwives and 4 TBAs.

These community level care providers were interviewed with reference to the domains of

1. Working experience in the area/location,
2. Women clients consulted every day and the types of ailments among unmarried and married AGYM,
3. Proportion of pregnant women among daily clients,
4. Tasks/services provided to pregnant women including dietary counselling, TT vaccination
5. Conduct of delivery
6. Use of safe delivery kits and instruments for delivery
7. Postnatal care
8. Counselling on breast feeding
9. Referral in complicated cases
10. Advice for family planning

It was reported all of these community level care providers had been working in the areas for more than 2 years duration with the most experienced being a TBA/Dai from Muzaffargarh who had been working in the area for more than 25 years.

4.3.1 Common SRH problems of married and unmarried AGYM

Opinion about the most common SRH related health problems among married and unmarried girls of 15-24 years age, was sought from these care providers. It was shared by these participants, that amenorrhea, dysmenorrhea, irregularity of cycles, vaginal discharge (Leucorrhoea) were the most common problems faced by unmarried girls. The same inquiry about married girls revealed the problems of abortions, repeated pregnancies, anaemia, vaginal discharge (leucorrhoea), pregnancy and delivery related complications (such as post-partum haemorrhage, uterine prolapse) as the common SRH problems. One TBA from Quetta understood "young age marriage" as one of the main problems faced by this age group. Given the latter response, it was understood that although TBAs may be classified as commonly illiterate informal care providers, but based on our discussions, their understanding about SRH issues for AGYM were correct.

4.3.2 Ratio of pregnant clients in AGYM and services provided

These care providers were also asked about the proportion of AGYM clients who were pregnant and came to them for healthcare. This was inquired under the context, that all catchment population members are registered with the primary healthcare system covered through the LHWs. Wide range of responses were recorded across the districts with the lowest proportion of 2% reported by an LHV hailing from Mardan and the highest proportion of 80% reported by a community midwife from the same district.

The range of services provided was inquired with reference to maternal care. It was reported that all of the formal care providers (LHVs and Doctors) and two LHWs were conducting Blood pressure measurements and providing dietary advice and counselling for Tetanus toxoid (TT) vaccination to the pregnant women. All the LHVs reported to give TT vaccination to the pregnant clients that they encountered across all the districts.

All of the TBAs, LHVs and all but one Midwife were conducting deliveries. Inquiry about use of safe delivery kits for conducting deliveries reflected mixed responses, with half of these care providers (except 2 LHWs who did not conduct deliveries) using safe delivery kits, while the remaining not opting for such safe delivery practices. Among these 18 birth attendants (i.e. except 2 LHWs who did not conduct deliveries) only three reported to commonly conduct deliveries at homes, while the remaining care providers were doing so at health facilities including at BHU, THQ and DHQ hospitals in the respective districts.

Use of Syntocinon (oxytocin derivative) and application/capacity to apply delivery forceps was reported by all of the formal care providers.

Counselling for breast feeding was being extended by all care providers including TBAs, while cord care practice for newborns revealed that all these respondents in Badin, Muzaffargarh and Quetta apply antiseptic solution only, while in Mardan ointment application (antiseptic) on the umbilical cord was also reported. All of the care providers reported to be promoting family planning through counselling and advice to married AGYM keeping in view the positive health benefits for these young clients.

4.3.3 Problems for SRH care/advice seeking

Problems faced for SRH as per the opinions of these care providers varied between married and unmarried clients.

Unmarried girls were reported to be facing more social limitations related to “shame”, “shyness” “social pressure” “attached to discussion about SRH issues with the complimenting factors of difficulty of access to hospitals and care providers, and difficulties in seeking permission at the household level to seek such advice/care due to “social values” and “fear from home men”. Lack of education, economic factors, and distance to health facilities were cited as more common problems faced by married young girls in accessing and utilising SRH services across the four districts.

4.4 Parents of AGYM

Qualitative approach based Focus Group Discussions were held separately with mothers and fathers of AGYM across the four districts. A total of 16 such FGDs were conducted, with 8 of them of fathers and the remaining 8 with mothers.

4.4.1 Opinions and perceptions

Important necessities and problems related to the health of girls/ women

FGD participants responded that girls and women needed proper diet, education, socialisation and especially religious education so that they may have close relation with religion that protects them in teen age from different social evils of modernity, promiscuity and infidelity. Opinion was that there must be controlled socialization and control over emerging young girls. If that would not be done that will leads towards destruction of family and moral values and the society will consider that family as having “loose character”. It was discussed that girls and women have to face different problems during mensuration. They told about some problems such as:

- ? Painful bleeding
- ? Over/excessive bleeding
- ? Disturbance in dates/irregular cycles
- ? Leucorrhoea

It was narrated that “women and girls discuss these things (i.e. SRH issues) with the elderly women in the family. It mostly depends on the knowledge and experience of those elderly women how they suggest or help these younger girls to get their problems resolved”. Very often, if the nature of these problems is not severe a home remedy or a local Dai's help is sought to prescribe medicines. In this milieu the quote from Mardan reflects on this poor state of affairs for

AGYM's SRH needs “Mostly they consult local dais or LHVs in the area for the matters related to sexual health, and they are always accompanied by their mothers or an elderly women”. This phenomenon of accompanying persons, is understood to limit the possibility of an adolescent to freely and frankly seek SRH advice, given the presence of mothers or elderly woman.

Do (15 to 24 years) girls/ women visit doctors to address these issues?

