

Assessment of Learning Needs of Youth in Pakistan about

HIV and AIDS and Adolescence Education

Report of the Study designed and sponsored

by

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List of Acronyms

Acronyms	Details
AIDS	Acquired Immune Deficiency Syndrome
ARH	Adolescent Reproductive Health
ARV	Anti Retroviral Therapy
CBOs	Community Based Organizations
DG Khan	Dera Ghazi Khan
ESCAP	Economic and Social Commission for Asia & Pacific
F	Female
HAART	HIV & AIDS Retroviral Therapy
HIV	Human Immuno-deficiency Virus
IBBS	Integrated Behavioral & Biological Surveillance
KAP	Knowledge Attitude and Practices
KPK	Khyber Pakhtun Khawa
Μ	Male
MBBS	Bachelor of Medicine & Surgery
MTCT	Mother to Child Transmission
NACP	National AIDS Control programme
NCHD	National Commission for Human Development
NGOs	Non-Government Organizations
PFRD	Phoenix Foundation for Research & development
PLHIV	People Living with HIV
PPTCT	Prevention of Parent to Child Transmission
PTIES	Provincial Bureaus of Curriculum, Teachers Training Institutes
RH	Reproductive Health
RR	Reproductive Rights
SRH	Sexual & Reproductive Health
STIs	Sexually Transmitted Infections
Т	Total
TB	Tuberculosis
UNAIDS	United Nations Office for Prevention of AIDS

- UNESCO United Nations Education, Scientific and Cultural Office
 - UNFPA United Nation Population Office
 - VCT Volunteer Counseling and Testing
 - WHO World Health Organization

Executive Summary

Of the over 1 billion youth (ages 15-24) worldwide, some 10 million are living with HIV & AIDS: Every day, an estimated 6,000 youth are infected with the virus. (AIDS Epidemic Report 200)

Research from around the world shows an alarming degree of misinformation and lack of knowledge about HIV & AIDS among young people, especially young women. The majority lack access to effective prevention programmes, while many cannot access condoms.(Pathfinders Manual for Service Providers) Of the 15-24 year old young people living with HIV & AIDS, 63 percent live in sub-Saharan Africa and 21 per cent live in Asia-Pacific. (AIDS Epidemic Report 2009)

The healthcare sector demands a lot for the awareness of our youth and provide them services at local health services level to increase demand, access, choices and quality services of reproductive health including awareness about HIV & AIDS for underserved and poor communities through building an integrated network of service delivery outlets.

The objectives of assessment were to; review the existing curriculum and textbooks for students in public sector secondary and higher secondary classes with a view to identify and enlist available content about HIV & AIDS prevention education; measure the level of awareness among adolescent students about HIV & AIDS in general and their knowledge about modes of transmission and precautionary measures; assess the knowledge of young people about adolescence and reproductive health issues; To identify possible challenges Pakistan Youth may have to face in their information seeking on their adolescence and reproductive health and discover factors which hinder the transmission and guidance to youth about these aspects; Identify learning of policy and curriculum level for the promotion and institutionalization of HIV & AIDS Education in schools and academic institutions and effective mechanisms for guidance and counseling of adolescent students on HIV & AIDS prevention and ARH.

The study was conducted in 9 cities of Pakistan namely; Peshawar, Mansehra, Chakwal, Lahore, Dera Ghazi Khan, Sukkur, Hyderabad, Sibi and Quetta based on the Population to give it a national representation. The sample was derived keeping in view the number of schools and colleges. A total of 5339 males and females aged 13-18 years were interviewed proportionately across the target cities with 90% from the schools and remaining from colleges.

Results ascertain the knowledge and gaps related with HIV & AIDS and the Reproductive Health among school going youth and recommend various steps to address the situation in an effective way. This report highlight all the aspects regarding reproductive health and HIV & AIDS in compliance of youth programmes, the situation is now an alarming threat which might be an explosive if we do not grab the opportunity at this time.

Review of textbooks from Grade 8th to 12th revealed that there was no information in any of the existing curriculum being utilized about HIV & AIDS except for Grade 11th Biology giving detail about the virus. However the revised curriculum of 2005-06 have some better information about HIV & AIDS and the components of Reproductive Health which is being added to the syllabi of various provinces gradually..

The questionnaire was designed to meet all the objectives of the assessment..

The respondents who have ever heard of HIV &or AIDS was found to be to the less than 50% Overall it was analysed that the 41.6% of males about HIV & or AIDS as compared to the 40% females. Data evaluation further revealed that the respondents of the highly populated cities of Lahore, Quetta, Hyderabad and Peshawar have heard more of both as compared to the smaller target cities. Though the TV is reported to be the source of learning by more than 30% of the respondents but a significant number, more than 10% in each province except Sindh have heard from the teachers and read in the curriculum. The information in the textbooks was reported to be only about the name of AIDS and name of the virus i.e. HIV. Almost all the respondents wanted to have basic knowledge about HIV & AIDS as part of the curriculum. The correct modes of transmission including sexual intercourse and infected blood was known to more than 41% of the respondents but mother to child transmission is known to a small fraction. Along with correct information, myths and misconceptions like transmission through Mosquito bite (2-6% in girls and 2% in boys), eating with infected person (5% in girls and boys), dirt, shaking hands with infected person and using of the same toilettes still persists. Proper methods of prevention including condom, use of new syringes, use of new/ sterilized surgical instruments/ tattooing and piercing instruments was known to a significant number but again prevention from dirt (8%), mosquito bites (3%) and not to eat with infected person (7%) was also thought to be the way to prevent HIV & AIDS.

More than 82% of the respondents having heard of HIV & AIDS informed that they are not on risk of contracting the disease as they don't have any sexual relations with anyone. It was further analysed that they know that we cannot tell about a person by looking that he is suffering from AIDS or a carrier of HIV and a healthy person may or may not be the carrier of the disease. Significant number of respondents in Pakistan perceived that Pakistan is on threat of having the HIV & AIDS.

Majority of the respondents were of the view to initiate imparting knowledge about HIV & AIDS from the age of 15 years and 9^{th} Grade. They have opined to get at least the basic knowledge.

There was a lesser fraction of respondents who have ever heard of Reproductive Health and in this case the females have heard more as compared to the males. Those who have heard about RH know about two components of the same i.e. Health & Hygiene and Changes in Puberty. There is no significant knowledge of any other component. Mostly the source of knowledge is the friends, teachers and parents in the same order. When asked about making RH as part of the curriculum, almost all the respondents agreed and said that components like health & hygiene, Changes in puberty, Psychological changes and Complications of Early age marriages may be made the part of the curriculum. Small fraction talked about other such issues as STIs, Sexual Abuse and Family Planning to be the part of the curriculum.

While HIV & AIDS prevalence appears to be low in Pakistan at present, the presence of a number of vulnerabilities and risky behavioral patterns suggest the need for urgent, prioritized, and coordinated action to curtail the emergence of a widespread epidemic. Commercial Sex Work, Needle Sharing, Poverty, genders based inequalities and low levels of education all contribute to HIV & AIDS vulnerability in Pakistan.

Our study findings are revealing satisfactorily that our youth has an inquisitive mind about the subject. The information available in the curriculum already is not up-to the mark and it must be standardized with the available knowledge like of other countries. The information available to the students may have a portion of misconception in both sexes. It is the duty of seniors, peers, teachers, parents and others that these myths and misconceptions must be removed to make our youth fully aware of the situation.

In the end it may be established that the present study fulfilled our objectives comprehensively and addressed all objectives equally well. A better communication methodology to reduce the gap in the youth and adults for provision of the information must be adapted. There is a dire need of revising the curriculum for making the HIV & AIDS and Reproductive Health as an integral part.

Introduction

Of the over 1 billion youth (ages 15-24) worldwide, some 10 million are living with HIV & AIDS: Every day, an estimated 6,000 youth are infected with the virus. (AIDS Epidemic Report 2007)

Research from around the world shows an alarming degree of misinformation and lack of knowledge about HIV & AIDS among young people, especially young women. The majority lack access to effective prevention programmes, while many cannot access condoms.

Of the 15-24 year old young people living with HIV & AIDS, 63 per cent live in sub-Saharan Africa and 21 per cent live in Asia-Pacific. (AIDS Epidemic Report 2009) In Eastern Europe and Central Asia, more than 80 per cent of those living with HIV & AIDS are under the age of 30.

The higher biological vulnerability of females to infection accounts, in part, for the growing number of young women infected with HIV & AIDS. Socio-cultural norms that reinforce gender inequalities, such as patterns of sexual networking and age-mixing, are also important factors that leave girls and young women more vulnerable to HIV than their male peers.

One-third of all women living with HIV & AIDS are between the ages of 15 and 24. Worldwide, young women (15-24 years) are 1.6 times as likely as young men to be HIV & AIDS positive. Many young women are reported to have experienced coerced and unprotected sex from an early age. Forced sex and consequent abrasions facilitate entry of the virus. (UNICEF/UNAIDS 2004)



Abstinence before marriage may not be a

successful prevention strategy for girls who marry early if their older husbands already carry the virus. Marriage can actually increase the risk of HIV transmission for young girls: In various African countries, married girls between the ages of 15 and 19 have higher HIV & AIDS infection levels than non-married sexually active females of the same age.

Studies in sub-Saharan Africa on age differences between girls (15 to 19) and their sexual partners show a gap of six or more years, which limits their power to resist unsafe sexual practices. (AIDS Epidemic Report 2009)

In high-prevalence countries of sub-Saharan Africa, the main mode of HIV transmission is heterosexual intercourse. This region contains almost two thirds of all young people living with HIV & AIDS – approximately 6.2 million young people, 76 per cent of whom are female. Where heterosexual intercourse is the primary mode of HIV transmission, young women face significantly higher risks than men: In sub-Saharan Africa and the Caribbean, young women are 3 times and 2.4 times, respectively more likely than men to be HIV positive. In Trinidad and Tobago, the number of women between 15 and 19 years old with HIV & AIDS is 5 times higher than among adolescent males. UNFPA (State of world population 2005)

The Economic and Social Commissions for Asia and the Pacific (ESCAP) Region is home to approximately 62 percent of the world's population. Since mid-1980s, the unprecedented increase in the number of cases infected with the Human Immunodeficiency Virus (HIV), which causes the Acquired Immunodeficiency Syndrome (AIDS) in this densely populated region that has become a global threat.

A number of factors determine whether HIV will spread once introduced into a population, including the frequency of high-risk sex, needle sharing, use of unsterilized barber's tools repeatedly to many clients, road-side medical treatments especially dentistry, tattoo formation, nose piercing etc. and the proportion of the population engaging in these behaviors, the mix of sex partners, and the levels of other sexually transmitted infections (STIs). Although these factors influence HIV transmission individually and in combination, the fact that HIV & AIDS epidemics consist of multiple, overlapping epidemics evolving on different time scales makes them inherently unpredictable. Even when population groups engage in sufficient risky behavior to support the growth of an epidemic, it can take surprisingly longer time period for HIV & AIDS to reach epidemic levels.

The Asia Context

Asian countries are experiencing highly varied HIV & AIDS epidemics, which are due to a number of factors including differential levels of risk behaviors such as multiple sexual partnerships and injecting drug use. Additionally, because Asia consists of both developing and developed countries with a variety of religious and cultural backgrounds, these risk behaviors are situated in highly varied socioeconomic and social cultural environments that can either help or hinder the spread of HIV.

The Asian HIV & AIDS pandemic is highly dynamic. The risky behavior and vulnerability, which promote fuel and facilitate the rapid transmission of HIV, are present in virtually all countries of the region. Thus, the potential for its further spread is significant (Larson and Narain, 2001).

Based on evidence from various sources, behaviors that produce the highest risk of infection in this region are unprotected sex (both heterosexual and homosexual) and needle sharing among intravenous drug users (UNAIDS and World Health Organization, 2001).

In the early 1980s when the HIV & AIDS pandemic was becoming significant in the Western Hemisphere and Africa, only a few cases of HIV & AIDS infection were reported in Asia. Relatively little attention was paid to HIV & AIDS by the population at large. However, the HIV & AIDS pandemic in Asia took a new turn in the 1990s when WHO estimated that HIV & AIDS is spreading faster day by day in parts of Asia than in other regions of the world. Some have predicted that the magnitude of the HIV & AIDS pandemic in this region in the twenty-first century could be much worse. (AIDS Epidemic Report 2007)

Based on UNAIDS and WHO estimates at the end of 2001, 40 million adults and children around the world were living with HIV & AIDS. Out of this total number, 6.1 million infected persons were living in South and South-East Asia, while another 1 million were living in East Asia and the Pacific. This made the Asian and Pacific regions the worst affected by the epidemic after sub-Saharan Africa where more than 28 million people have been infected (UNAIDS and World Health Organization, 2001). The spread of HIV in Asia is expected to accelerate if governments fail to act with a sense of urgency, and if preventive action is taken too little or too late.

