

KAP of Male Youth regarding Health and Hygiene in Urban Slums of Twin Cities of Rawalpindi and Islamabad

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Abstract

Knowledge, attitudes and practices of youth regarding health are considered important for the social, political and economic stability of a country. Pakistan is experiencing the largest cohort of youth in its recent history. A large portion of the Pakistani youth live in slums where opportunities regarding health are squeezed to scratch. This study focuses on knowledge, attitudes and practices of male youth living in slums of Rawalpindi and Islamabad regarding health and hygiene. A quantitative survey tool has been employed to collect data from respondents while respondents were selected through convenience sampling method. Though respondents had some knowledge regarding health and hygiene but due to lack of positive attitude or lack of facilities practices do not confirm with knowledge. Multi directional approach is required to improve KAP of male youth in slums of Rawalpindi and Islamabad.

Keywords: knowledge, attitudes and practice, health and hygiene, youth, slums,

INTRODUCTION

Pakistan currently has the largest cohort of young people in its history i.e. almost 63 percent of the population in between ages of 15 to 33 years (UNFPA, 2017). Despite all the commitments by Pakistan through international treaties and national policies, there seems a lack of efforts for youth especially in the area of health. The current study focuses on the male youth of slums in Rawalpindi and Islamabad for their knowledge, attitude and practices regarding health and hygiene. Slums are already deprived areas of cities and youth being part of the larger population in slums do not avail opportunities for quality life especially in the area of health and hygiene. The current study digs out males' health issues, the problems they face for maintaining their health in slums like absence of health services providers, economic burden, lack of knowledge etc. The current study also tries to find out the channels of information for male youth and the hurdles in the process of communication regarding health and hygiene among/around male youth either at sender's end or receiver's part.

The understanding that adolescence is a distinctive stage of life in human beings is fairly recent. Adolescence, the powerfully formative time of transition, is roughly concurrent with second decade of the life in which individuals move from childhood to adulthood and goes through major physical and psychological changes. According to WHO, the term adolescence refers to the age of 10–19 years (WHO, 2012). On the other hand, youth, according to United Nations Organization, is a phase of life which spans from 15-24 years of age (UNYSPDD, 2012) but

the age limit for Pakistan's youth as defined in National Youth Policy by Government of Pakistan is 15 - 29 years.

The phase of adolescence and youth is characterized as a stage of life where changes occur not only in body but also in their social setup/surroundings. The physical changes that come with puberty during adolescence are change of voice, muscle and body hair growth particularly in genital area, nocturnal emission in males and menstruation in females, desire for sex and ability to become father in males and mother in females (PC, 2001). These changes are more often dealt with in the area of reproductive health issues of adolescents and youth but they are related with general health and hygiene of the said group as well. According to one study in India, special need of accurate information regarding health and hygiene in this phase of life is highlighted (Acharya, 2009). Age of youth partially overlaps the time of adolescence bringing change majorly in roles and responsibilities of youth. Females are supposed to limit themselves in terms of mobility and are seen more focused in household chores. On the other hands males get more opportunities to explore the world and are concerned with public chores. Men face a number of challenges during this phase of life like education pressures, earning stress and being strong and healthy as society expects from males to be like that (Barker, 2000). These pressures seem even worse for youth living in slums where opportunities like health, education and clean environment are meeker in comparison to availability of these opportunities for youth living in other parts of urban areas.

Slums are results of rapid urbanization in Pakistan. Though the phenomenon of urbanization is decades old in Pakistan but it has expedited in the last couple of decades enormously. In 1998, 32% of the Pakistan's population was urbanized (PCO, 1998) which is expected to be 36% in 2015 (www.cia.gov, 2012). It is very interesting to note that the expanding urbanization is not only the phenomenon of developed countries. In fact, this increase in urbanization can be observed at a higher rate in developing countries than developed countries. Almost majority of this ill patterned growth would be seen in city slums of poor portions of the globe. More importantly this escalation of slums is estimated at rate upon which people in these slums would not be able to get even basic services/infrastructure to maintain a good standard of life which ultimately affects the health standard of the residents (Allison, 2007). It is also significant to note that Pakistan has the fastest rate of urbanization in South Asia (UNPF, 2007).