Most commonly FGD participants responded that as per the prevalent socio-cultural norms, girls are commonly not allowed to independently visit healthcare facilities or hospitals across all the four districts. Similar quotes such as “We take our women and girls to city hospitals that cost us a lot of money. Doctors charge heavy amounts for fees, we only take them to the doctor when there is something really serious. Some die when we fail to arrange money in time” were recorded with reference to the opinions of men regarding healthcare seeking and utilization for SRH issues by AGYM. It was also narrated that “It is important that they (i.e. AGYM) are accompanied by family member/s. Young girls should not go to the doctors alone”. This reflected limited space of decision making and social empowerment for this neglected age group to seek and utilize SRH services. Consequences of not allowing young girls to seek proper care were also recognized by participants of two focus group discussions (one each from Muzaffargarh and Mardan) in which for example it was narrated that “a man was working in his office whose daughter was 14 years old and was married; she was affected by Leucorrhoea and due to inability to communicate to father and his absence from home due to his occupation, the girl was not treated properly consequently she was not in a position to give birth to children”. This expression although narrated as a perception of loss of health and good future (In local language narrated as “Sehat aur mustukbil kharab ho gaya”) was still not considered to be a condition, for which actions are supposed to be taken so that SRH related health adversities could be avoided.

When girls become adult, then should we tell them about physical changes?

Mixed responses were recorded with reference to sharing of SRH information with young girls and boys. Some

participants said that this information should be shared with the girls. But they emphasized that “only mothers should tell them” about all that. The reported notion highlighted the possible socio-cultural limitations (with reference to open communication) of receiving such information only from the mothers within a home environment and not in consultation with healthcare providers. It was reported that open discussions on women's RH issues will create a negative atmosphere in the house. It would promote shamelessness among the girls and they will forget about their parents respect and that “they might become astray”.

- a. Those who supported the idea said:
 1. It is difficult to have a direct discussion with the girls, but it can be discussed with wives/mothers who can then help the young girls
 2. Some written material with valid information about the organs and their functions can be shared with the girls.
 3. Doctors or healthcare provider can also provide the correct information
- b. Those who opposed the idea of providing information to girls debated:
 1. It will promote shamelessness
 2. People will stop respecting each other
 3. Men and family will lose their respect

In one of the FGDs, men also discussed that normally practice is “not to inform the children” because of ignorance and the sense of shame in discussing the sexual health. But most of the participants specially mothers agreed and emphasized that we should change our behaviours and practices to better facilitate/educate adolescent and young girls on SRH issues.

When do the girls get married?

The age group of 12-25 years was the most suitable for girl's marriage as understood by the parents across the four districts, with one narration “female who is above 25 is not able to become a mother” possibly reflecting the norms and societal pressures on parents to marry their daughters at an early age. These and similar responses for this query reflected that this age group especially during the teen age (13-19) was considered to be appropriate for marriage, given the societal norms with little consideration for possible adverse health effects for the girl and her children

in the future. This finding corroborates with information from existing literature, where the national demographic health survey (PDHS 2006-07) reflected that more than half of women in Pakistan marry by age 20 and over one-third marry by age 18. Around 12 - 13% of women enter marriage before their 15th birthday.

Due to early marriages girls face extra health related issues

Participants commonly said that early marriages create a lot of problems for girls. The biggest drawback of getting married at an early age is that “younger girls (may) die due to child birth complications”. They can get several sexual diseases. They give birth to premature and abnormal children. A participant shared a story of “his brother's daughter who was married in early age after first pregnancy she give birth to a son and (during her) second pregnancy (the) doctors were worried to save the child or (the) mother!” They saved mother after operation but now she is not in a position to reproduce a child. They shared different problems which lead to early marriages including:

- ✍ Unawareness
- ✍ Poverty
- ✍ The elements of so called “shame”
- ✍ Prevalent traditional culture and societal practices

Early marriages can be avoided through

Various options were shared in relation to avoiding of early marriages such as

- ✍ Educating people,
- ✍ Awareness meetings at Hujra/baithuk¹³/community centres
- ✍ Holding informative seminars with doctors
- ✍ Disseminating pamphlets and posters
- ✍ Reducing poverty

It was generally understood that parents did attribute lack of education and awareness among the masses, as the reason to avoid young age marriages. These narrations however, provided contradictions when compared to the responses of “age of marriage” question, since the parents despite opining that awareness to avoid young age marriage and hence SRH related problems among AGYM, is needed, were still carrying the perception that girls should be married at early age, so that the parents can fulfil their social responsibility of marrying their girls at an early stage..

13 Hujra/Baithak refers to a home based gathering room/guests room for households in rural areas of the country especially in KPK and Balochistan.

5 DISCUSSION AND CONCLUSIONS

5 DISCUSSION AND CONCLUSIONS

The AIMS study utilized diverse set of qualitative and quantitative approaches to acquire information on SRH among adolescents, their parents, healthcare providers and district level health managers. These included community-based survey of married and unmarried 15-24 year old AGYM, hospital based exit survey of 15-24 year old service utilizers, IDIs with care providers and FGDs with parents of AGYM. This study is one of the first research initiatives in the country, that has simultaneously explored the SRH needs of AGYM with reference to their marital status (married and unmarried) across both community based and hospital based settings. The research adds to the existing literature for Pakistan on ascertaining the perspectives of AGYM mothers and fathers on SRH needs of their daughters with special focus on reproductive health awareness for the adolescents and young married girls.

5.1 Summary of Key Findings and comparison with existing literature

One of the identified key preventive reproductive health needs of AGYM is knowledge about menstruation. There is general lack of awareness about menstrual health problems and appropriate sources to seek care among both married and unmarried girls. This finding is endorsed with existing literature for Pakistan, where it has been shown that among adolescents in Pakistan, there is inadequate knowledge

about menstruation (Khan & Pine, 2003; Hennink et al, 2004). Low levels of awareness giving (about physiologic and reproductive health changes) to adolescent girls at the household and community level was prevalent and understood to be one of the main inhibiting factors towards appropriate knowledge of AGYM. Socio-cultural barriers seemed to be the most predominant underlying factor for this problem. To overcome such barriers, one of the possible solutions is depicted in a previous study from Karachi, Pakistan (Ali et al, 2006), where 72% adolescent participants desired proper SRH information before puberty and they suggested that School Health Programs (45%), TV programs (35%) may be a good source for such information sharing.