In Thailand, HIV & AIDS was introduced in 1984 and had started spreading heterosexually by 1985 however, explosive heterosexual transmission did not occur nationally until 1989. Similarly, in Kathmandu, Nepal, despite documented high levels of needle-sharing in the early 1990s, HIV & AIDS infections among injecting drug users remained negligible until they started rising rapidly six or seven years later. By 1997, half the users were infected.

Thus, the mere presence of high levels of risky behavior does not pledge immediate epidemic growth, even though the potential for growth still exists. This raises concerns for countries such as Bangladesh, where high levels of risk, especially among sex workers and men who have sex with men, but yet so far HIV & AIDS prevalence remained low. In order for an epidemic to expand, the average infected person must pass the virus on to more than one person. How quickly new infections occur that depends on a number of factors for example the frequency of risky behavior.

HIV & AIDS prevalence in developing countries is often difficult to measure, partly because much of the population does not have access to healthcare facilities and largely relies on traditional medicine(s). Therefore, HIV & AIDS prevalence only tends to be measured at whatever points; the people do have contact with health staff. This is more or less at antenatal clinics or STI treatment centers.

The Pakistani context

The HIV & AIDS situation in Pakistan, as in other Asian countries, is at a precarious and dangerous crossroads. The increase in the incidence of HIV & AIDS in Pakistan, which has a low standard of socio-economic development, can offset progress made in health and living standards as well as economic, social and institutional arrangements.

The first case of HIV & AIDS in a Pakistani citizen was reported in 1987 at Lahore. During the late 1980s and 1990s, it became evident that an increasing number of Pakistanis, mostly men, were becoming infected with HIV while living or traveling abroad. Upon their return to Pakistan, some of these men consequently infected their wives who, in some cases, passed along the infection to their children. In 1993, the first recognized transmission of HIV infection through breastfeeding in Pakistan was reported in the city of Rawalpindi. During the 1990s, cases of HIV & AIDS began to appear among groups such as commercial sex workers (CSWs), drug abusers and jail inmates. The increased rates of infection among these groups are assumed to have facilitated, at least to some extent, a further transmission of HIV in the general population. Since the official recognition of the first case in 1987, the official number of reported HIV & AIDS infections and AIDS cases has grown to more than 7000. (NACP 2009)

According to UNAIDS, the official statistics estimated that approximately 97400 or less than 0.1 percent of the population in Pakistan, were infected with HIV & AIDS. Pakistan still has a window of opportunity to act decisively to prevent the spread of HIV & AIDS. Although the estimated HIV & AIDS burden is still low - around 0.1 percent of the adult population, however, there has been an outbreak of HIV & AIDS among injecting drug users. (Epidemic Report 2009)

Government of Pakistan - the Federal Ministry of Health, the National AIDS Control Program (NACP) was focused on diagnosis of cases that came to hospitals, but progressively began to shift towards a community focus including Integrated Behavioral & Biological Surveillance (IBBS) of Most at Risk Populations in 2005, 2006, and 2008. Its objectives are the prevention of HIV transmission, safe blood transfusions, reduction of STIs transmission,

establishment of surveillance, training of health staff, research and behavioral studies, and development of program management.

Many adolescents engage in sexual intercourse with multiple partners and without condoms; thus, they engage in sexual behaviors that place them at risk of sexually transmitted infections including HIV.

Throughout the world, sexually transmitted infections and unplanned pregnancies have always occurred among adolescents. In this course, many adolescents began having sexual intercourse with their partners prior to marriage, and this, of course, facilitated HIV transmission.

In 2009, 1.8 million people died from AIDS and another 2.6 million people were infected with the virus. Sub-Saharan Africa has been hit harder by HIV & AIDS than any other region in the world. Two-third of people living with HIV & AIDS and three-quarters of deaths from HIV & AIDS are in sub-Saharan Africa. People with AIDS don't suffer alone - the disease also attacks their families and communities. 14.8 million African children have already lost one or both parents to HIV & AIDS. The disease targets people during their most productive years, making economic progress in many sub-Saharan African countries even more of a challenge. In 2009 of 33.3 million over all HIV positive, 2.5 million children below the age of 15 years were living with HIV & AIDS globally of which 370000 were new infections and death toll due to AIDS was 250000. (Epidemic Report 2009)

Adolescents, in general, are at risk of contracting HIV through sexual transmission, because a large majority engage in sexual intercourse, have multiple partners over a period of time, and fail to consistently use a condom during every act of intercourse. In addition, many young people also become infected with other STIs that facilitate the transmission of HIV.

In contrast, adolescents in countries where HIV infection is widespread are at much higher risk of contracting HIV through sexual intercourse, as are adolescents in low-prevalence countries who have unprotected intercourse with members of very high-risk groups (e.g. males who have sex with other males or injecting drug users).

In addition, there are some adolescents who engage in very frequent unprotected sex for drugs, and thereby greatly increase their risk, both by having frequent unprotected sex and by having sex with partners in high-risk groups. These high-risk groups are somewhat bounded by social networks, but this may change. Finally, some adolescents are at risk of contracting HIV through sharing needles used to inject drugs.

These patterns have important implications for educational programs. First, they suggest that there should be effective HIV & AIDS education programs for all young people. Furthermore, they suggest that there should be additional, more focused programs targeting those groups of adolescents who are at higher risk of HIV & AIDS infection. Educational programs for school-aged males should adequately address the risks of unprotected intercourse among males who may have sex with males.

UNESCO & HIV & AIDS Education in Pakistan

Prevention Education is an important component of global strategy against HIV & AIDS. Knowledge and awareness about how HIV is transmitted and how infection can be averted, reduces the vulnerability of young people. The international community and member states agreed to promote HIV & AIDS Prevention Education during the World Education Forum held from 26-28 April 2000 in Dakar, Senegal, and this commitment was reflected in Article 8. VIII. of the Dakar Framework of Action. Ministry of Education, Govt. of Pakistan has demonstrated its determination for HIV & AIDS Education by envisaging strategic actions on these issues in the National Education Policy approved on 09 September 2009. Unfortunately, school curriculum in Pakistan lacks information on prevention against HIV & AIDS. Information about HIV & AIDS is not integrated into the textbooks, and teachers do not discuss this important issue with their students, due to socio-cultural sensitivities and their own personal reluctance. In the absence of sound mechanisms of educating young people about HIV & AIDS, risks of their vulnerability are multiplied.

UNESCO is a member of UNAIDS Programme and is working closely with Ministries of Education for promotion of HIV & AIDS Prevention Education. In collaboration with UNAIDS and other international partners, UNESCO has launched a flagship programme titled 'EDUCAIDS' to strengthen response of the education sector in the fight against the epidemic of HIV & AIDS. UNESCO Islamabad has been working closely with the Ministry of Education, provincial Bureaus of Curriculum, teacher training institutes (PTIEs), and National AIDS Control Programme (NACP) for promotion of HIV & AIDS Prevention Education. Guidebooks for teachers were produced and workshops for orientation of curriculum developers, textbook writers, teacher trainers and education managers were organized in collaboration with Ministry of Education. Recently, United Nations and Government of Pakistan have planned to launch School Health Programme, whereas, Reproductive Health Education is one of the components of this innovative pilot project. In the context explained above, UNESCO has planned to assess the awareness level of young people, particularly adolescent students in Pakistan, about HIV & AIDS and their learning needs on this subject and issues related to their adolescence and reproductive health etc. This information is to be gathered through a small scale study, based on direct interaction with educated young people, particularly those who are still studying in secondary schools, colleges, or universities.

UNESCO is the only international agency in Pakistan which has worked extensively with the Federal Ministry of Education (now devolved) and provincial Departments of Education. Since 2001. Ministry of Education, Govt. of Pakistan has been publishing (with its own name and logo) Teacher Guidebook on HIV & AIDS Prevention, and produced number of other books on this issue, and have taken up a number of activities in the past one decade in collaboration with Ministry of Education and National AIDS Control Programme.

The activities were aimed at the education to the school going adolescents. For the purpose of education the target was to provide training to the teachers in Pakistan. A training guide was prepared for the same. It was not only prepared in Urduu but also translated in Sindhi Language in 2006. It covers in detail all the topics related with HIV Prevention and Control. It was followed by training to the teachers in all the provinces. Besides this for the purpose of moral development of the school going adolescents, a guide was developed in Urdu titled *Nojwanon ki Akhlaqi TaleemI*. For the purpose of highlighting the Importance & Significance of the Education for HIV & AIDS, a booklet was developed. Another manual for teachers was again developed in 2007 titled "Reducing Vulnerability Among Students in the School Setting".

In March 2009, again UNESCO prepared a manual titled "EduAID" targeting based on the information for the Education Department in URDU, A kit giving details on a set of four leaflets was prepared based on the Geographical Spread, Role of Education Department, Role of Students in Prevention and Control of HIV & AIDS was prepared for the mass awareness of the literate people. Another booklet was prepared addressing the youth titled "Nojwan Nasal Kay Naam – Salamati Ka Paigham" (Message of rule for Youth).

In case of Sindh, PITE Nawabshah published Sindhi version of the Guidebook for Teachers on HIV & AIDS. Balochistan Bureau has also produced its own set of HIV & AIDS training material with support from UNESCO. In addition, since 2001 and up till now, Federal Ministry of Education and Provincial Departments of Education have organized over 70 workshops and Seminars for training and orientation of policy makers, curriculum developers and teacher trainers. UNESCO supported guidebooks on HIV & AIDS have acceptability among Education Sector in Pakistan.

The assessment was taken up with following objectives;

Objectives

- 1. To review the existing curriculum and textbooks for students in public sector secondary/higher secondary schools with a view to identify and enlist available content about HIV & AIDS Prevention Education.
- 2. To measure the level of awareness among adolescent students about HIV & AIDS in general, and their knowledge about modes of transmission and precautionary measures
- 3. To assess the knowledge of young people about adolescence and reproductive health issues
- 4. To identify possible challenges Pakistani youth may have to face in their information seeking on their adolescence and reproductive health and discover factors which hinder the transmission of information and guidance to youth about these aspects.
- 5. To identify learning needs of young students on HIV & AIDS prevention and ARH; and
- 6. To recommend the actions at policy and curriculum level for the promotion and institutionalization of HIV & AIDS Education in schools and academic institutions and effective mechanisms for guidance and counseling of adolescent/students on HIV & AIDS prevention and ARH.

METHODOLOGY

The review and assessment was conducted by utilizing scientific tools and techniques as well as devised a framework that was based on the pattern of other such types of KAP studies and also considered the socio-cultural context.

Locale of study:

The present study was conducted in nine districts of Pakistan, namely Hyderabad, Sukkur, Quetta, Sibi, Dera Ghazi Khan, Lahore, Chakwal, Mansehra and Peshawar. The universe was restricted to urban and rural areas adjoining the district capital.

Inclusion Criteria;

- 1. Male or Female aged 13-18 years;
- 2. Must be a student of Secondary or above Classes or have dropped out within past six months from any of the above classes.
- 3. Willing to participate in the study

Pre-survey preparations included the following activities;

- Enumerators' recruitment. Maximum staff would be recruited from the one who have previous experience of working with Adolescents and research.
- Guides/Mobilizes would be recruited wherever necessary from the NGOs already working with youth. To avoid any bias in the study, data will be collected directly without taking the guides with the enumerators..
- Held meetings with the NGOs, CBOs etc having association within the vulnerable groups informing them about the research activity and seeking their support in identifying sites where vulnerable group members are located and the best ways to access them.
- Acquiring maps of the cities for preparation of educational facilities.
- Training of field staff on data collection
- Developing of monitoring formats/quality assurance

Training of Staff

The team was trained on the various aspects of field work in a 2 days training workshop organized at various sites for field workers of each site by technical team and master trainers. The training focused on providing information and clarifications related with the project.

Details of Master Trainers Training

In the master training one participant was trained from each district at Lahore. These master trainers were responsible for conducting training at Local level in their specific cities.