Such a massive urban growth in any resource scarce developing country does not come alone but with various peripheral tribulations. Development of slums as a result of rapid urban growth is common in developing countries. Unhealthy living environment and health/hygiene hazards are two of the major issues among many others in slums' life for everyone or for most. Both of these problems in a slum's life are interconnected as unhealthy living environment leads to health hazards for residents of the areas. Slum is an area which lacks one or more of the following for the households living the area: access to improved potable water, access to improved sanitation, security of tenure, durability of housing and sufficient living area (UNICEF, 2012). Stark disparities in health between rich and poor have drawn attention to the social determinants of health or the ways in which people's health is affected not only by the medical care and support systems available to prevent and manage illness, but also by the

economic, social and political circumstances in which they are born and live. Rapid urbanization and increasing density of people in small and poorly constructed areas like slum make it easier for communicable diseases to spread and non-communicable diseases and other health problems can also be seen in upward trend. Children, adolescents and youth from these communities are particularly vulnerable because of the stresses of their living conditions and also their poor knowledge and risky practices regarding such diseases (WHO/UN-HABITAT, 2010).

There are 26.6 million people living in slums in Pakistan and 48% urban population of Pakistan is slum dwellers.¹ Pakistan lags far behind in the provision of safe drinking water and sanitation facilities. The access to safe and improved water to 93 percent of population by 2015 is the tenth MDG target adapted by Pakistan. Although over the time Pakistan has improved the supply of drinkable water to its population but has still a long way to go in reaching MDG target of 93 percent, with given current trends, it may prove to be an insurmountable challenge. Inadequate quantity and quality of potable water and poor sanitation facilities and practices are associated with a host of illnesses such as diarrhea, typhoid, intestinal worms and hepatitis (Planning Commission of Pakistan, 2010).

Rawalpindi is the fourth most populous city of Pakistan and is further growing at a faster rate than many other populous cities in Pakistan in terms of urbanization. Urbanization in Rawalpindi and Islamabad since long has produced many slum areas. There are 17 registered slums in Rawalpindi and Islamabad i.e. eleven of these in Islamabad and six in Rawalpindi. Most of these slums are situated near the bank of Nullah Lai in Rawalpindi while they are dispersed in various sectors in Islamabad (WMO, 2004). Five slums in the city of Rawalpindi and five in the capital Islamabad were selected for the current study. Slums in Rawalpindi are scattered over a large geographical span in contrast to Islamabad where slums are clustered in relatively closer vicinity. Following five ghettos in city of Rawalpindi were selected conveniently to conduct the current study: i) Jhag'gyan Bhoosa Godam in Ratta Amral, ii) Mohalla Mareer Hassan, Saddar, iii) Ghareebabad, Chaklala Scheme III, iv) Wagon Colony situated along the Railway track near Railway Service Station Rawalpindi and v) Ram Baagh, Asghar Mall Scheme. On the other hands ghettos in Islamabad are mainly concentrated in G and F sectors. Slums in the sectors of G-8/1, G-7/2, G-7/1, F-7/4 and F-6/2 were selected for the study.

Slums of Rawalpindi and Islamabad are overcrowded and unplanned. They lack adequate housing/living space, basic facilities like drinkable water, proper sanitation and sewerage and drainage system. Majority of the dwellers use Nullah Lai for disposing of solid waste from their houses. There are severe water, sanitation and environmental issues contributing to the unhealthy and unsafe environment of slums. These water and environmental issues have effects on the health of communities as well. Most of the dwellers of the slums have to struggle to get water for them. General health status of communities especially children and women is not up to the mark and many diseases are common in the area. Private health services are available

¹ <http://www.homeless-international.org>

outside slum areas. However these services may not be accessible to the low income groups of the slums. Most of the households have constructed the latrines on self-help basis and with the support of different NGOs as well but their utility is very low because of choked or inappropriate sewerage measures (AHKRC, 2008).

Pakistan as signatory of international treaties like Universal Declaration of Human Rights (UDHR), Convention of the Rights of Child (CRC), and Millennium Development Goals (MDGs) is bound as a state to take steps towards a healthy and safe living environment to all the children, adolescents and youth of the country (WB, 2005). Government of Pakistan in its National Youth policy 2006 also committed to take measures to enhance the overall health status of the youth (GoP, 2006).