In this regard, a summary of the recent existing literature on adolescence and menstruation related health knowledge, have been summarized in Table 31.

These findings as summarized (Annexure 3), coincide with the findings of the current study, for studies up to the year 2006 (Khan & Pine, 2003; Hennink et al, 2004; Marie Stopes Society, 2006; Ali et al, 2006), in which a lower proportion of female adolescents were made aware of puberty and its related sexual and reproductive health aspects. However, the more recent studies of 2010 and 2011 (World Population Foundation, 2010; Development pool, 2011) depict a higher proportion (77%) of knowledgeable adolescents. The said differences between the findings of the current study and later mentioned research may possibly be due to different geographical and cultural settings. This is so since; the earlier studies (of 2010 and 2011) had representation through an internet based survey and conducted in urban and semi-urban areas while the majority of participants in this study's community survey belonged to peri-urban and rural settings.

The curative health needs of AGYM pertain to menstruation related problems among the unmarried. Among the married such needs related to early age of marriage complicated with repeated pregnancies, lack of availability of curative services in the government sector, low adoption of family planning methods, and prevalent practice of home based deliveries by TBAs. The said finding is understood to carry biological plausibility, given the premise that in Pakistan, where sexual activity prior to marriage is less prevalent¹⁴, and hence their reproductive health needs pertain to menstruation related aspects, while for the married they

pertain to maternal health requirements.

There was a wide gap in the awareness about family planning and actual adoption of family planning method. There is high prevalence of awareness of family planning and its potential benefits among AGYM and their mothers, however, contraceptive prevalence is dismally low. The most important underlying factors for this wide gap pertain to socio-cultural limitations and misperceptions, availability and accessibility to FP counselling and services, and lack of awareness and trust among male segments of the population. According to Pakistan Demographic & Health Survey of 2006 – 2007 conducted by National Institute Population Studies and Macro International, the knowledge of family planning in Pakistan is nearly universal; 96% of ever-married and currently married women age 15-49 know of at least one method of family planning. Modern methods are more widely known than traditional methods. For example, 96% of currently married women have heard of at least one modern method, while only 64% have heard of a traditional method. Similar to this research, the PDHS depicts lower levels of contraceptives adoption despite higher prevalence of knowledge with use of any contraceptive method being merely 7 percent among married women age 15-19 years of age.

Use of government health facilities for maternal care, SRH counselling and FP services is low when compared with the utilization of such services from the private sector. These findings of lower care utilization from public sector is also reflected through the most recently reported PDHS survey for Pakistan, where antenatal, natal and postnatal care is more commonly utilized from the private sector as compared to the public sector. In The current study, use of antenatal care was mostly from skilled care providers (predominantly from private sector), and there was abysmally low utilization of natal care from government centres and hospitals. The main underlying factors are understood to be lack of awareness about range of reproductive health services at these facilities and accessibility with reference to distance and time of travel and out of pocket expenditures.

It was also found that generally those who utilize SRH services from government hospitals were satisfied about the care provision at such facilities. However, non-cordial staff attitudes, overcrowding and long waiting times were narrated to be the difficulties for utilizing services from the public sector.

14 Face to face interviews of 1,864 un-married adolescent females revealed that 3% were sexually active. Out of the total female respondents 2% said that they would have sex if given an opportunity.

Demographic and economic characteristics

Married respondents had a higher mean age than the unmarried respondents in the community survey component of the study, however, the said difference was not statistically significant. Keeping in view similarity of mean age and proportions for current marital status among community survey participants, it may be deduced that participants did not vary across the provinces with reference to these demographic markers.

Across all the districts for the community survey component, the proportion of married educated girls was lower than that of the husbands', with the differential ranging between 18%-32%. The said finding is endorsed with existing literature for the country where the literacy rate among adolescents (15 – 24 years) for 2010, (as reported by UNESCO's Institute of Statistics), was 79% among males and 51% in females. The comparison across girls' education and for their husbands showed that across all the four provinces education was less prevalent among married girls as compared to their husbands, with those belonging to Badin faring the poorest across the four study districts. In relation to exit survey participants the same finding held true, with the differential of education across sex being more pronounced in Badin and Quetta.

Combining the results of the economic status indicators of monthly income, building material of house and number of rooms, it was derived that the highest proportion of economically poor AGYM belonged to Badin. Conversely based on these indicators, it was also understood that a higher proportion of participants from Quetta (as compared to other three districts) had better economic status. From these findings and given the rural and less developed context, it can hence be understood that participants from Badin as compared to other districts fared less favourably against the indicators of education and economic status.

Menarche and its awareness

There was lower prevalence of menses related information sharing with unmarried adolescent girls in Mardan as compared to other districts. Given this finding and considering the prevalent socio-cultural context of KP province, it can be understood that traditions inflict more stringent restrictions on SRH related aspects among female segments of the population and it may be extrapolated that in KP province such communication is least prevalent as

compared to other parts of the country.

The most commonly reported source of menses related information for AGYM, was the participant's mother across both the married and the unmarried groups. These findings are in-line with existing research for Pakistan, where the most common source of knowledge about menstruation was cited to be the mother (up to 89%), followed by friends (30%), sisters (up to 20%) and cousins (up to 10%). Fathers were the least prevalent source of such information among the community survey participants. Among the four districts, Mardan (KPK) fared the poorest with reference to communication about menses, adolescence and health problems related to these.

SRH history and management among unmarried

Three quarters of unmarried community survey participants of all the districts had suffered some form of menstrual problems/complications in the past, with menstrual morbidity being least common among unmarried girls of Badin as compared to other districts. This finding can be understood to depict the rural and less economically developed aspects of participants from Badin, where women may possibly be having less hygienic menstrual management practices as compared to other districts. Healthcare utilization from Government health facility was less than that of the private sector across all the districts. This proportion was the lowest in Muzaffargarh and the highest in Badin.