Following were the contents of the master trainers training;

- Vulnerability of Adolescents and HIV & AIDS
- Pre-survey exercise
- Inclusion Criteria for Respondents
- Data cleaning
- Behavioral Study of Adolescents
- Gender & HIV & AIDS
- Communication & interviewing skills
- Risk mitigation/ conflict resolution
- Organizing the field work

- Monitoring of the field work
- Field work practices

Local Trainings

The local trainings will be held at the local level in each district. The Principal Coordinator, Site coordinator and other local master trainer will conduct the training. This would facilitate the trainees to have a clearer picture in their local setup.

The field team was trained on the various aspects of fieldwork in a 3 days training workshop. The training focused on providing information and clarifications to the interviewers on issues like:

- Assessment Orientation
- Ethics of Research with the Adolescents
- Zoning of area
- Discussion on formats
- Form filling practices
- Importance of behavioral study and instrument to be used for behavioral study
- Communication skills
- Interviewing skills
- Probing Skills

The participants included enumerators, supervisors, and data management team.

Field Staff and Zoning

Keeping in view the population of target districts, following were the staff and the zones plan;

Table 5: Type of Hired Staff								
District	Site Coordinator	Enumerators	Zones/ Clusters (Rural/Urban)					
Hyderabad	1	4	6					
Sukkur	1	3	4					
Quetta	1	4	4					
Sibi	1	3	2					
Dera Ghazi Khan	1	3	5					
Lahore	1	9	18					
Chakwal	1	3	3					
Mansehra	1	3	2					
Peshawar	1	4	4					

Mobility facility was provided to the teams. They were also provided the mobile cards for communication with their site coordinators.

Collection of Data

The methodology for conducting survey was uniform across all districts. It was tailor-made to suit the data requirement of this specific study by the technical expert from UNESCO, PFRD and Steering Committee.

Assessment

The survey was conducted keeping in view the socio-cultural aspects and research ethics and proper steps were followed in the methodology by experienced staff, which were recruited for this purpose and had past experience in working with adolescents, data collection, analysis, quality check etc. The survey was in line with the research protocols devised in consultation with UNESCO.

Sample

The stratified-random sample, representing all provinces, selected districts, rural and urban areas, and both boys and girls were calculated. The size of the sample was proportionate to the male/ female enrolment in each of the district and further calculated on the basis of the enrollment at school and college level to make the study more meaningful.

Table 6: Sample Size										
City	Boys Interview	Girls Interview	Total	Boys Schools	Girls School	Boys College	Girls Colleges			
Lahore	416	484	900	279	316	136	169			
Chakwal	282	218	500	261	187	21	30			
DG Khan	263	237	500	216	195	47	43			
Sukkur	395	105	500	318	76	76	30			
Hyderabad	337	363	700	244	268	93	95			
Mansehra	335	165	500	266	110	69	55			
Peshawar	428	272	700	312	185	116	87			
Quetta	446	254	700	431	254	0	0			
Sibi	175	164	339	295	205	0	0			
Total	3077	2262	5339	2622	1796	558	509			

Sample Size

Logistic arrangement:

- Hiring of staff was done for all sites.
- Transport for field work and quality assurance was hired.
- Printing of forms in four colours giving a separate identity to each.
- Phone cards were provided to facilitate each interviewer

Questionnaire Pre-Testing and Finalization:

The consultants based on the objective of the study developed different colored questionnaire, monitoring forms. Questioners were pre-tested in Lahore with four high-risk groups. Subsequent to this, changes were made to improve the effectiveness of the questionnaire.

Field Strategy for Assessment:

- Females interviewed the females while males interviewed the males.
- Mobilizes were recruited from different zones as per need
- The interviews were held in the field at a convenient place for the respondent.

- Material containing HIV & AIDS information was distributed at the end of the interview.
- Confidentiality during interviews was ascertained
- Timings for field work was from 01:00 pm to 8:00 pm
- Meetings were conducted with NGO staff
- National Commission for Human Development (NCHD) was hired for the monitoring of the field work at all nine sites by UNESCO-Islamabad. They worked in close laision with the field workers during the data collection. They were provided schedule for the field work.

Ethical Consideration:

Protocols were put in place to ensure and maintain confidentiality of all respondents. The team members were sensitized to ethical issues related to confidentiality during their training. Consent forms clearly explaining the objectives of the study and procedures involved for participants were read out and signed by all the interviewers.

Teams members were also trained to take precautionary measures essential to safe guard against exposure to any untoward incident and other risks while conducting the study and interacting with students.

Informed consent

All participants who participated in the study were asked to become part of the study and got informed consent and explained the confidentiality of their information.

Monitoring of Field Activities

A number of activities at all levels carried out during study. In order to monitor these activities, a set of Indicators were developed and shared with UNESCO and utilized. Moreover NCHD monitors were also doing their monitoring of the field work in respective cities for UNESCO. The principal investigator and filed coordinator paid monitoring visits to all the sites.

Administration of the questionnaire

Each respondent was allotted a serial/ID number before the questionnaire was administered after obtaining the verbal consent.

Data collection and data entry

- Data were collected in 40 days during May June and July 2011
- Supervisor reviewed all the forms (form number, profession. location, and spots were checked)
- Data entry operators were trained
- Checked forms were punched in the computer using the software designed for the purpose (the software name like epi-info etc. may be written)
- Double independent entries were performed to ensure the reliability and validation of data

Study Findings & Discussions

Review of Literature

A detailed desk review of text books from Grade 8th to 12th was carried out and the same revealed that there was no information in any of the books about HIV & AIDS and the same is actually revised in 2002. However revised national curriculum 2005-06 contains health related concepts, in general, in the subjects of General Knowledge (I to III), General Science (IV & V), Islamiat (IV to XII) and specifically about HIV & AIDS in English (XI & XII) and Biology (IX to XII). New book of Biology IX has already been introduced from the academic session 2010 while remaining new books with above mentioned concepts are in the process of development and introduction. The Grade 11th Biology giving detail about the virus with a picture on page number 78 and 79. The information is more about the virus and a little bit about the route of transmission and no detailed difference about HIV & AIDS is properly explained.

In this regard, the Ministry of Education (now devolved) was also contacted. It was informed that the existing curriculum was the one which was revised in 2002 and in the recent past in 2005-06 the curriculum has been revised.

The production and introduction of new textbooks are in the process and are at different stages in the provinces.

General	I to III	1. Keeping oneself clean
Knowledge		2. Cleanliness and food
		3. Cleaning house
		4. Health Care
		1. Common illness
		2. Causes of illness
		3. People and health care
		4. Ways of protecting from illness
		5. Need of parks and keep parks clean
		6. Ways to keep the environment clean
General Science	IV	1. Introduction to human body
		2. Major body parts and their functions
		3. Food and health
		4. Living things and their environments
	V	1. Micro organism usefulness and harmfulness for food and
		health
		2. Environmental pollution
	VI, VII,	1. Human organs and system
	VIII	2. Water for life
		3. Biotechnology
		4. Agricultural environments
		5. Health and food
		6. Pollutants and Their Effects on Environments

Following is the some of the information in the revised curricula;

Table 7	1		
	Health Related Concepts in the New	Revised National C	urriculum 2006

English	I to XII	1. Health, Safety, Drug Education
Language		1. Learning to say NO (I-II)
		2. Knowing Medicines (III-V)
		3. Knowing Harmful Medicines & Dangerous Drugs
		4. Recognition of Problems Related to Drugs,
		Tobacco, Intoxicants
		5. Youth Role in Prevention of Drug Abuse, related
		diseases (HIV, AIDS, Hepatitis)
		2. Life Skills Education
		1. Sports and Sportsmanship
Islamiyat	IV-XII	1. Personal Hygiene
		2. Cleanliness of Body, Soul and Surroundings
		3. Protecting Oneself from Diseases
		4. Protecting the environment
		5. Balanced Diet
		6. "ISRAF". Remaining within Limits and Resources
Biology	IX-XII	1. Nutrition (Nutrition in Plants, Man and Digestion in Man)
		2. Reproduction (Sexually Transmitted Diseases AIDS)
		3. Man and environments (Pollution)
		4. Pharmacology (Medicinal Drugs and Addictive Drugs,
		Antibiotic and Vaccines)
		1. Effects of Drugs
		2. Defining Narcotics
		3. Associated Problems of Drug Addiction
		5. Respiration
		1. Different parts of Respiratory System
		2. Comparison and Interpretation of the X-ray films
		of lungs of a smoker with that of healthy Man.

The above table reveals that there is information about the various health related issues which encompasses both HIV & AIDS and Reproductive Health. One reason of not mentioning the Reproductive Health is the Socio-cultural and religious aspect, due to which Sexual & Reproductive Health is still thought to be a taboo subject especially for the unmarried adolescents and youth.

Respondents Analysis

Gender of the Respondent



To have a sample representative in all respects including, rural-urban, college/ school and gender were looked into proportionately to the enrolment ratio. Data revealed that in Lahore of total respondent 46.2 % were boys and 53.8% were girls studying in different schools and colleges. In Chakwal 56.4% were boys and 43.6% were girls. In DG Khan 52.6% were boys and 47.4% were girls. In Mansehra 79.0% were boys and 21.0% were girls. In Peshawar 48.1% were boys and 51.9% were girls. In Sukkur 67.0% were boys and 33.0% were girls. In Hyderabad 61.1% were boys and 38.9% were girls. In Quetta 63.7% were boys and 36.3% were girls. In Sibi 51.6% were boys and 48.4% were girls of various ages. In Quetta and Sibi it was very difficult to conduct interviews of the respondents because of law and order situation. Particular in Sibi refusal to be interviewed was quite high as 10% of the prospective respondents refused to be interviewed. The scorching heat of May – July also led to lesser numbers of interviews. It was difficult to find the college going boys and girls in both Quetta and Sibi. And it took more than six weeks to complete the survey in Sibi and Quetta.



According to study definition school and college going adolescents of age group from 13 to 18 years of age were included in the survey.

The Data shows that in Lahore 3.8% respondent were of the age of 13 years, 9.7% were of 14 years of age, 20.6% were of 15 years of age, and 27.4% were of the age of 16 years of age, 17.9% were of the age of 17 years and 20.7% were of 18 years of age group. In Chakwal 5.0 % respondent were of the age of 13 years, 15.8% were of 14 years of age, 25% were of 15 years of age, and 25% were of the age of 16 years of age, 17.8% were of 17 years of old and 6.3% were of 18 years of age group. In DG Khan 5.2% respondent were of the age of 13 years, 15% were of 14 years of age, 30% were of 15 years of age, and 24.4% were of the age of 16 years of age, 16.4% were of 17 years of age group and 5.0% were of the age group 18 years. In Manshehra 4.2% respondent were of the age of 13 years, 11.4% were of 14 years of age, 25.2% were of 15 years of age, and 29.0% were of the age of 16 years of age, 15.2% were of age of 17 years and 8.3% were of 18 years of age group. In Peshawer 3.4% respondent were of the age of 13 years, 19.4% were of 14 years of age, 18.1% were of 15 years of age, and 35.1% were of the age of 16 years of age, 13.1% were of age group 17 and 8.7% were of 18 years of age group. In Sukkur 3.8% respondent were of the age of 13 years, 10 % were of 14 years of age, 21.4% were of 15 years of age, and 24.8% were of the age of 16 years of age, 15.0% were of 17 years of age group and 6.9% were of 18 years of age group. In Hyderabad 5.4% respondent were of the age of 13 years, 14.3% were of 14 years of age, 21.3% were of 15 years of age, and 28.7% were of the age of 16 years of age, 16.7% were of 17 years of age group and 10.6% were of 18 years of age group. In Ouetta 4% respondent were of the age of 13 years, 15.4% were of 14 years of age, 18.8% were of 15 years of age, and 24.9% were of the age of 16 years of age, 22.1% were of 17 years of age group and 12.1% were of 18 years of age group. In Sibi 4.7% respondent were of the age of 13 years, 15.9% were of 14 years of age, 34.5% were of 15 years of age, and 23.6% were of the age of 16 years of age, 11.5% were of 17 years of age group and 3.7% were of 18 years of age group.



Data shows that among total number of respondents, 0.1% adolescents were residing in private hostels, 0.8% were in government hostels, 0.9% were living at their relatives homes and 97.9% were living with their parents at their own homes.



In Sibi, all the respondents were living with their parents and in Lahore most of the respondents were residing in hostels. Twelve respondents showed different living pattern.