REVIEW OF LITERATURE

Youth is a demographic concept which has biological and social aspects. It is an age group which links childhood with adulthood. Besides spatio-temporal differentials, youth differ in terms of the socio-cultural, political and economic structures of the countries they reside in. Youth is also the life span when sexuality is discovered, exposing young people to the risk of pregnancy, child bearing and sexually transmitted diseases. Youth is a significant stage in life, an important part of individual growth and a factor in national development. (Acharya, 2009).

Adolescents between the ages of 10 and 19 years are generally thought to be healthy. Nevertheless, every five minutes 16 adolescents die, primarily as a result of accidents, suicide, violence, pregnancy-related complications, and communicable diseases. Young people face the challenge of adopting healthy behaviours as they move towards adulthood, given that approximately 7 out of 10 premature deaths among adults are associated with behaviours initiated during adolescence (WHO, 2006).

A baseline study of slums of Islamabad reported that health and hygiene conditions of the communities are quite pathetic; there is no public health facility available and thus no immunization services. People who are aware of importance of vaccinations seek it on their own from public facilities that are very far away from community. There are private clinics in the communities set up by a doctors charging in the range of 150-250 rupees for consultation. Generally, this range of fee is not affordable by people. Skin diseases are very visible among children, playing in streets and on garbage heaps. The study also reveals that stepping in labour in early age, adolescent and youth of this area are very vulnerable to abuse. They work in Shrine surroundings till very late at night which also put them on risk. There is no mechanism of seeking information related to health and physical changes in course of life. The only source of information is their peers and friends. There is no system of sanitation and drains are open. The drinking water sources are heavily polluted being very unhygienic. Garbage heaps can be seen lying in the streets. (Plan Pakistan, 2009).

In another study on slums it is revealed that the place where we live can have a significant influence on whether or not we are likely to be healthy, educated, employed, safe, or impoverished. The survey shows that people who live in slums face serious threats to their

well-being. Poor living conditions also contribute to a host of diseases and infections, such as diarrhea, acute respiratory infections, malaria and HIV and AIDS (UN-Habitat, 2006).

In a survey on the slums of various countries, the slums of Rawalpindi were taken as case study. The survey showed that families commonly have six or more members, with about 40% of women having four or more children. Living conditions in the slum areas of Rawalpindi are poor; however, the majority of homes have electricity (95.6%) and many have a running tap water supply (67.2%). Those families without running water in their homes have to collect water from a community supply. Most homes have toilets (94.5%), with only a small proportion of people forced to use the outdoors. Of those with toilets, just over three quarters have a flushing type and the remainders have a local type. Just under half of the percentage (49%) of the people surveyed, live within 1 km of a government health facility. These slums comprise about 17% of the total population of Rawalpindi city. The areas vary from those that are characterized by small and narrow streets, to those directly exposed to the Nullah Lai, which are prone to flooding in the wet season. The study indicates that marked health inequalities exist in the urban areas of Rawalpindi. In particular, attention needs to be paid to the provision of high quality health care, safe drinking-water, garbage collection and disposal and other basic amenities of life. It is important to note that many of the problems experienced by slum residents do not exist in the more prosperous areas of the city (WHO, 2010).

Only few studies have examined health risks for adolescents, in part because adolescence is often considered a healthy time of life. A recent review provides the first analysis of causes of death among youths aged 10–24 years, based on the 2004 Global Burden of Disease data. In low- and middle-income countries, all-causes mortality was 2.4 times higher in youths aged 20–24 than in adolescents aged 15–19. Mortality rates thus escalated from adolescence to young adulthood with the rise of reproductive health problems, road traffic accidents or mental illness. But conditions affecting younger children may continue to threaten adolescents. For youths in sub-Saharan Africa and Southeast Asia, tuberculosis and lower respiratory tract infections actually led to more deaths than HIV. Gender-related differences may be significant, with young males usually at greater risk of premature death than their female counterparts (Coffey et al, 2009).

A research on a slum of Lahore revealed that only health facility provided to the slum dwellers is a private free dispensary which provides medicines at PKR 15 per head. This dispensary provides them with medicines for simple health problems like fever, cough, cold etc. which helps them survive. But if any of them is suffering from fatal diseases like cancer, hepatitis, tuberculosis etc. then there is no hope for them (Ali and Ali, 2011).

The review of literature remains limited in terms of availability of studies regarding knowledge and attitudes of male youth of slums in relation to health. Major focus of studies previously done seems to be on practices of people including youth and physical environment of slums in connection of health.