Reproductive health history among married

If viewed from the lens of reproductive health needs in relation to reproductive history of number of pregnancies and live children, it can be deduced that AGYM in Badin and Mardan have relatively higher needs than their contemporaries from Quetta and Muzaffargarh. Interestingly, it was concluded that the districts where girls had a higher reproductive health burden during the past, had a lower prevalence of current pregnancy (i.e. in Mardan and Badin), while vice versa was applicable for Muzaffargarh and Quetta. The said finding (if understood in conjunction with the finding of use of family planning methods to be higher in Mardan as compared to other districts), may reflect that a higher proportion of participants from the said district were current users of FP methods and hence had lesser prevalence of current pregnancy.

Maternal health and care utilization

The highest proportion of antenatal healthcare utilization was found in Muzaffargarh followed by Mardan and Quetta among the community survey participants. Among the exit survey participants, district-wise comparison elicited that the highest proportion that got antenatal care was from Quetta, while lowest proportion from this district had utilized hospital care for a reproductive health problem.

Among the community survey participants across the four locations, except for Muzaffargarh, none of the other district's girls had sought antenatal care from local Traditional Birth Attendant (TBA/Dai). This was understood to be a positive finding, keeping in view that nearly all of the antenatal care was being received from health facilities (public or private) where commonly care is extended by skilled healthcare providers. The finding also highlights the possibility that TBAs are primarily visualized as natal and postnatal care givers at the community level in the country, hence reflecting less proportion of antenatal care seeking from such care providers. According to the most recent national data, PSLM- 2010-11, majority of women seeking ANC (51%) uses the services of private hospitals / clinics. The next providers of choice are government hospitals (30%) followed by Nurses /LHVs/LHWs (10%), TBAs (7%) and doctors (2%). The pattern seems to be almost consistent in both urban and rural areas. Data of PDHS (2006-2007), reveals that 61% of mothers received antenatal care from skilled health providers (from a doctor, nurse, midwife, or Lady Health Visitor). Only 3 percent of women receive prenatal care from a traditional birth attendant (dai), 1% from a Lady Health Worker, a hakim, or a dispenser or compounder.

Among community survey respondents who had utilized antenatal care from private health facility, the most common reasons for not doing so from a government health centre, was non-cordial staff attitude. Comparatively, among the exit survey participants, the more commonly reported problems in utilizing care from government hospital was over crowdedness and longer waiting time, followed by expenses incurred to reach the hospital. Such comparison across the settings, may be differentiated with reference to the level of government facility where the study participants sought care. The community survey participants more commonly referred to government health facility in their vicinity which was primary level centres (i.e. BHUs and RHCs), where cover crowdedness and long wait is

less common, while bad staff attitudes was the commoner issue. For the exit survey participants, the selected hospitals were district's highest level referral care centre, where larger catchment population contributes towards higher turnover of patients. This high turnover at district level hospitals is further augmented with patients' often by-passing primary level centres due to system's inefficiencies at the said level and non-cordial staff attitudes. Given the various levels of care it may hence be concluded that staff attitudes and capacities need to be addressed at primary level centres, and mechanisms to reduce patient overload at secondary/referral level facilities needs to be done through improved functioning of care giving mechanisms at the primary level.

In the community survey component the highest proportion of girls reporting morbidity during pregnancy belonged to Quetta followed by Mardan. Among those who suffered morbidity, the majority had utilized care from the private sector. The same held true for exit survey participants, when their pattern of healthcare use for maternal morbidity was inquired. These results and findings from qualitative component help us to understand that care utilization from government sector is limited by various factors including

- a. lack of comfort due to non-cordial staff attitudes at primary level,
- b. Social limitations of travelling alone to a nearby health facility especially in relation to unmarried girls, and for consulting a male care provider for reproductive health issues
- c. Distance and expenses for travel to a secondary/referral level government hospital
- d. Over-crowdedness and long waiting time at secondary level

Giving birth at a government hospital reflected low levels of utilization by the community survey participants. Among the exit survey participants the awareness about range of services (in relation to delivery) was low. Combining these results from the two surveys, it may be concluded that (similar to the factors narrated above for antenatal care), women are either not aware of delivery services being extended across various levels of government health system, or do not prefer to give birth at government facilities.

Results for antenatal and natal care reflected contrasting results, with a low proportion of AGYM seeking prenatal care from TBAs, while nearly half of them having TBAs as birth

attendants at the time of delivery. This finding further endorses, the premise, that prevalent socio-cultural norms of delivering through TBAs and at homes is still the preferred approach across the surveyed communities, even though the TBAs were reported to have little role in extending antenatal advice and care. These observations corroborate with the existing literature from the Pakistan Demographic Health Survey 2006-07, in which nearly half of the births (during the last five years at the time of survey) had been conducted at homes and more commonly but traditional birth attendants.

Family Planning – knowledge and practice

The majority of married girls were aware about family planning, but adoption of family planning methods was low. Decision making about adoption of a method reflected that the majority of girls had taken a decision by themselves or jointly with their spouses. This dimension highlights that among the users, decision making for family planning reflects reasonable level of girl's own participation. However, and conversely, low prevalence of FP use warrants that still the majority of girls were not using FP due to various socio-cultural, economic, availability and accessibility related issues.

Knowledge about sexually transmitted diseases

A small proportion of community survey participants were aware of sexually transmitted diseases, amongst whom not all having correct knowledge, reflected that indeed this age group of women have been a neglected segment of the population with reference to awareness raising programs on sexually transmitted diseases, AIDS and reproductive health issues. It also highlights the importance of making this segment of the population aware about such sexual and reproductive health issues from a public health point of view. This is important since this population segment is in its early phase of reproductive health life, and by making them knowledgeable, can bring forth tremendous benefits for the future generations as well as facilitate in reducing the burden of disease from STIs in the country.