It was analyzed that in Lahore 33.9% respondents were students in various boys and girls colleges while 66.1% were students of schools. In Chakwal 10.2% respondents were students in various boys and girls colleges while 89.8% were students of schools. In Dera Ghazi Khan 18.0% respondents were students in various boys and girls colleges while 82.0% were students of schools. In Mansehra 21.2% respondents were students in various boys and girls colleges while 78.8% were students of schools. In Peshawar 26.9% respondents were students in various boys and girls colleges while 73.1% were students of schools. InSukkur 24.8% respondents were students in various boys and girls colleges while 73.1% were students in various boys and girls colleges while 71.0% were students of schools. In Quetta 2.1% respondents were students in various boys and girls colleges while 97.9% were students of schools. In Sibi, none of the respondent was from college.



Educational Grades/ Classes of the Respondents

It was observed that out of 5339 adolescent in all the districts 2371 (44.4%) respondents were of 9^{th} grade, 2147 (40.2%) were of 10^{th} grade, 336 (6.3%) respondents were of 11^{th} grade, 399 (7.5%) were from 12^{th} grade and 86 (1.6%) interviews were conducted from 13^{th} grade.



It was analyzed that 48.0% adolescents from Lahore were studying in science group and 52.0 were students of humanities group. In Chakwal 82.4% were students of science group and 17.6% were from humanities group. In Dera Ghazi Khan, 67.6% were science students and 32.4% were from humanities group. In Mansehra, 60.6% students were from science group and 39.4% were from humanities. In Peshawar, 46.6% were from science group and 53.4% were from humanities. In Sukkur 56.8% were of science group and 43.2% were studying in Humanities group. In Quetta and Sibi 67.4%, 77.9% were from Science group, 32.6% and 22.1% respondents were from Humanities group respectively.

Findings about HIV & AIDS

A set of questions related with knowledge about HIV & AIDS, Routes of Transmission, Prevention, Treatment and stigma & discrimination with being positive were asked. The results are as follows;

Respondents Who Have Heard About AIDS or HIV										
			Heard About AIDS				Heard About HIV			
	Gender	Yes	Yes %	No	No %	Yes	Yes %	No	No %	
	Male	959	31.4%	2096	68.6%	683	22.4%	2372	87.6%	
	Female	858	37.6%	1426	62.4%	625	22.4%	1659	87.6%	
Pakistan	Total	1817	34.5%	3522	65.5%	1308	22.4%	4031	87.6%	
	Male	408	42.3%	556	57.7%	339	35.2%	625	64.8%	
	Female	423	45.2%	513	54.8%	338	36.1%	598	63.9%	
Punjab	Total	831	43.75%	1069	56.25%	677	35.65%	1223	64.35%	
	Male	204	27.9%	527	72.1%	127	17.4%	604	82.6%	
	Female	125	26.7%	344	73.3%	87	18.6%	382	81.4%	
КРК	Total	329	27.3%	871	72.7%	214	18%	986	82%	
	Male	113	15.2%	629	84.8%	84	11.3%	658	88.7%	
	Female	75	16.4%	383	83.6%	59	12.9%	399	87.1%	
Sindh	Total	188	15.8	1012	84.2	143	12.1	1057	87.9	

	Male	234	37.9	384	62.1	133	21.5	485	78.5
	Female	235	55.8	186	44.2	141	33.5	280	66.5
Baluchistan	Total	469	46.85	570	53.15	274	27.5	765	72.5

The data depicts the alarming findings that only 34.5% (31.4% male and 37.6% female) out of total sample nationwide have heard about the word AIDS while only 22.4% heard about HIV. The situation in Sindh province is quite threatening as only 15.8 percent respondents have heard about AIDS even we have observed several awareness raising interventions particularly for adolescents undertaken through various programmes by the Public and Private sector. Similarly; only 12.1 percents respondents stated that they have heard about HIV. The situation in Punjab and Baluchistan seem comparatively better among other both provinces. By considering different data between male and female, we should intervene accordingly in future through more elaborative information in the test books.



Source of Learning

The question was asked to know about the existing source of knowledge from the respondents who have heard of HIV & or AIDS, so that a comparison can be made between the knowledge acquired from text books and other various sources. There were more than one responses to the question. The table 5 gives the overall picture of the source of learning. **Table 9**

Source of Learning (%)										
							School	Text		
	Gender	TV	Radio	Newspaper	Magazines	Friends	Teachers	Books		
	Male	60.4	7	4.8	5.7	9.2	11.3	13.5		
	Female	67.5	7.8	5.4	6.4	10.3	12.6	15		
Pakistan	Total	63.95	7.4	5.1	6.05	9.75	11.95	14.25		
Punjab	Male	67.2	5.4	6.6	3.9	13.5	14	20.1		

	Female	62.4	7.1	6.4	5.7	5.4	19.4	28.1
	Total	64.8	6.25	6.5	4.8	9.45	16.7	24.1
	Male	61.3	1.5	2	4.4	10.3	14.7	2.5
	Female	72	0.8	1.6	5.6	5.6	8	6.4
КРК	Total	66.65	1.15	1.8	5	7.95	11.35	4.45
	Male	61.1	0	4.4	2.7	13.3	8	4.4
	Female	78.7	0	1.3	4	8	4	0
Sindh	Total	69.9	0	2.85	3.35	10.65	6	2.2
	Male	77.8	5.6	9	5.6	16.7	11.1	0
	Female	70.6	15.3	6.8	8.9	22.1	5.5	0.9
Baluchistan	Total	74.2	10.45	7.9	7.25	19.4	8.3	0.45

From the table, it is quite evident that the percentage of students who have acquired knowledge through school teachers and the text books in Pakistan is 11.95% and 14.25%, which is quite low as compared to the other sources. In Punjab, more students have learnt through Teachers and the Text Books than any other province showing that teachers have taken some interest in provision of knowledge. From the above findings it is quite evident that TV is the major sources of learning pertaining to HIV & AIDS. 63.9 % respondents nationwide learnt through TV. All provinces fall under 60-70% category while Baluchistan is above 74.2%. The data also show that the contribution in learning of Radio, Magazine, newspaper and friends remain below 10%. The situation in Baluchistan is different with other provinces like the role of teachers and text book is minimal in learning about HIV & AIDS. The data give us a significant analysis to understand the role of media in learning about HIV & AIDS.



Correct Knowledge about Modes of Transmission

Regarding correct knowledge about the mode of transmission of HIV & AIDS, a range of 9 modes was ascertained with multiple responses by the respondents who have heard about HIV &/or AIDS.

The analysis at country level shows the results having some significant values like 36.55% through Sexual Intercourse Route, 31.55% through Reuse of Syringes and 31.2% through Blood Transfusion. Rests of the mode were reported by less than 10% of the total responses under MTCT, Infected Surgical Instruments, Sharing Razors, Piercing and Tattooing. Piercing and Tattooing is lesser known to be the route of transmission at both country and all provinces levels as less than or equal to 1%. It is necessary to educate the youth about these behavioral routes as our girls go for piercing quite frequently and might get infected by the use of the same needle for piercing without any knowledge. Moreover tattooing is also picking up in the school going youth and needs to be included in the syllabi. It has also been found that Male respondents are more assertive about Sexual Intercourse being the route of the transmission as against the Female respondents with a difference of 10%.

Table 10	: Knowl	edge Ab	out Correct	Mode of 7	Fransmi	ssion (%)			
	Gende r	Sexual Interco urse	Transfusio n	Reuse of syringes	MTC T	Infected Surgical Instrument S	Sharing Razors	Pier cing	Tatto oing
	Male	44.1	27.4	24.9	2.2	5.9	12.3	0.3	0.4
	Fema le	29	35	38.2	4.8	8.7	7.5	1	0.6
Pakistan	Total	36.55	31.2	31.55	3.5	7.3	9.9	0.65	0.5
	Male	47.5	28.7	32.4	2.9	9.6	13.5	0.7	1
	Fema le	23.6	36.4	39.2	3.1	12.8	7.6	1.4	0.9
Punjab	Total	35.55	32.55	35.8	3	11.2	10.55	1.05	0.95
	Male	42.2	21.6	8.3	0.5	2.9	10.8	0	0
	Fema le	15.2	21.6	30.4	0.8	5.6	1.6	1.6	0.8
KPK	Total	28.7	21.6	19.35	0.65	4.25	6.2	0.8	0.4
	Male	35.4	18.6	13.3	0	0	5.3	0	0
	Fema le	17.3	18.7	17.3	1.3	1.3	1.3	0	0
Sindh	Total	26.35	18.65	15.3	0.65	0.65	3.3	0	0
	Male	44	34.6	32.1	3.4	5.1	15	0	0
	Fema le	49.8	44.7	47.2	11.1	5.5	12.3	0.4	0
Baluchis tan	Total	46.9	39.65	39.65	7.25	5.3	13.65	0.2	0

At province levels, Balochistan and Punjab are having the maximum values under the above three modes. Balochistan shows 46.9% response under Sexual Intercourse, 39.65% for

Transfusion and Reuse of Syringes and 0% for Tattooing. The Sindh and KPK have almost the same trend among the modes but fewer percentages as compared to the other two provinces.



Myths and Mis-concepts about Routes of Transmission of HIV

Though the analysis, shows a little percentage of the respondents having incorrect knowledge or a mis-concept about the routes of transmission, but needs to be clarified in the curriculum because having mis-concepts may lead to some wrong behaviours including discrimination with the HIV positive person. Four myths regarding routes of transmission were reported including 'Eat with Infected person', 'Mosquito Bite', Sneezing/Coughing and Dirt. Collective figures at country level shows 4.3%, 2.95% and 2.9% responses respectively under the above mentioned sources. An overwhelming value as 11.15% has been standing with a large range of other sources. The same included the using the clothes of the infected person, using the same toilette, bathing together etc. All of the same might lead to a negative behavior with positive person. It gives a gist of stigmatizing the positive person which might lead to stigmatizing. The same was evident from the question related with the behavior with a positive classmate if ever come across. In response to the same, a remarkable number ranging from 6.8 - 13.7% informed of not going nearby to him/her and though a small fraction but still persisting is he one who said of getting him/her expelled or not to talk with him/her.

It was analysed that regarding the perceptions and belief on myths, females have more of the same than the males. The pattern is found same at country and all provinces levels.

Table 11: Myths & Misconceptions About HIV Transmission (%)						
	Gender	Eat with Infected Person	Mosquito Bite	Sneezing/ Coughing	Dirt	Others
	Male	3.4	2.2	1.8	1.7	10.3
	Female	5.2	3.7	4	2.9	12
Pakistan	Total	4.3	2.95	2.9	2.3	11.15
	Male	3.9	2.7	1.5	2.2	11.8
	Female	5.7	5.9	6.1	3.8	13.5
Punjab	Total	4.8	4.3	3.8	3	12.65

	Male	0	1	0.5	0	12.3
	Female	0.8	1.6	2.4	0	16.8
КРК	Total	0.4	1.3	1.45	0	14.55
	Male	2.7	0.9	0.9	1.8	20.4
	Female	4	1.3	0	10.7	29.3
Sindh	Total	3.35	1.1	0.45	6.25	24.85
	Male	6	3	3.8	2.1	1.3
	Female	7.2	1.7	2.1	0.4	1.3
Baluchistan	Total	6.6	2.35	2.95	1.25	1.3



Correct Knowledge about Methods of Prevention

A question was asked from the respondents who have ever heard of HIV &/or AIDS about various methods of Prevention of transmission of HIV. The same was analysed and reported separately for having correct and incorrect knowledge.

Correct Knowledge on the prevention measures prevails in males more than females. The source of HIV transmission is linked with correct knowledge on prevention measures. Among the 5 measures, maximum values was found for 'Using New Syringes' as 33.05% followed by 31.35% for 'Screened Blood Transfusion' and 26.7% for 'By Using Condom'. The difference between males and females among first category is around 7% and quite significant but least with other categories. The gender difference is almost same (as 10%) among the provinces.