RESEARCH METHODOLOGY

The locale of study

The research was conducted in selected slums of Rawalpindi and Islamabad cities. Islamabad is the capital of country but a recently established city in comparison to Rawalpindi which has thousands of years old history. Though both cities are different from each other in many aspects, yet both are similar regarding the presence of slums in them like all big cities do. Current study took into account only those communities which are recognized as slum by the Capital Development Authority (CDA) in Islamabad and Tehsil Municipal Administration (TMA) in Rawalpindi. Islamabad has concentration of slums right in the center though a few exist on the margins of the city as well. The slums in the sectors of G-8/1, G-7/1, G-7/2, F-7/4 and F-6/2 were selected conveniently to conduct the research in Islamabad. The slums in Rawalpindi are scattered in a wider geographical span. Although these slums were situated at the boundaries of Rawalpindi city in the past but they are in the center of the city right now. Out of the six slums in Rawalpindi city as recognized by TMA, five slums are selected on the basis of convenience for the current study. The location of these slums has been identified by using Google maps facility.

Sampling

The respondents for the study were males of 15 – 24 years of age living in selected slums of Rawalpindi and Islamabad. A total of 60 respondents from slums of each city were selected through convenient sampling technique i.e. twelve respondents from each slum. Hence the total respondents were 120. Key informants in the community helped researcher to get access to the respondents. Researcher selected respondents through non-random convenient sampling technique as there were no data available regarding male youth of slums in Rawalpindi and Islamabad to be used as sampling frame.

Key Informants

Usually young people are hesitant to have discussion with a stranger, like the researcher was for them. Moreover, selection of 120 respondents from the study area was a difficult job too. Both these problems led the researcher to find some key informants/gate keepers who could introduce him to the respondents. This was also necessary to develop a conducive environment between researcher and respondents to have spontaneous responses from the respondents of lower age groups.

Structured Interviews

Structured interviews were conducted with the sampled respondents. The structured interview tool was divided in six sections; a) background/demographical information about respondents, b) type of dwelling of the respondents, c) knowledge, attitude and practices regarding general health, d) knowledge, attitude and practices regarding water and sanitation, e) health seeking behavior f) problems faced by male youth in physical environment of slum. Though the structured interview tool was developed in English but the questions were put forward either in Urdu or Punjabi for the ease of respondents. An effort was made that the meaning should not be changed while translating the questions in local languages.

Data Analysis

Data collected for the study were analyzed through computer software SPSS. The frequency tables and cross tabulation were employed for the analysis. Qualitative data has been analyzed through categorizing it under major themes. Under each major theme i.e. KAP regarding general health, KAP regarding water and sanitation, health seeking behavior and problems faced by male youth in slums to maintain their health data have been collected through open ended questions.

RESULTS AND DISCUSSIONS

Background Characteristics of the Respondents

The following table shows the distribution of respondents according to their age. Majority of respondents fall in the age brackets of 15 – 18 years i.e. 48.3 percent. While 23.3% and 28.3% respondents fell in the age brackets of 19 – 21 years and 22 – 24 years respectively.

Distribution of Respondents according to their Age

Age Ranges	Frequency	Percent
15 -- 18	58	48.3
19 -- 21	28	23.3
22 -- 24	34	28.3
Total	120	100.0

Over thirty-five percent of the respondents had educational level of primary (5th grade). 15% of the respondents had an educational level of below primary or Illiteracy while forty percent of the respondents had achieved education of middle to matriculation. Only about seven percent of the respondents had education up to level of F.A./F.Sc. or above.

Distribution of Respondents according to their Education level

Education Level of Respondents	Frequency	Percent
Illiterate	5	4.2
Below Primary	12	10.0
Primary	44	36.7
Middle	27	22.5
Matriculation	22	18.3
FA/FSc	7	5.8
BA/BSc	2	1.7
Master or Above	1	.8

Total	120	100.0
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Over fifty-five percent of the respondents in communities under study receive monthly pocket money/income up to Rupees. 3000/-. Thirty percent of the respondents receive/earn Rupees 3001 – 6000/- per month. About six percent of the respondents get an amount in the range of Rupees. 6001 – 9000/- per month as pocket money or salary while eight percent respondents had a range of PKR 9001 and above per month as their pock money/income.