Opinions about Sexual and Reproductive Health Education

Responses from the community survey and based on the opinions of AGYM parents, it is understood that all the types

of participants supported the idea of such education to be given to adolescent girls. The main cited source for extending such education was parents, elderly women of the household and immediate relations (elder sister, sister-in-law). Consultation with healthcare providers, especially the formal sector was not favoured by fathers; however, mothers supported the idea that in case of menstruation related morbidity girls should be able to seek advice and consultations from the healthcare providers. All the parent groups realized the importance of appropriate information sharing, so as to avoid misconceptions and psychological issues among young girls.

Common SRH problems of married and unmarried AGYM

Based on information from care providers, Amenorrhea, dysmenorrhea, irregularity of cycles, vaginal discharge (Leucorrhoea), were the most common problems faced by unmarried girls. The same inquiry about married girls revealed the problems of abortions, repeated pregnancies, anaemia, vaginal discharge (leucorrhoea), pregnancy and delivery related complications (such as post-partum haemorrhage, uterine prolapse) as the common SRH problems. One TBA from Quetta understood “young age marriage” as one of the main problems faced by this age group. Given the latter response, it was understood that although TBAs may be classified as commonly illiterate informal care providers, but based on our discussions, their understanding about SRH issues for AGYM were correct.

5.2 Study limitations

The present research despite its robust design and implementation had some limitations. These were as follows

1. With reference to information sharing about menstruation, the research did not differentiate between information being extended/received before menses onset or afterwards. This limitation may possibly have restricted the extent of information in the study to explore the timeliness of such information sharing.
2. The current research included only one district per province, thus limiting the generalizability for Pakistan, given the geographical expanse and diversity of the country which has 120 districts across 7 geographical regions. Comparisons across the districts were limited to

some extent across the domains of literate and illiterate segments of study participants. This was understood to be due to low prevalence of literacy among AGYM in two districts that reflected as less numbers in the literate group.

3. Although the study carried a mixed methods approach, however emphasis was on quantitative component through two separate surveys. Smaller component of qualitative information provided support to the quantitative results. It is felt that, if a more elaborate component of qualitative component had been adopted, the results of the study could have been further explained elaborately.

6 RECOMMENDATIONS

6

RECOMMENDATIONS

The AIMS project focused to identify the SRH needs of AGYM in Pakistan and to highlight the issues pertaining to access and utilization of services according to the needs. The study findings help us to recommend the following

Policy Level

Non-cordial staff attitudes at the primary care level, and over crowdedness with long waiting times at the secondary level care were the main cited factors for lack of satisfaction from the public sector healthcare services. It is recommended, that health system's strengthening to improve staff attitudes at the primary level would possibly enhance satisfaction among service users. Such strengthening, is also anticipated to increase utilization rates at the primary level, and resultantly reduce the workload on secondary level facilities thus resulting in less crowdedness and patient waiting times.

Low levels of healthcare utilization from the public sector (and conversely higher utilization from private sector) warrants involvement of the private sector for public health program designing and implementation, to promote healthier SRH management by adolescents in rural and peri-urban areas of the country.

There is high social acceptability of TBAs for natal and postnatal care, and the observed high proportion of home based births highlights the importance of such care

providers at the community level. Given the premise of successful involvement of TBAs for FP methods promotion in a pilot study in Pakistan, it is proposed that capacity of these providers may be enhanced by SRH programs in and a more inclusive approach to involve TBAs should be adopted by the healthcare system in the country.

Practice Level

Demographic and economic indicators of participants from Sindh province (Badin district), were less favourable as compared to other provinces. It is proposed that focus of SRH related interventions in the province need to be initiated for adolescents with special emphasis towards AGYM of rural areas.

Communication for menarche related information, was least prevalent in KP province (Mardan district) as compared to the other regions. In this regard, mothers were cited to be the most appropriate source of extending such knowledge across all the provinces. As understood through the socio-cultural norms in the province of KP, it is recommended that mothers of AGYM may be targeted to reduce their apprehensions about such information sharing with adolescent girls, and also to enhance the knowledge of mothers on these aspects.

Advocacy level

Decision making about adoption of a family planning method reflected that the majority of girls had taken a decision by themselves or jointly with their spouses. This dimension highlights that among the users, decision making for family planning reflects reasonable level of girl's own participation. However, and conversely, low prevalence of FP use warrants that still the majority of girls were not using FP due to various socio-cultural, economic, availability and accessibility related issues. These patterns of FP services utilization need to be advocated with planners to target the accessibility aspects.

A small proportion of community survey participants were aware of sexually transmitted diseases, amongst whom not all having correct knowledge, reflected that indeed this age group of women have been a neglected segment of the population with reference to awareness raising programs on sexually transmitted diseases, AIDS and reproductive health issues. It also highlights the importance of making this segment of the population aware about such sexual and reproductive health issues from a public health point of

view. This is important since this population segment is in its early phase of reproductive health life, and by making them knowledgeable, can bring forth tremendous benefits for the future generations as well as facilitate in reducing the burden of disease from STIs in the country.

As understood through this research, parents and care providers carry the realization that SRH related information should be shared with adolescent girls. Given such receptiveness and positive deviance towards imparting of SRH knowledge (especially among the fathers) may be used as a window of opportunity for SRH related programmes. This window may be targeted towards enhancement of knowledge and better menstrual hygiene management by adolescents through targeting of AGYM directly and indirectly (via their parents) through awareness campaigns and community mobilization activities.