Table 12: Correct Knowledge of Methods of Prevention (%)						
	Gender	By Using Condom	Screened Blood Transfusion	Using new syringes	Using New Razor	Disinfection of Surgical Instruments
	Male	30.3	30.1	28.8	13.5	4.7
Pakistan	Female	23.1	32.6	37.3	7.7	5.2

	Total	26.7	31.35	33.05	10.6	4.95
	Male	41.2	23.8	34.1	15.4	6.4
	Female	22.9	30.5	36.9	7.6	7.6
Punjab	Total	32.05	27.15	35.5	11.5	7
	Male	20.6	36.3	13.2	12.3	2.9
	Female	7.2	16.8	44	3.2	3.2
КРК	Total	13.9	26.55	28.6	7.75	3.05
	Male	23	15.9	18.6	4.4	0.9
	Female	10.7	20	13.3	4	1.3
Sindh	Total	16.85	17.95	15.95	4.2	1.1
	Male	23.5	42.7	38	15.4	5.1
	Female	35.7	48.9	42.1	11.5	3.4
Baluchistan	Total	29.6	45.8	40.05	13.45	4.25



Incorrect Knowledge About Methods of Prevention

There have been a lesser percentage of respondents having incorrect knowledge about the methods of prevention. However, it again shows the discriminatory behaviours towards the positive people as 5.35% of the respondents informed that the transmission could be prevented by not eating with a positive person. The prevention by avoiding dirt and mosquitoes, though less than 4% but still perceived to be the methods of preventions. Difference among male and female has been there as female have more misconceptions with 6.5% as compared to 4.2% for males. Overall Punjab province is at the top for the three misconceptions values, followed by Sindh, Balochistan and KPK.

Table 13: Misconception About Methods of Prevention(%)

	Gender	Not to eat with infected person	Avoid Mosquitoes	Avoid Dirt
	Male	4.2	1.7	2.4
	Female	6.5	2.6	3.8
Pakistan	Total	5.35	2.15	3.1
	Male	5.4	2.5	2.5
	Female	10.2	3.5	5.9
Punjab	Total	7.8	3	4.2
	Male	1.5	0	0
	Female	0	0.8	0
КРК	Total	0.75	0.4	0
	Male	5.3	0	3.5
	Female	4	2.7	8
Sindh	Total	4.65	1.35	5.75
	Male	3.8	2.6	3.8
	Female	4.3	1.7	0.9
Baluchistan	Total	4.05	2.15	2.35



Perceptions about Threat to Pakistan

A set of question was asked about the perceptions about Pakistan being on threat as a country and the respondent as an individual so that the type of knowledge to be incorporated in the curriculum can be ascertained. The below given responces are from the analysis of the same.

Threat to Pakistan about the Spread of HIV

Table 14: Is Pakistan on Threat of HIV							
	Gender	Yes	%	No	%	Don't Know	%
	Male	703	71.7%	61	9.2%	216	22%
	Female	654	74.5%	86	9.8%	138	15.7%
Pakistan	Total	1357	73.1%	147	9.5%	354	18.85%
	Male	318	76.6%	25	6%	72	17.3%
	Female	349	80.8%	14	3.2%	69	16%
Punjab	Total	667	78.7%	39	4.6%	141	16.65%
	Male	121	57.3%	7	3.3%	83	39.3%
	Female	87	66.9%	6	4.6%	37	28.5%
КРК	Total	208	62.1%	13	3.95%	120	33.9%
	Male	81	69.8%	8	6.9%	27	23.3%
	Female	60	76.9%	4	5.1%	14	17.9%
Sindh	Total	141	73.35%	12	6%	41	20.6%
	Male	183	76.9%	21	8.8%	34	14.3%
	Female	158	66.4%	62	26.1%	18	7.6%
Baluchistan	Total	341	71.65%	83	17.45%	52	10.95%

The question was asked about the threat to Pakistan of spread of HIV virus was asked from the respondent. Following are the results;

An overwhelming majority (73.1%) stated that Pakistan is on threat of HIV while only 9.5% expressed in No. The respondents from Punjab, 78.7%, KPK 62.1%, Sindh 73.35 and Baluchistan 71.6% have a perception that that HIV is a threat for them. Only in Baluchistan 17.5% respondents said that HIV is not a threat while in other provinces only below six percents responded that HIV is not a threat.



Healthy Looking Person and HIV

Two questions were asked about the healthy looking person and HIV including to be sure by observing a healthy looking person that he/ she is HIV+ and telling about a person by just looking that he/ she is HIV+.

In Pakistan, the overall Perception of HIV+, on behalf of the apparent body structure and general health status, revealed that as many as 49.55% are clear that a healthy looking person could be HIV+ and that is quite significant as most of the literature and IEC material gives this message. On the other hand the percentage of respondents who have misconception of being not positive 32.65% is quite significant with a fraction of having no knowledge as 17.85%. Trends in Punjab and KPK provinces are alike and adhering to the country level trends in percentages but Sindh and Baluchistan provinces have little different trend with less differences between Yes and No response as 41.25% for Yes and 38.6% for No. Differences between male and female responses are very little which means both sex think in same direction when seeing the apparent body and health to diagnose HIV positive. It is quite necessary to incorporate in the curriculum with a clear message about HIV+ being healthy looking so that it can lead to having correct knowledge.

Table 15: Ca	n a Healthy	/ Looking	g Person b	e HIV+			
		Yes		No		Don't Know	
	Gender	Count	%	Count	%	Count	%
	Male	468	47.8%	332	33.9%	180	18.4%
	Female	450	51.3%	276	31.4%	152	17.3%
Pakistan	Total	918	49.55%	608	32.65%	332	17.85%
	Male	243	58.6%	145	34.9%	27	6.5%
	Female	258	59.7%	134	31%	40	9.3%
Punjab	Total	501	59.15%	279	32.95%	67	7.9%
	Male	114	54%	37	17.5%	60	28.4%
	Female	67	51.5%	41	31.5%	22	16.9%
KPK	Total	181	52.75%	78	24.5%	82	22.65%
	Male	51	44%	42	36.2%	23	19.8%
	Female	30	38.5%	32	41%	16	20.5%
Sindh	Total	81	41.25%	74	38.6%	39	20.15%
	Male	60	25.2%	108	45.4%	70	29.4%
	Female	95	39.9%	69	29%	74	31.1%
Baluchistan	Total	155	32.55%	177	37.2%	144	30.25%



In response to the second question of diagnosing by looking at a person of his status of being HIV+, overall the response in Pakistan was good as 73.35% of the respondents are clear that one cannot tell by looking at a person that he/ she is HIV+. Only 16.2% have were having an incorrect perception of observation leading to knowing the status. The percentage of both males and females are almost the same i.e. 72.1% and 74.6% respectively.

Table 16: Can we Diagnose a Person By Looking That He/ She is HIV+							
		Yes		No		Don't Know	
	Gender	Count	%	Count	%	Count	%
	Male	145	14.8%	707	72.1%	128	13.1%
	Female	142	16.2%	655	74.6%	81	9.2%
Pakistan	Total	143.5	15.5%	681	73.35%	104.5	11.15%
	Male	110	26.5%	278	67%	27	6.5%
	Female	110	25.5%	290	67.1%	32	7.4%
Punjab	Total	110	26%	284	67.05%	29.5	6.95%
	Male	13	6.2%	132	62.6%	66	31.3%
	Female	21	16.2%	85	65.4%	24	18.5%
КРК	Total	17	11.2%	108.5	64%	45	24.9%
	Male	12	10.3%	84	72.4%	20	17.2%
	Female	2	2.6%	60	76.9%	16	20.5%
Sindh	Total	7	6.45%	72	74.65%	18	18.85%
	Male	10	4.2%	213	89.5%	15	6.3%
	Female	9	3.8%	220	92.4%	9	3.8%
Baluchistan	Total	9.5	4%	216.5	90.95%	12	5.05%

Treatment & HIV & AIDS

The knowledge and perception about the treatment to cure HIV is seen encouraging among the respondents. The HIV as treatable disease, have been agreed by 45.5% whereas 34.5% do not agree and 21.8% have no knowledge about the same. The gender differences are too very little in this regards. The provinces response is found to be highest in Punjab, followed by KPK, Sindh and Baluchistan in the same order.

Table 17: Is HIV Treatable							
		Yes		No		Dont Know	
	Gender	Count	%	Count	%	Count	%
	Male	460	46.9%	306	31.2%	214	21.8%
	Female	383	43.6%	331	37.7%	164	18.7%
Pakistan	Total	843	45.25%	637	34.45%	378	20.25%
	Male	230	55.4%	103	24.8%	82	19.8%
	Female	256	59.3%	94	21.8%	82	19%
Punjab	Total	486	57.35%	197	23.3%	164	19.4%
	Male	82	38.9%	54	25.6%	75	35.5%
	Female	58	44.6%	30	23.1%	42	32.3%
КРК	Total	140	41.75%	84	24.35%	117	33.9%
	Male	49	42.2%	41	35.3%	26	22.4%
	Female	31	39.7%	27	34.6%	20	25.6%
Sindh	Total	80	40.95%	68	34.95%	46	24%
	Male	99	41.6%	108	45.4%	31	13%
	Female	38	16%	180	75.6%	20	8.4%
Baluchistan	Total	137	28.8%	288	60.5%	51	10.7%



The attitude about vulnerability of HIV was scrutinized from the whole data of the Pakistan, where only 2.1 percent of the respondent say yes including male and females whereas 78 percent of the respondent were not aware at all weather they are at risk or not. The situation

in Sind is bit better where at least 3 percent respondent knows but in Punjab, KPK and Baluchistan stand on decreasing line of 1.15, 0.95 and 0.4 respectively.

The reasons given for acquiring HIV & AIDS by the respondents who have said yes were of various types including; transfusion of the infected blood, reuse of syringes, used blades, environment, eating with infected person, careless behavior, mosquito-bites, dirt, bad behavior, shaving with used blades and sitting with HIV & AIDS patient.

The reasons of not at risk included; no sexual relations, always new shaving razor, ask for new syringes, if necessary would ask for screened blood, sterilized instruments and will never take food with HIV & AIDS person.

This again shows the mis-concepts of routes	s of transmission and needs to be addressed in the
curriculum at nationwide level.	

Table 18: Are You at Risk of Acquiring HIV/AIDS												
		Yes		No		Don't Know						
	Gender	Count	%	Count	%	Count	%					
	Male	16	1.6%	201	20.5%	763	77.9%					
	Female	7	0.8%	176	20%	695	79.2%					
Pakistan	Total	23	1.2%	377	20.25%	1458	78.55%					
	Male	6	1.4%	89	21.4%	320	77.1%					
	Female	4	0.9%	80	18.5%	348	80.6%					
Punjab	Total	10	1.15%	169	19.95%	668	78.85%					
	Male	4	1.9%	18	8.5%	189	89.6%					
	Female	0	0%	6	4.6%	124	95.4%					
КРК	Total	4	0.95%	24	6.55%	313	92.5%					
	Male	4	3.4%	23	19.8%	89	76.7%					
	Female	2	2.6%	13	16.7%	63	80.8%					
Sindh	Total	6	3%	36	18.25%	152	78.75%					
	Male	2	0.8%	71	29.8%	165	69.3%					
	Female	1	0.4%	77	32.4%	160	67.2%					
Baluchistan	Total	3	0.6%	148	31.1%	325	68.25%					



The question was asked about being tested if given a chance, and it was observed that the tendancy for testing for HIV & AIDS is better as the overall data depict shows that 77% of the respondents response was affirmative. The response was found to be highest in Sindh Province.

Table 19: If Given Chance, Would You Like to be tested for HIV Non												
		Yes		No								
	Gender	Count	%	Count	%							
	Male	770	78.6%	210	21.4%							
	Female	662	75.4%	216	24.6%							
Pakistan	Total	1432	77%	426	23%							
	Male	341	82.2%	74	17.8%							
	Female	348	80.6%	84	19.4%							
Punjab	Total	689	81.4%	158	18.6%							
	Male	165	78.2%	46	21.8%							
	Female	89	68.5%	41	31.5%							
КРК	Total	254	73.35%	87	26.65%							
	Male	96	82.8%	20	17.2%							
	Female	66	84.6%	12	15.4%							
Sindh	Total	162	83.7%	32	16.3%							
	Male	168	70.6%	70	29.4%							
	Female	159	66.8%	79	33.2%							
Baluchistan	Total	327	68.7%	149	31.3%							



Provision of HIV & AIDS Education through Curriculum

As per objective of the assessment, after having a clear picture about existing knowledge, the questions were asked about the HIV & AIDS education being part of the curriculum, type of knowledge and the age and class from which the education is to be started. In this section analysis of the same has been given.