Distribution of Respondents according to their monthly Pocket Money/Income

Monthly Pocket Money/Income of Respondents (PKR)	Frequency	Percent
0 -- 3000	67	55.8
3001 -- 6000	36	30.0
6001 -- 9000	7	5.8
9001 & above	10	8.3
Total	120	100.0

General Health

The section of focuses on the knowledge, attitudes and practices of male youth in slums, their sources of information and hurdles in flow of information with reference to general health.

Health as per definition of male youth in slums

The respondents from the area under study differed in their view towards health. Significant number of male members thought that a male would have a good health when he would have an appearance like body builder. A male like him would be able to do his works quickly and actively. Good health is also thought to have a relationship with good looks i.e. a good looking man must have a good health according to substantial number of respondents. Opposite sex is also attracted towards a healthy and good looking male. Good health was also related with economic status of a person. Male youth is convinced that as good health requires good quality and quantity of food including meat and fruits which are expensive food items and only rich people can afford them. They shared that mostly people in slums do not have good incomes and young people specifically do not, so there are meek chances for them to have good health overall. Respondents were also concerned about the cleanliness of an individual and his environment. They shared that environment and cleanliness in surrounding are important factors among many others with regards to health of a person. People living in an environment where one cannot avoid catching germs and filthiness cannot keep one's own-self healthy.

General problems regarding health in the area

According to opinion of respondents there were many common problems in the slums of Rawalpindi and Islamabad. Most highlighted problem was filthy environment with piles of solid waste all around the living area. Moreover, open and semi open sewerage system or in some cases no sewerage system at all have been major challenges for the dwellers of slums. Lacking or unavailability of potable water also generates further problems like many diseases. Commonly found diseases in population of slums according to the views of male youth were diarrhea among children, skin problems among all segments of population, fever, flu and tuberculosis (TB) etc. They also thought the incidence of hepatitis B and C is also very high especially in old age people but due to unavailability of testing services they were unsure. The incidence of Malaria is quite frequent as mosquitoes are in plenty in these slums being near to Nullah Lai. Absence of quality health service centers in slums or nearby areas worsen the problem. Respondents though identified some health service providers in the area but they also suspected their education and training for being health service providers.



Two young males trying to manage solid waste and choked sewerage line in slum of G-7/2

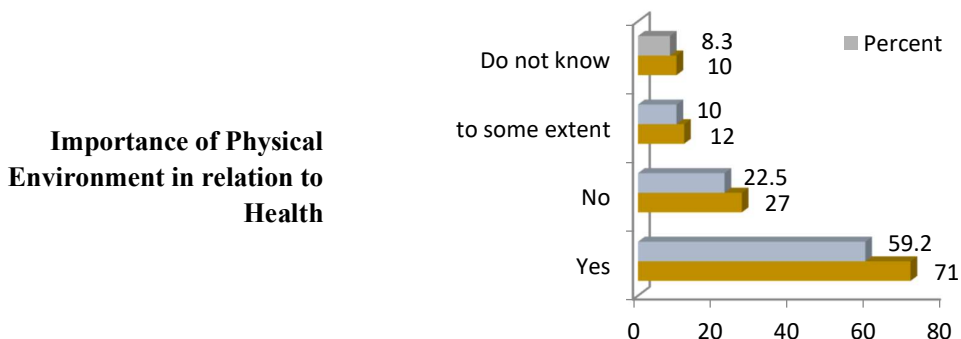
Requirements for maintaining health

Respondents shared various opinions regarding requirements for maintaining good health. Most of the respondents rated good quality and quantity of food as one of the most important requirements for maintaining good health. They also talked about stress and tension free life for people to have good health. Many participants on the other hand, expressed the needs of cleanliness in environment, availability of play grounds for sports and healthy leisure time activities for youth.



Slum of Marir Hassan, Sadar, Rwp, right next to Nullah Lai Slum of Sector F-6/1, Islamabad situating on both side of Nullah Lai
The following graph shows that about sixty percent of the respondents thought their physical environment important in relation to maintaining their health. But a notable percentage of

respondents i.e. more than thirty percent were either of the view that physical environment is not important in connection to maintaining health or has importance to only some extent. About ten percent of the respondents had no idea about relationship of physical environment and maintaining health.