BIBLIOGRAPHY

Bibliography

1. Agha, S. and T. W. Carton (2011). "Determinants of Institutional delivery in rural Jhang, Pakistan." *International Journal of Equity Health* 10: 31-42.
2. Akhtar, S., M. Rashid, et al. (2009). "Perception, attitude and practices of rural migrants about their reproductive health: a case study of Faisalabad city." *Pakistan Journal of Agricultural Sciences* 46: 196-199.
3. Alam, A. Y., A. A. Qureshi, et al. (2005). "Comparative study of Knowledge, Attitude and Practices among Antenatal Care utilizing and non-utilizing women." *Journal of Pakistan Medical Association* 55: 53-56.
4. Ali, S., S. Rozi, et al. (2004). "Prevalence and Factors associated with practice of modern contraceptive methods among currently married women in District Naushahro Feroz." *Journal of Pakistan Medical Association* 54(9): 461-464.
5. Ali, T. S., P. A. Ali, et al. (2006). "Understanding puberty and related health problems among female and adolescents in Karachi." *Journal of Pakistan Medical Association* 56: 68-72.
6. Ashraf, R., A. Gul, et al. (2004). "Septic induced abortions." *Annals of King Edward Medical College*, 10: 346-347.
7. Ashraf, T. (1996). "Maternal mortality: A four-year review." *Journal of the College of Physician and Surgeon Pakistan* 6: 159-162.
8. Ayaz, A. and S. Saleem (2010) Neonatal Mortality and Prevalence of Practices for Newborn Care in a Squatter Settlement of Karachi, Pakistan: A Cross-Sectional Study. *PLOS One* Volume, e13783 DOI:
9. Azmat, S. K., H. Mustafa, et al. (2008). Barriers and Perceptions towards family planning among men and women of reproductive age in rural Pakistan: A qualitative Study. Karachi, Marie Stopes Society.
10. Bhutta, S. Z., K. J. Noorani, et al. (2003). "Sociocultural Determinants of Induced Abortion." *Journal of College of Physicians and Surgeons Pakistan* 13: 260-262.
11. Bibi, I., M. H. Soomro, et al. (2010). "Frequency of syphilis in female sex workers at red light area of Hyderabad, Pakistan." *Journal of Pakistan Medical Association* 60: 353-356.
12. Bibi, S., A. Memon, et al. (2008). "Contraceptive Knowledge and Practices in two districts of Sindh, Pakistan: A hospital based Study." *Journal of Pakistan Medical Association* 58: 253-258.
13. Bongaarts, J. (1994). "Population Policy Options in Developing World." *Science* 263: 771-776.
14. Canada, P. H. A. o. (2008). "Infectious Diseases - Sexual Health and Sexually Transmitted Infections."
15. Chandra, M. D. and P. Srichand (2006). "Maternal mortality and morbidity due to induced Abortion in Hyderabad." *Journal of Liaquat University of Medical and Health Sciences* 5: 62-65.
16. Devrajani, B. R., D. R. Bajaj, et al. (2010). "Frequency and pattern of gonorrhoea at Liaquat University Hospital, Hyderabad (a hospital based descriptive study)." *Journal of Pakistan Medical Association* 60(1): 37- 40.
17. Dowsell, T., G. Carroli, et al. (2010). "Alternative versus standard packages of antenatal care for low-risk pregnancy." *Cochrane Database of Systematic Reviews*(10).
18. Farooq, M., A. U. Bari, et al. (2007). "Urethritis in men: evaluation of risk factors and aetiological pathogens among our population." *Journal of Pakistan Association of Dermatologists* 17: 219-224.
19. Fatmi, Z. and B. I. Avan (2002). "Demographic, Socio-economic and Environmental Determinants of Utilisation of Ante-natal Care in a Rural Setting of Sindh, Pakistan." *Journal of Pakistan Medical Association* 55: 53-56.
20. FBS. (2011). "Pakistan Social and Living Standards Measurement Survey (PSLM) 2010-11." Islamabad : Statistics Division, Government of Pakistan.
21. Fikree, F. F., S. Sarah, et al. (2005). "A quality of care issue: Appropriate use and efficacy knowledge of five contraceptive methods: Views of men and women living in low socioeconomic settlements of Karachi, Pakistan." *Journal of Pakistan Medical Association* 55: 363-368.
22. Foundation, W. P. (2010). A Research Study on status of Sexual and Reproductive Health and Rights of Young People in Pakistan. Available at URL: Islamabad, World Population Foundation.
23. Foundation, W. P. (2010). Status of Sexual and Reproductive Health and Rights of Young People in Pakistan. Islamabad World Population Foundation.
24. Foundation, W. P. (2011). Baseline Action Research: Sexual and Reproductive Health and Economic Status of Adolescent Girls in Sanghar (Sindh) and Gujranwala (Punjab). . Islamabad, David and Lucile Packard Foundation.
25. Gilani, S. and P. Azeem (2005). "Induced Abortion: A Clandestine Affair." *Journal of Postgraduate Medical Institute* 19: 412-415
26. Gul, R., Z. H. Shah, et al. (2003). "Unwanted Pregnancy and Post Abortion Complications in Pakistan." Islamabad: Population Council.
27. Hawks, S. (2008). "Sexually Transmitted Infections and HIV among People with High Risk Behaviours".
28. Hennink, M., I. Rana, et al. (2004). "Knowledge of Personal and Sexual Development amongst young people in Pakistan." University of Southampton. UK.
29. Humayun, A., N. H. Sheikh, et al. (2005). "Abortion Prevalence and Socio-Demographic Differentials." *Biomedica* 21: 12-17.
30. Hussain, M., M. Ashraf, et al. (2004). "Alleged Reasons and Complications of Induced Abortion." *Journal of Surgery Pakistan*, 9: 18-21.
31. ICPD (1994). "Cairo Declaration on Population & Development."
32. Inam, S. N. B. and S. Khan (2007). "Importance of Ante-natal care in reduction of Maternal Mortality and Morbidity." *Journal of Pakistan Medical Association*, 55: 53-56.
33. Jalal, R. and A. Khan (2008). "Obstetric morbidity in the booked versus Non-booked patients - a comparative study at Lyari General Hospital." *Pakistan Journal of Surgery* 24: 196-202.
34. JHPIEGO (2004). Focused Antenatal Care: Planning and Providing Care During Pregnancy - A Maternal and Neonatal Health Program. Islamabad, JHPIEGO.
35. Kazmi, K. and S. Naz (2005). "Fertility and choice of family planning practices in rural Islamabad." *Pakistan Journal of Medical Research* 44: 148-152.
36. of Sciences; 1.