When the question about HIV being the part of the curriculum was asked, in Pakistan 86.1% of the respondents said that it should be made the part of the curriculum with almost equal percentage of males and females i.e. 85.2% and 87% respectively. It is quite evident that our adolescents and youth are interested in acquiring appropriate knowledge and the best mode is the syllabi of the schools.

Table 20: Should the HIV & AIDS Knowledge be Part of Curriculum													
		Yes		No		Don't Know							
	Gender	Count	%	Count	%	Count	%						
	Male	2603	85.2%	21	0.7%	431	14.1%						
	Female	1986	87%	32	1.4%	266	11.6%						
Pakistan	Total	4589	86.1%	53	1.05%	697	12.85%						
	Male	848	88%	6	0.6%	110	11.4%						
	Female	887	94.8%	9	1%	40	4.3%						
Punjab	Total	1735	91.4%	15	0.8%	150	7.85%						
	Male	684	93.6%	6	0.8%	41	5.6%						
	Female	425	90.6%	5	1.1%	39	8.3%						
КРК	Total	1109	92.1%	11	0.95%	80	6.95%						
	Male	592	79.8%	7	0.9%	143	19.3%						
	Female	334	72.9%	14	3.1%	110	24%						
Sindh	Total	926	76.35%	21	2%	253	21.65%						
	Male	479	77.5%	2	0.3%	137	22.2%						
	Female	340	80.8%	4	1%	77	18.3%						
Baluchistan	Total	819	79.15%	6	0.65%	214	20.25%						



Table 21: Grade From Which Education to be Imparted Pakistan Punjab KPK Sindh Baluchistan																
		J	Pakista	ın		Punjal	b		KPK			Sindh		Ba	aluchis	tan
Grade		М	F	Т	М	F	Т	Μ	F	Т	М	F	Т	Μ	F	Т
	Со															
	unt	92	73	165	24	20	44	26	29	55	15	8	23	27	16	43
771.0.1		3.5	3.7	3.6	2.8	2.3	2.55	3.8	6.8	5.3	2.5	2.4	2.4	5.6	4.7	5.15
Fifth	%	%	%	%	%	%	%	%	%	%	%	%	5%	%	%	%
	Со	21	24	451	00	77	150	20	20	70	15	10	21	05		202
	unt	0 1	12	451	82	07	159	29	29	58	15	10	31	85	24	203
Sixth	%	8.1 %	12. 1%	10.1	9.7	8.7 %	9.2 %	4.2 %	0.8 %	5.5 %	2.5 %	4.8 %	3.0 5%	17. 7%	54. 7%	20.2 %
	Со	16	15	, ,			, ,			,,,			- , .			, .
	unt	8	1	319	44	30	74	29	30	59	29	9	38	66	82	148
Seven		6.5	7.6	7.05	5.2	3.4	4.3	4.2	7.1	5.65	4.9	2.7	3.8	13.	24.	18.9
th	%	%	%	%	%	%	%	%	%	%	%	%	%	8%	1%	5%
	Со	38	32		13	16								10		
	unt	5	0	705	1	8	299	73	57	130	77	52	129	4	43	147
Eight		14.	16.	15.4	15.	18.	17.1	10.	13.	12.0	13	15.	14.	21.	12.	17.1
h	%	8%	1%	5%	4%	9%	5%	7%	4%	5%	%	6%	3%	7%	6%	5%
	Co	14	10	248	46	49		49	25		35	20		13		
	unt	54	30	4	6	8	964	7	8	755	3	1	554	8	73	211
		55.	51.	53.9	55	56.	55.5	72.	60.	66.7	59.	60.	59.	28.	21.	25.1
Ninth	%	9%	9%	%0	%	1%	5%	7%	7%	%0	6%	2%	9%	8%	5%	5%
	Co	22	12	242	01	70	154	26	14	40	72	27	100	40	7	40
	unt	96	0	343	0.7	V 1	154	2.0	2.2	40	12	27 Q 1	100	42	21	49 5.45
Tenth	0/2	0.0 %	6%	1.5	9.1	0.1	0.9 0/2	3.0 %	3.3 %	3.55 %	12. 3%	0.1 %	10. 2%	0.0	2.1 %	5.45 %
Tenti		/0	070	/0	/0	/0	/0	/0	/0	/0	570	/0	<i>4</i> /0	/0	/0	/0
	unt	53	39	92	12	14	26	3	6	9	21	19	40	17	0	17
Eleve					1.4	1.6	1.5	0.4	1.4	0.9	3.5	5.7	4.6	3.5		1.75
nth	%	2%	2%	2%	%	%	%	%	%	%	%	%	%	%	0%	%
Twelf	Со															
th	unt	11	9	20	6	5	11	1	2	3	4	2	6	0	0	0

		0.4	0.5	0.45	0.7	0.6	0.65	0.1	0.5	0.3	0.7	0.6	0.6			
	%	%	%	%	%	%	%	%	%	%	%	%	5%	0%	0%	0%
	Со															
	unt	4	0	4	0	0	0	0	0	0	4	0	4	0	0	0
Thirte		0.2		0.1							0.7		0.3			
enth	%	%	0%	%	0%	0%	0%	0%	0%	0%	%	0%	5%	0%	0%	0%
	Со															
	unt	2	4	6	1	3	4	0	0	0	1	0	1	0	1	1
Fourt		0.1	0.2	0.15	0.1	0.3	0.2				0.2		0.1		0.3	0.15
eenth	%	%	%	%	%	%	%	0%	0%	0%	%	0%	%	0%	%	%

When it was asked about the grade from which the education is to be initiated, 84.1% in strong recommendation to initiate the same from Grade 6 and the age was recommended to be 15 years by the majority of the respondents. It appears that a student is usually in grade $8^{\text{th}} - 10^{\text{th}}$ at the age of 15 years, the same could be started from Grade 8 rather than to grade 6. Based on the analysis as given in the table, Basic Knowledge about HIV & AIDS must be incorporated and should include the following topics;

- 1. Facts about HIV & AIDS
- 2. Pakistan & HIV & AIDS
- 3. Routes of Transmission
- 4. Methods of Prevention
- 5. Behavior with HIV & AIDS Patients

Table 2	Table 22: Age of Initiation of Education															
Age in Yrs		P	akist	an	Punjab			KPK			Sindh			Baluchistan		
		Μ	M F T		Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т
8	Co unt	7	3	10	3	1	4	3	1	4	0	0	0	1	1	2

	0/2	0.3	0.2	0.25	0.4	0.1	0.25	0.4	0.2	0.3	0%	0%	0.0/	0.2	0.3	0.25
	Co	/0	/0	/0	/0	/0	/0	/0	/0	/0	070	070	0 /0	/0	/0	/0
	unt	10	6	16	5	3	8	1	3	4	3	0	3	1	0	1
0	0/	0.4	0.3	0.35	0.6	0.3	0.45	0.1	0.7	0.4	0.5	00/	0.25	0.2	00/	0.1
9	% C0	% 11	% 10	% 0	%	%	% 0	%	%	% 0	%	0%	% 0	%	0%	% 0
	unt	9	8	227	55	36	91	22	31	53	12	13	25	30	28	58
		4.6	5.4		6.5	4.1	5.3	3.2	7.3	5.25		3.9	2.95	6.3	8.2	7.25
10	%	%	%	5%	%	%	%	%	%	%	2%	%	%	%	%	%
	C0	39	53	92	19	22	41	7	14	21	7	4	11	6	13	19
	un	1.5	2.7	2.1	2.2	2.5	2.35	,	3.3	2.15	1.2	1.2	1.2	1.3	3.8	2.55
11	%	%	%	%	%	%	%	1%	%	%	%	%	%	%	%	%
	Co	20	21	405	07	11	0 10	25	25	(0)	22	17	40		64	100
	unt	8	9	427	97	12	210 12.1	35	25	<u>60</u>	5.4	5.1	<u>49</u> 5 25	44	64 18	108
12	%	8%	%	9.5 %	5%	12. 7%	12.1 %	9.1 %	%	3.3 %	9.4 %	9.1 %	3. <u>4</u> 3 %	9.2 %	8%	14 %
	Со	27	27			13										
	unt	4	9	553	98	3	231	40	27	67	58	55	113	78	64	142
13	0/4	10. 5%	14 %	12.2	11. 6%	15 %		5.8	6.4	6.1	9.8 %	16. 5%	13.1	16. 3%	18. 8%	17.5
15	⁷⁰ Co	35	29	570	070	10	70	70	70	-70	14	J 70	570	570	070	570
	unt	5	1	646	83	0	183	68	56	124	0	80	220	64	55	119
		13.	14.	14.1	9.8	11.	10.5	9.9	13.	11.5	23.	24	23.8	13.	16.	14.8
14	%	6%	7%	5%	%	3%	5%	%	2%	5%	6%	%	%	4%	2%	%
	C0	13 34	8/	220	43	41	841	47	24 6	724	23 4	2	346	19	10 4	296
	unt	51.	44	47.6	50.	46.	48.5	69.	57.	63.9	39.	33.	36.5	40.	30.	35.3
15	%	2%	%	%	8%	3%	5%	9%	9%	%	5%	5%	%	1%	6%	5%
	Co	15	10	262	40	50	00	24	15	20	74	22	100	10	6	25
	unt	61	52	262	42	50	<u>92</u>	24	35	39	12	96	106	19	18	25
16	%	%	%	%	5%	%	%	%	%	%	5%	%	5%	4%	%	<u>2</u> .) %
	Со															
	unt	70	32	102	9	11	20	4	4	8	17	16	33	40	1	41
17	0/2	2.7	1.6	2.15	11	1.2	1.15	0.6	0.9	0.75	20	18	3 85	81	03	1 35
17	Co	/0	/0	/0	1.1	/0	/0	/0	/0	0.75	2.)	7.0	5.05	0.7	0.5	т.55
	unt	20	16	36	3	6	9	2	3	5	12	4	16	3	3	6
10	<i></i>	0.8	0.8	0.8	0.4	0.7	0.55	0.3	0.7	0.5	0.04	1.2	1.6	0.6	0.9	0.75
18	%	%	%	<u>%</u>	%	%	%	%	%	%	2%	%	%	%	%	%
	unt	3	2	5	0	0	0	0	0	0	2	1	3	1	1	2
		0.1	0.1	0.1							0.3	0.3	0.3	0.2	0.3	0.25
19	%	%	%	%	0%	0%	0%	0%	0%	0%	%	%	%	%	%	%
	Co	Л	Δ	1	2	Δ	2	Δ	Δ	Δ	1	Δ	1	Δ	Δ	Δ
	unt	0.2	0	0.1	0.4	0	0.2	0	0	U	0.2	0	0.1	0	0	U
20	%	%	0%	%	%	0%	%	0%	0%	0%	%	0%	%	0%	0%	0%
	Co	~		_			_			~			~			~
	unt	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0
21	%	0%	%	%	0%	%	%	0%	0%	0%	0%	0%	0%	0%	0%	0%

As the respondent suggested the 15 years age of the initiation of the education, so they were in thought the topics should be up to the basic knowledge. The Pakistan level data shows up to 81 percent and more or less same case is with the Provincial data.

Table 2	Table 23: Topics to be Part of Part of Curriculum (%) Modes of Care and													
	Gender	Basic Knowledge	Modes of Transmission Information	Guidance about HIV Prevention	Care and Support of PLHIV	Anyth ing								
	М	81.4	32	23.9	5.8	0.3								
Pakista	F	82.1	30.2	29.8	5.5	0.5								
n	Т	81.75	31.1	26.85	5.65	0.4								
	М	75.1	34.4	36.4	11	0.9								
	F	81.4	44.1	37.7	6.4	0.8								
Punjab	Т	78.25	39.25	37.05	8.7	0.85								
	М	90.2	41.1	19.4	6.3	0								
	F	89.6	19.5	28.2	5.6	0.2								
KPK	Т	89.9	30.3	23.8	5.95	0.1								
	М	86.3	19.9	19.8	1.2	0								
	F	82.6	15.6	21.9	2.1	0.3								
Sindh	Т	84.45	17.75	20.85	1.65	0.15								
	М	74.1	29.6	13.2	1.5	0.2								
Baluchi	F	73.8	21.5	18.8	6.2	0								
stan	Т	73.95	25.55	16	3.85	0.1								

Reproductive Health Education

As per objective, the existing knowledge about Reproductive Health (RH) was assessed and based on the same, incorporation of the RH in the curriculum was ascertained from the respondents.