37. Khan, A. and F. Pine (2003). "Adolescents and Youth in Pakistan." Islamabad : Population Council.
38. Khan, E., B. I. BI Memon, et al. (2010). "Trend of Syphilis in Pakistan, 1991-2008." *Indian Journal of Medical Microbiology*, 2010; 28: 263-264.
39. Khan, E. A., N. Khokhar, et al. (2004). "Seroprevalence of Syphilis in asymptomatic adults seeking employment abroad." *Rawal Medical Journal* 29: 65-67.
40. Khan, M. S., M. Unemo, et al. (2011). "HIV, STI prevalence and Risk Behaviours among women selling sex in Lahore." *BMC Infectious Diseases* 2011, 11: 119-127.
41. Lobenstine, R. W. and H. C. Bailey (1926). *Prenatal care*. New York, Appleton.
42. Maan, M. A., F. Hussain, et al. (2011). "Sexually transmitted infections in Pakistan." *Annals of Saudi Medicine* 31(3): 263-269.
43. MacDonald, K. (2004). *FMO Thematic Guide: Reproductive Health, Forced migration online*.
44. Mansour, D., P. Inkiř, et al. (2010). "Efficacy of contraceptive methods: A review of the literature." *The European Journal of Contraception and Reproductive Health Care* 15: 4-16.
45. Mir, A. M., A. Wajid, et al. (2009). "STI prevalence and associated factors among urban men in Pakistan." *Sexually Transmitted Infections* 85(3): 199-200.
46. Munjanja, S. P., G. Lindmark, et al. (1996). "Randomised controlled trial of a reduced-visits programme of antenatal care in Harare, Zimbabwe." *Lancet* 348: 364-369.
47. Mustafa, R., U. Afreeen, et al. (2008). "Contraceptive Knowledge, attitude and Practice among Rural Women." *Journal of College of Physicians and Surgeons Pakistan*, 18: 542-545.
48. NACP (2006). "Situation Assessment of Adolescents for Life skills and HIV Prevention in selected Districts of Pakistan." Islamabad: National AIDS Control of Pakistan.
49. Naib, J. M., M. I. Siddiqui, et al. (2004). "A Review of Septic Induced Abortion Cases in One Year at Khyber Teaching Hospital, Peshawar." *Journal of Ayub Medical College* 16: 59-62.
50. Najmi, R. S. (1993). "Maternal mortality: A hospital based study for Lahore." *Journal of College of Physicians and Surgeons Pakistan* 5: 67-70.
51. Nasir, A., J. M. Tahir., H., et al. (2010). "Contraceptive Attitude and Behaviour among University Men: A study from Punjab, Pakistan." *Journal of Ayub Medical College Abbottabad* 22(1): 125-128.
52. Nausheen, F., J. Iqbal, et al. (2004). "Emergency Contraception: Knowledge, Attitudes and Practices of General Practitioners." *Biomedica* 20: 117-121.
53. Nayab, D. (2004). "Reproductive Tract Infections among Women in Pakistan."
54. Naz, F. and A. Begum (2004). "Septic Induced Abortion - The Prevalence, Logics and Complications." *biomedica* 20: 110-113.
55. NIPS (2007). "Pakistan Demographic & Health Survey 2006 – 2007." Islamabad: National Institute of Population Studies.
56. Nisar, N. and R. Amjad (2007). "Pattern of Ante-natal Care Provided at a Public Sector Hospital Hyderabad Sindh." *Journal of Ayub Medical College Abbottabad* 19: 11-13.
57. Nisar, N. and F. White (2003). "Factors affecting utilization of Ante-natal Care among reproductive age group women in an Urban Squatter Settlement. ." *Journal of Pakistan Medical Association* 53: 47-56.
58. Qayyum, K., S. Gul, et al. (2011). "Domestic Violence Against Women: Prevalence and men's perception in PGRN Districts of Pakistan." Islamabad : Rutgers WPF.
59. Quarini, C. A. (2005). "History of Contraception." *Women's Health Medicine* 2: 28-30.
60. Rahman, M. U., K. U. Khan, et al. (2008). "Frequency of Contraceptive Practice amongst doctors of Pakistan Armed Forces." *Pakistan Armed Forces Medical Journal* 58: 177-184.
61. Rehan, N. (2003). "Profile of Men suffering from Sexually Transmitted Infections in Pakistan." *Journal of Ayub Medical College Abbottabad* 15(2): 15-19.
62. Rehan, N. (2009). "National Study of Reproductive tract Infections among High risk groups of Lahore & Karachi." *Journal of College of Physicians & Surgeons* 19: 228-231.
63. Research Society, A., Lahore (2011). "The Punjab ANC Services Assessment Study." Lahore : Allama Iqbal Medical College.
64. Saleem, K., B. Mumtaz, et al. (2009). "A clinic -pathological study of urethritis in males." *Journal of College of Physicians & Surgeons* 19: 772-775.
65. Sarmad, R., S. Manzoor, et al. (2007). "Family Planning : Reasons of un-met need in urban setting of Lahore." *Professional Medical Journal* 14: 152-157.
66. Shah, N. S., N. Nisar, et al. (2008). "Awareness and Pattern of utilizing Family Planning Services among Women attending Urban Health Centre Azizabad, Sukkur." *Pakistan Journal of Medical Sciences* 24: 550-555.
67. Shah, S. A., G. Usman, et al. (2011). "Prevalence of syphilis among antenatal clinic attendees in Karachi: imperative to begin universal screening in Pakistan." *Journal of Pakistan Medical Association* 31: 993-997.
68. Siddique, S. and M. Hafeez (2007). "Demographic and Clinical Profile of Patients with Complicated Unsafe Abortion." *Journal of College of Physicians and Surgeons Pakistan* 17: 203-206.
69. Stephenson, S. and M. Monique Hennink (2004). "Barriers to Family Planning Service Use among the Urban Poor in Pakistan." *Opportunities and Choices Working Paper No. 2, February 2004*
70. Stopes., M. (2006). "Adolescence in Pakistan: sex, marriage and reproductive health." London : Marie Stopes International..
71. Studies, N. I. o. P. (2008). "Pakistan Demographic and Health Survey 2006-2007." Islamabad : National Institute of Population Studies.
72. Tariq, S., S. Tariq, et al. (2011). "Family Planning Awareness and practices Among Women Attending Tertiary Care Hospital at Faisalabad, Pakistan." *Journal of Bahria University Medical & Dental College* 1(2).
73. Umber, A. (2010). "Bilateral Tubal Ligation Versus Vasectomy: which Method of Surgical Contraception is More Prevalent?" *Annals of King Edward Medical University* 16: 11-13.
74. UNAIDS. (2007). *Estimating national adult prevalence of HIV in concentrated epidemics. . Geneva*
75. UNFPA (2006/07). "The adolescent experience in-depth: using data to identify and reach the most vulnerable young people." *Pakistan 2006/07*.
76. UNFPA (2009). "The United Nations Task Force on Adolescent Girls. Girl power and Potential. Geneva."
77. Usmani, R. A., S. Manzoor, et al. (2006). "Family Planning Services: Role of socio-economic factors in utilization." *Professional Medical Journal* 13: 587-590.
78. WHO (2004). *Reproductive Health Strategy*. Geneva.