Ever Heard about Reproductive Health

It was quite evident as per analysis that only 30.95% of the respondents have heard about RH. In this case 34.6% of the females as compared to a lesser percentage of 27.3% have heard about Reproductive Health. The reason could be the same as the Reproductive Health is thought to be related with maternal health and family planning and same are perceived to be the topics for the female and not for males. In Punjab and Baluchistan the situation is bit batter but in KPk and Sindh is lowest rate of knowledge about reproductive Health knowledge.

Table 24: Ever Hear	d About Repro	oductive Hea	lth		
		Y	/es	N	ίο
	Gender	Count	%	Count	%
	Male	835	27.3%	2220	72.7%
	Female	790	34.6%	1494	65.4%
Pakistan	Total	1625	30.95%	3714	69.05%
	Male	368	38.2%	596	61.8%
	Female	439	46.9%	497	53.1%
Punjab	Total	807	42.55%	1093	57.45%
	Male	157	21.5%	574	78.5%
	Female	61	13%	408	87%
КРК	Total	218	17.25%	982	82.75%

	Male	78	10.5%	664	89.5%
	Female	73	15.9%	385	84.1%
Sindh	Total	151	13.2%	1049	86.8%
	Male	232	37.5%	386	62.5%
	Female	217	51.5%	204	48.5%
Baluchistan	Total	449	44.5%	590	55.5%

Of the respondents, who have knowledge about Reproductive Health, the maximum number of the respondent 45.7 in Pakistan knows that Puberty and Physical changes is one of the component, followed by Health & Hygiene by 33.8% of the respondents. However the knowledge about the essential topics like STI, early marriages, and family planning is very low. It shows that the adolescents and youth should be educated about Reproductive Health so that MMR and IMR and prevalence of RH related diseases could be reduced as we are ffast approaching to the deadline of achieving the Millennium Development Goals (MDG) by 2015.

Table 25: The Components Heard of Reproductive Health (%)															
	Pa	ıkista	an	P	Punja	ıb		KPK	Σ.		Sind	h	Bal	uchi	stan
Component	Μ	M F T M		Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т
Health and		38	33	38	45	41.	12	31	21.	26	35	31.	25	28	27.
Hygiene	29	.6	.8	.3	.1	7	.7	.1	9	.9	.6	25	.9	.6	25
Puberty &															
Physical	44	46	45	58	59	59.	23	19	21.	19	20	19.	46	35	
Changes	.9	.5	.7	.7	.7	2	.6	.7	65	.2	.5	85	.1	.9	41
Psychological	12	10	11	12	12	12.	21	8.	14.	7.	5.		8.	6.	7.7
Changes	.7	.1	.4	.5	.8	65	.7	2	95	7	5	6.6	6	9	5
RH & Early	4.	4.	4.	5.	5.		5.	9.	7.4	3.	5.	4.6	1.	2.	2.2
Marriages	2	9	55	4	2	5.3	1	8	5	8	5	5	7	8	5

		7.	6.	5.	6.		6.	8.		3.			4.	11	
Family Planning	5	5	25	2	6	5.9	4	2	7.3	8	0	1.9	3	.5	7.9
Gynecological		2.	2.	3.	2.	3.2	2.	1.	2.0	3.	2.	3.2	1.	1.	1.7
Problems	3	4	7	8	7	5	5	6	5	8	7	5	7	8	5
	1.	2.	2.	1.	2.					6.	2.	4.5	0.	4.	2.7
Infertility	3	8	05	1	3	1.7	0	0	0	4	7	5	9	6	5
Mother & Child	6.	10	8.	4.	10		1.	4.		10	6.	8.5	10	11	10.
Care	1	.1	1	3	.9	7.6	3	9	3.1	.3	8	5	.8	.1	95
	1.	2.	2.	1.	1.		1.	1.	1.7				3.		
Sexual Abuse	9	5	2	4	4	1.4	9	6	5	0	0	0	4	6	4.7
Harmful Sexual		0.	1.	2.	1.	2.0	1.	1.	1.7	1.		0.6	1.		0.6
Behaviours	2	9	45	7	4	5	9	6	5	3	0	5	3	0	5
	4.		5.	5.	8.	7.0	3.	6.		10	13		0.	1.	
STIs	2	7	6	4	7	5	8	6	5.2	.3	.7	12	4	4	0.9
	5.	6.		5.	6.	6.2	9.	1.		2.	2.	2.6	4.	7.	6.0
HIV & AIDS	7	3	6	7	8	5	6	6	5.6	6	7	5	3	8	5

To ascertain the source of knowledge a question was asked and as per analysis, it was found that the friend were the most told of source of knowledge followed by Teachers and parents. 29.3% give credit to the friends which show the importance of the peer group as the agent of the socialization, the teachers were also the great role players as 28.7% respondent that they have got knowledge from the teachers. 25.3% respondent claimed that they learned from their parents.

Table 26: Source of Knowledge																
		F	Pakista	n		Punjab		КРК			Sindh			Baluchistan		
Source		Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т

	Co	19	19													
	unt	7	7	394	66	83	149	35	15	50	14	22	36	82	77	159
		22	27	25.	17	10	10	22	24	23.	10	20	24.	25	25	25
Doronto	0/	23.	27.	35 04	1/.	18.	18.	22.	24.	45	18.	30.	15	35. 20/	35. 5%	35. 404
Parents	% Co	4%	3% 22	%0	9% 12	9% 13	4%	3%	0%	%0	2%	1 %0	%0	3%	3%	4%
	unt	20 4	9	493	4	15 6	260	51	14	65	17	22	39	72	57	129
	ant	•		175	•	0	32.	51	11	27.	17		57	, 2	51	28.
		29.	27.	28.	33.	31	35	32.	23	75	22.	30.	26.	31	26.	65
Teacher	%	8%	6%	7%	7%	%	%	5%	%	%	1%	1%	1%	%	3%	%
	Со	27	22		14	15										
	unt	7	3	500	7	9	306	50	16	66	32	18	50	48	30	78
							38.						33.			17.
		33.	25.	29.	39.	36.	05	31.	26.	29	41.	24.	15	20.	13.	25
Friend	%	5%	2%	3%	9%	2%	%	8%	2%	%	6%	1%	%	7%	8%	%
Elden	Co	15	16	21	5	6	11	4	4	o	2	2	5	2	4	7
Elder Brother/	unt	0.1	10	10	3	0	11	25	4	4 5	20	27	22	12	1 9	/
Sister	%	9.1 %	12. 5%	10. 8%	1.4 %	1.4 %	1.4 %	2.3 %	0.0 %	4.5 5%	3.9 %	2.1 %	5.5 %	1.5	1.8	1.5 5%
Dister	Co	70	0,0	0,0	70	70	/0	,,,	70	0,0	,,,	70	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,	,,,	0,0
	unt	14	31	45	6	18	24	4	3	7	1	1	2	3	9	12
		1.7	3.6	2.6	1.6	4.1	2.8	2.5	4.9	3.7	1.3	1.4	1.3	1.3	4.1	2.7
Magazine	%	%	%	5%	%	%	5%	%	%	%	%	%	5%	%	%	%
	Co															
	unt	43	62	105	9	13	22	9	7	16	2	6	8	23	36	59
			0.0	7.4	2.4		07	~ 7	11	0.6	26	0.0	~ 4	0.0	10	13.
IV/ Morriss	0/	50	9.8	/.4	2.4	20/	2.7	5.7	11. 50/	8.6	2.6	8.2	5.4	9.9	16.	25
wiovies	^{%0}	5.2	70	70	70	3%	70	70	J%	70	70	70	70	70	0%	70
	unt	16	14	30	6	6	12	4	2	6	5	2	7	1	4	5
		2.8	2.3	2.5	1.6	1.4	1.5	2.5	3.3	2.9	6.5	2.7	4.6	0.4	1.8	1.1
Internet	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	Со															
	unt	8	18	26	5	18	23	0	0	0	3	0	3	0	0	0
		1.3	1.0	1.1	1.4	4.1	2.7	0.04	0.04	0.04	3.9	0.04	1.9	0.04	0.04	0.04
Others	%	%	%	%	%	%	5%	0%	0%	0%	%	0%	5%	0%	0%	0%

Reproductive Health Education

The respondents were asked a set of questions to know, what should be the made the part of the curriculum and from which age and grade. The findings are discussed and shown below; It was probed which components should be the part of the curriculum, as the 40.05 percent respondents responded in puberty and physical changes should be included followed by Health & Hygiene by 28.6% and all the other components were not emphasized much. Health and hygiene were also emphasized by 34.7 percent. Psychological chance was rated by only 10.05 percent. Only fraction of the respondent responded in other topics.

Table 27: Compor	Table 27: Components to be Part of Curriculum (%)														
	Pa	akist	an	F	Punja	ıb		KPK	_		Sind	h	Bal	uchi	stan
Component	Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т	Μ	F	Т
Health and	23	33	28.	30	39	34.	12	27	20	21	32	27.	21		22.
Hygiene	.7	.5	6	.2	.2	7	.7	.9	.3	.8	.9	35	.6	24	8
Puberty &															
Physical	38		40.	46	51	49.	24	26	25	19	20	19.	40	33	36.
Changes	.1	42	05	.7	.9	3	.2	.2	.2	.2	.5	85	.1	.6	85
Psychological	8.	11	10.	7.	12	10.	10	3.	7.	5.	4.		10	14	12.
Changes	7	.6	15	6	.5	05	.8	3	05	1	1	4.6	.3	.7	5
RH & Early	5.	5.		6.		5.7	3.	3.	3.	5.	5.		4.	8.	6.5
Marriages	3	9	5.6	5	5	5	8	3	55	1	5	5.3	3	8	5
	3.	4.		3.	6.	5.0	5.	1.	3.	3.			2.	2.	2.2
Family Planning	6	4	4	5	6	5	7	6	65	8	0	1.9	2	3	5
Gynecological	2.	3.		1.		2.4	3.	1.	2.	5.		2.5	2.		
Problems	6	4	3	9	3	5	2	6	4	1	0	5	6	6	4.3
	0.	3.	1.9	0.	4.	2.5				1.	1.	1.3	1.	1.	1.5
Infertility	7	2	5	5	6	5	0	0	0	3	4	5	3	8	5
Mother & Child		8.		2.	9.	5.7	3.	3.	3.	6.	4.	5.2		9.	7.8
Care	4	4	6.2	4	1	5	2	3	25	4	1	5	6	7	5
	3.	4.	4.0	2.	0.			3.	1.		1.		7.	13	10.
Sexual Abuse	4	7	5	7	9	1.8	0	3	65	0	4	0.7	8	.8	8
Harmful Sexual	1.	1.		2.	1.		3.	3.	3.				0.	0.	
Behaviours	9	3	1.6	2	4	1.8	8	3	55	0	0	0	9	9	0.9
	4.	7.	5.9	4.		6.0	4.	3.	3.		13	11.	3.	5.	
STIs	6	3	5	1	8	5	5	3	9	9	.7	35	9	1	4.5
	4.			5.	6.		8.	8.	8.	1.	4.		2.		
HIV & AIDS	6	8	6.3	2	6	5.9	3	2	25	3	1	2.7	2	12	7.1

Summary of Analysis

The review of literature had shown that there is very little information in the existing curriculum. The curriculum was revised in 2005-06 and yet to be incorporated in the syllabi of the various grades.

Overall the knowledge about HIV & AIDS was found to be quite poor. Media is the major source of the information. Incorrect knowledge and mis-concepts about routes of transmission still persists in a significant number of respondents. Teachers and Text Books are also means of information but to a very little fraction. Discrimination is also observed as the respondents have shown to be infected by such routes like sharing food, wearing the clothes of infected persons, using the same toilettes and bathing together. The good response is to acquire knowledge about HIV & AIDS and the same is at a median age of 15 years and the same could be started from Grade 9th.

Knowledge about Reproductive Health is found to be quite poor. The knowledge acquired is through friends, teachers and parents in the same order. The components to be part of the curriculum are analyzed to be Health & Hygiene, Puberty & Physical Changes and Psychological Changes. Lesser fraction has also shown an inclination to incorporate other essential components.

Conclusion & Recommendations

While HIV & AIDS prevalence appears to be low in Pakistan at present, the presence of a number of vulnerabilities and risky behavioral patterns suggest the need for urgent, prioritized, and coordinated action to curtail the emergence of a widespread epidemic. Commercial Sex Work, Needle Sharing, Poverty, genders based inequalities and low levels of education all contribute to HIV & AIDS vulnerability in Pakistan especially in youth and adolescents who have risky behaviours.