79. WHO (2005). Alcohol, Gender and Drinking Problems : Perspective from Low and Middle Income Countries. Geneva
80. WHO (2009). "Strengthening linkages between sexual and reproductive health and HIV." WHO Bulletin. 87: 805-884.
81. WHO (2010). Developing sexual health programmes : A framework for action. Geneva, World Health Organisation.
82. WHO (2010). "Measuring Sexual Health: Conceptual and practical considerations and related indicators."
83. WHO (2010). World Health Report. Geneva.
84. WHO (2011). "Sexually transmitted infections." Fact sheet N°110.
85. WHO (2011). "Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008." Sixth Ed.
86. WHO (2011). World Health Statistics. Geneva, World Health Organisation.
87. WHO (2012). "Ante-natal Care."
88. WHO (2012). "Sexually Transmitted Infection."
89. Yousaf, F., G. Haider, et al. (2010). "Factors for inaccessibility of antenatal care by women in Sindh." Journal of Ayub Medical College Abbottabad 22: 187-189.

Summary of existing research on SRH and AGYM in Pakistan

| Knowledge, Perceptions and Practices about Menstruation | | | | |
|---|--|---|--|---|
| Author | Khan & Pine | Hennink et al | Marie Stopes Society | Ali et al |
| Place | Islamabad | Lahore & Faisalabad | Hyderabad, Mirpur Khas, DG Khan, Multan | Karachi |
| Year | 2003 | 2004 | 2006 | 2006 |
| Population | Published Data | Girls:18-24 Years | Adults (17 – 60 years) | Females (10-19 years) |
| Number | - | Six FGDs | 389 | 150 |
| Methodology | Literature Review | FGDs | Interview Survey FGDs | Interview Survey |
| Findings | | | | |
| Knowledge | Knowledge was inadequate | Knowledge was inadequate | 13% received information before and 94% after onset of menses. | 68 % correctly defined Menstruation |
| Perceptions about Menstruation | 90% school girls of Karachi thought that menstruation was harmful to health | Menarche was a significant gateway to first knowledge of personal development. | 47% females reported higher level of anxiety during menses. | <ul style="list-style-type: none"> Shocking 44% Fearful 30% Stressful 18% |
| Practices | Taking bath during menstruation was harmful. | <ul style="list-style-type: none"> Avoiding Prayers No Ramadan fasting | Restricted to go out side | <ul style="list-style-type: none"> Avoid bathing 70% Avoid carrying weight. 89% Avoid eating fish, beef and eggs |
| Source of Knowledge | | <ul style="list-style-type: none"> Observing elder sister Mothers Sister in Laws | Elder female relatives | <ul style="list-style-type: none"> Mothers 89% Cable 90% Internet 35% |
| Opinions | | <ul style="list-style-type: none"> Mothers were shy to discuss Mothers were themselves ignorant | | <ul style="list-style-type: none"> 72% participants desired proper SRH information before puberty. School Health Programs (45%), TV programs (35%) be started |
| AUTHOR | World Population Foundation (WPF) | | DEVELOPMENT POOL | |
| Place | Quetta, Matiari, Multan, Karachi | | Gujranwala, Sanghar | |
| Year | 2010 | | 2011 | |
| Population | Leaders in RSHS | | Girls 12-18 years | |
| Number | 350 | | School going = 1519 Non-school going = 76 | |
| Methodology | Internet Survey FGDs | | Questionnaire Survey FGDs | |
| Findings | | | | |
| Knowledge | 77.6% had received information about menses. | <ul style="list-style-type: none"> Only few girls knew about changes on puberty. They were aware of increase in height and changes in voice 77.2% received guidance about body changes | | |
| Perceptions about Menstruation | <ul style="list-style-type: none"> For majority of girls, onset of menstruation was a panic. 55.8% girls did not feel normal | <ul style="list-style-type: none"> 20.6% felt nervous 35.2% felt shy 44.1% felt Normal | | |
| Practices | Restricted to go out side | Majority of the girls were not allowed to go to friend's home or participate in social gathering (birthday and wedding party). | | |
| Source of Knowledge | <ul style="list-style-type: none"> Mothers : 69.7% Sisters : 11.8% Friend : 3.9% | <ul style="list-style-type: none"> Mother 69.0% Sisters 11.0% Friends 3.0 % | | |



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