The analysis has revealed various aspects and lead to following Recommendations based on the results;

Curriculum

- 1. As there is no information in the curriculum except for Biology books of the F Sc level, there is a need to initiate the HIV & AIDS education and as per results the appropriate median age is 14 years and grade 9th.
- 2. As lesser stigma is attached with Hepatitis B and C generally, therefore the education about HIV & AIDS can be integrated with Hepatitis, which is a major epidemiological problem of Pakistan.
- 3. The curriculum may be standardized and be made uniform in each province through some coordination body at National level.
- 4. The word, Reproductive health have been heard by a very little proportion (less than 20%) of the respondents but a good sign again is the interest in acquiring the knowledge. Those who have heard about RH have perceived it to be only about Puberty and Body Changes while a small fraction knows about other components. Like HIV & AIDS, the knowledge should also be included but the same could be initialed from 10th grade. Reason for the same is the early marriages, particularly of girls in Pakistan. The information may include about complications about Early Age Marriage, Health & Hygiene, Maternal & Child Health. Basic Adolescents Reproductive Health information may be incorporated in the curriculum as the same is analysed to be initiated from Grade 9.
- 5. Use of life skill based education material designed and used for the out of school children by UNICEF may be utilized for education of in school children.

General Awareness

- 1. Youth have accessibility to electronic media including television, radio and internet. It would be good to organize talk shows, plays highlighting the RH and HIV & AIDS in the programmes.
- 2. Mass awareness campaigns including walks, seminars may be organized periodically with coverage by the media.
- **3**. Peer education models on the awareness of ARH & HIV&AIDS for school and out of school youth/adolescent should be institutionalized on sustained manner.
- 4. The adolescents and youth care to go to a MBBS doctor for treatment and especially in the Government setup. However shyness factor is observed in some of the cases. It appears that a separate counseling section must be established for the youth in the hospitals to discuss their issues.
- 5. The information and services on HIV&AIDS and RH for youth and adolescents should be provided through the mainstream health system of the government; like the existing facilities from LHW, BHU, RHC, THQ,DHQ to teaching hospitals.
- 6. As per analysis the respondents who have heard about HIV or AIDS are less than 30% which is quite alarming. On the other hand, they are interested to be provided

knowledge about HIV & AIDS, which is a good sign. The text book of Biology of 9th 10th have the information but that is again limited to only name of the AIDS virus. The curriculum should be designed in such a way that basic information about HIV & AIDS should be provided. Respondents have shown their interest to learn about HIV & AIDS from the median age of 13 and from 8th Grade. The same is quite ideal as that is the age of taking risks. The curriculum must be designed in such a way that the same could be dove tailed for the effective Program and Campaign based on the reducing sexual risk-taking behaviors. Government of Pakistan/ Provinces have successfully implemented a number of programmes in collaboration with UNICEF based on Life Skill Based Education (LSBE) quite successfully for the out of school youth/ most at risk adolescent (MARA)/ Especially Vulnerable Adolescents (EVA). Same type of pattern could be followed in the design of the curriculum of the 8th grade and above for HIV & AIDS education.

- 7. Youth policy may be implemented as the same gives a right to the youth to acquire knowledge about ARH and information about HIV & AIDS.
- 8. In the absence of a vaccine, HIV & AIDS prevention efforts are to be focused on modifying risk behaviors to reduce or eliminate transmission. The education of individuals at risk for HIV & AIDS is only one component of these prevention efforts, and by itself is rarely sufficient to effect behavior change. Environmental influences such as peer opinion, prevailing social values and the availability of any necessary adjuncts to effect the behavior change (such as condoms and needle exchange) play crucial roles in enabling and reinforcing behavioral change.
- 9. A joint action is required by the health service providers and educationists.

Annexure

Questionnaire

Respondent Code: _____ Assessment of Learning Needs of Youth in Pakistan about HIV& AIDS and Adolescence Education

Consent Form

Before starting the interview, ascertain the age and confirm the inclusion criteria: The Respondent should be ...

1) 13 - 18 years of age

2) Either of the two sexes i.e., could be a male or a female

3) Must be studying in a class ranging from 9th Grad (Secondary School) to 13th Grade (i.e. in a College) or have left educational institution during last six months from any of the above mentioned classes/grades.

Greet the respondent.

My name is _______ and I am working with Phoenix Foundation for Research & Development (PFRD), for a survey being conducted with support from UNESCO and in collaboration with National AIDS Control Programme, Ministry of Health, Government of Pakistan. The National Education Policy of Pakistan envisages to infuse information about HIV and AIDS and other infectious diseases into the curricula for students and for training of teachers (*Reference Section 109.9, page 36 of NEP 2009, please see at:* http://www.moe.gov.pk/). This Survey aims to assess the knowledge of youth about certain diseases including HIV & AIDS. Findings of the Survey will help the government and other relevant organizations to plan measures to improve the knowledge of young people about HIV and AIDS and other health issues.

I am going to ask you some questions about your knowledge of HIV & AIDS and your own health etc. Your name will not be mentioned in any of the final data but will be kept for our own record on the form. You will not be compelled to respond a question or set of questions which you do not want to respond, and we can skip such questions. In case you feel uncomfortable, this interview can be terminated at any time. However, your honest answers to the questions will help us better understand about your knowledge and what your problems are, and make sound recommendations. We would greatly appreciate your help in responding to this survey. The survey will take about 15 - 20 minutes.

- Have you understood what I mean?
- Are you willing to participate?

Yes____No _____

Signatures of the interviewer _____

Assessm and Adol Phoenix Programm	ent of escenc - PAKI ne (NACI	Learni ce Edu STAN ir P), Minis	ng Ne catior n colla stry of	eds) boration Health	of on	Youth in with UN	n Pa esco	akistan) and Na	abou ationa	It HIV& AIDS
Assessm	Study Code nent of Le	Ro arning N	eg. No eeds of `	Youth i	- - n P	City akistan ab	- out H	Zon	e S and A	Adolescence
City Name: Zone :				E		Provinc	ce:			
Name of the locality/spot Time Taken Interviewer Name of Respondent										
Date of Interviev Time Started	w:	-	DD/N	- /M/YY	-					
Fime Ended			_				Signa	ture:		
Checked by:						Signatu				
Data Entry						Signatu	ire:	-		
Entered by						Date				
Assessm	ent of Le	arning N	eeds of `	Youth i Ea	n P duc	akistan ab ation	out H	IV& AID	S and A	Adolescence

Section 1: Socio-Demographic Characteristics

101.	Gender of the respondent	1. Male 2. Female	
102.	What is your age?		
103.	In which class are you studying?		
104.	Name of the School/ College you are		

	studying		
105	Are you living in a hostel?	Yes No	Skip 106 if Yes
106.	If not a day scholar, where are you living during your studies?	Parents house - 1 Relatives house - 2 Hostel (Govt.) 3 Private Hostel 4 Any other 5	

Section 2: Knowledge about HIV & AIDS

Now I am going to ask you some questions related with your health and knowledge about health related issues.

201.	Have you ever suffered from a significant illness in the past 1 year? (Typhoid, Malaria, Measles, Dengue etc)	1. Yes 2. No	→ go to Q. 204
202.	What disease did you suffer from?		
203.	From where did you get the treatment? (Do not read the list and wait for the reply)	 Govt. Hospital Private (MBBS Doctor) Private (Quake) Homeo Doctor Hakim Dispensary Self medication None Others 	
204.	Are you presently suffering from any medical or health problem?"	1. Yes 2. No	ightarrow go to Q208
205	What is your current medical/health problem?	 Fever Respiratory problem Genitourinary problem Skin problems Others (specify, if possible) 	
206	Have you consulted a MBBS doctor for the treatment?	1. Yes 2. No	\rightarrow go to Q. 208

207.	If not, what are the reasons?	 Shyness Parents do not allow Fear Stigma Non availability of a doctor No reliable guidance/counselor Economical Reasons Other: 	
208	Have you ever heard about AIDS?	1. Yes 2. No	
209	Have you ever heard about HIV?	1. Yes 2. No	→ go to 222 if no in 208 & 209
210	From which source you heard or learnt about HIV/AIDS (Do not read the list and more than one answer could be there). If mentions 7, do give the text book name in remarks column.	 T.V Radio Newspaper Magazine or book Friends School teacher School textbook Others 	
211.	Do you think we have problem of or cases of HIV/AIDS in Pakistan?	 Yes No Do not know 	
212.	Can you tell various modes of HIV/ AIDS Transmission? (Do not read the list and more than one answer could be there)	 Sexual intercourse Transfusion of Infected Blood Reusing old Syringe Mother to Child Transmission Infected Surgical instruments Sharing infeted razor/ blade Eating with infected person Mosquito bite Sneezing/ coughing Piercing Tattooing 	

	-	-	
		12. Dirt	
		13. Others	
		98. Don't Know	
213			
213	Tel us all methods you know, which can be adopted for prevention against HIV/AIDS? (Do not read the list and more than one answer could be there)	 By using condom during sexual intercourse Safe blood transfusion (screened for HIV/AIDS) Using new syringe for each injection Not to eat with infected person Using new razor/ blade Disinfection of the surgical instruments Avoid mosquitoes Avoid dirt Don't know Others 	
214.	What will be your behavior with an HIV/AIDS positive student in your school? (Do not read the list and more than one answer could be there and in case of 2, 3, 4, 5 provide correct knowledge at the end of the interview)	 Affectionate Hatred Will not go near him/her Will not talk/ communicate Try to get him expelled Empathy/ sympathy Others 	
215	Can a healthy looking person be HIV/AIDS+ve?	 Yes No 98. Do not know 	
216	Can we tell about a person by looking that he/she is HIV/AIDS+ve?	1. Yes 2. No 98. Do not know?	
217	Do you think HIV/AIDS/ AIDS is treatable?	 Yes No 98. Do not know 	
218	Do you think that you can also be at risk of acquiring HIV/ AIDS?	 Yes No Do not know 	\rightarrow go to 220 \rightarrow go to 221
219	If yes, how or why? (Explain, if possible)		
220	If No, why not? (Explain, if possible)		

221	If given a chance, would you like to be tested for HIV/AIDS?	1. Yes 2. No	
222	Do you think that knowledge about protection against HIV/ AIDS should be included in the textbooks or syllabus for adolescent students?	 Yes No 98. Don't Know 	ightarrow go to 224
223	If not, why? Can you give some reasons		
224	From which grade/ class or age the knowledge about HIV/AIDS should be imparted?	Grade: Age (Years)	
225	If yes, what type of information or contents should be included in the syllabus?	 Basic knowledge Information about modes of transmission Guidance about prevention against the spread of HIV/AIDS Care and Support of HIV/AIDS positive people Other: 	

	Section 3: Knowledge about Adol	escence and Reproductive Healt	h
301	In your view, what is the ideal age or time for a male to be married?		
302	In your view, what is the ideal age or time for a female to be married?		
303.	Have you ever heard about Reproductive Health?	1. Yes 2. No 98. Don't Know	ightarrow End the interview
304	What do you know about Reproductive Health? Indicate various components, elements, or dimensions of Reproductive Health (Do not read the list and more than one answer could be there)	 Health & Hygiene Puberty & Physical Changes Puberty & Psychological Changes Puberty & Psychological Changes Reproductive Health & Early Marriages Family Planning Gynecological problems Infertility Mother & Child Care Sexual Abuse Harmful sexual behavior STIs 	

		12. HIV & AIDS Others
305	From where did you hear about R.H related information?	1. Parents 2. Teacher 3. Friend 4. Elder brother/ sister 5. Magazine 6. TV/ Movie 7. Internet Other
306	Usually, who is being consulted, when adolescent boys or girls face Sexual Health issue?	1. Govt. Hospital 2. Private Clinic/Doctor (MBBS) 3. Homeo Doctor 4. Hakim 5. Dispensary 6. Self medication 7. Friends 8. Parents 9. None Others
307	What type of knowledge should be provided about R.H to adolescent student (Do not read the list and more than one answer could be there)	 Health & Hygiene Puberty & Physical Changes Puberty & Psychological Changes Reproductive Health & Early Marriages Family Planning Gynecological problems Infertility Mother & Child Care Sexual Abuse Harmful sexual behavior STIs HIV & AIDS Others
An	y suggestions or comments on the questions	asked during the interview o about Survey?

Thank you for sparing your time. If you have any question, Please ask; I will try to answer the same. Please note the ending time on the cover page.