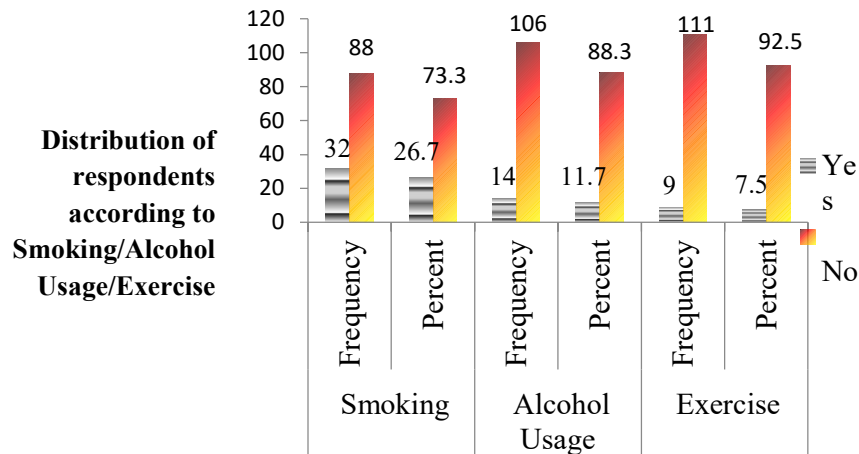


Respondents were inquired with reference to their level of knowledge regarding three components of health i.e. bodily health, mental health and environmental health. 57% respondents had scratch level of knowledge regarding components of health. On the other hand, forty percent of the respondents had low level of knowledge regarding components of health. Only less than three percent of the respondents knew about more than one component of health.

Distribution of respondents according to their knowledge level of components of health

Knowledge level regarding components of health	Frequency	Percent
Scratch level of knowledge	69	57.5
Low level of knowledge	38	40
Medium level of knowledge	3	2.5
High level of knowledge	0	0
Total	120	100

The graph shows that majority of respondents i.e. 88% take 3 meals in a day. On the other hand, picture 4.5 describes the behavior of respondents in terms of smoking, alcohol usage and taking exercise. Almost twenty-seven percent of the respondents smoke while alcohol usage is found just over eleven percent among male youth of slums. It is important to note that while discussing with communities' important personalities, it was also found that alcohol usage is on the higher side among males of Christian slum communities which are mostly situated in Islamabad. Exercise schedule is drastically low among male youth of slums of Rawalpindi and Islamabad. Only seven and a half percent male youth take any sort of exercise in their daily routine.



Fifty-four percent of the respondents shared that they receive information about health and hygiene from their family members (parents and siblings). Second most important source of information regarding health and hygiene for male youth of slums is peers and friends while fourteen percent of the respondents receive information regarding health and hygiene through electronic media (TV and radio). Six percent respondents seek information on health and hygiene from sources like books, newspapers and magazines.

Distribution of respondents according to source of information on health and hygiene

Source of Information about Health and Hygiene	Frequency	Percent
Family Members (Parents/Siblings)	65	54.2
Peers	27	22.5
Books/Newspapers/Magazines	7	5.8
Media (Tv/Radio)	17	14.2
others	4	3.3
Total	120	100.0

Blocks/hurdles in the process of communication regarding Health and Hygiene

Majority of participants rated poverty as hurdle in the flow of information regarding health and hygiene in slums of Rawalpindi and Islamabad. They thought that due to poverty they lack the income and resources which keep them busy in livelihood activities more than anything else. So they hardly get time to think of other non-productive activities. Many of the respondents were of the view that people do not have interest in spreading or getting the information about health and hygiene because they think whatever information they already have is enough for them. They highlighted the unavailability of any health service and information center as one of the important blocks for communication regarding health and hygiene in slums. Low literacy rate among majority of population especially mothers causes wrong information to flow down to next generation to generation. An attitude of not verifying the information and following whatever they listen from any source, also causes the right knowledge holding back.

Respondents shared that overall social attitude of discouragement of seeking knowledge in slums also holds the male youth back from getting knowledge about health and hygiene.

Water and Sanitation

Fifty-seven percent of the respondents thought that male youth of slums of Rawalpindi and Islamabad do not have information about water and sanitation issues. Almost 27% of the respondents were of the view that male youth has information regarding water and sanitation but not enough.

Distribution of Respondents according to their opinion about knowledge of male youth in slums on water and sanitation issues

Knowledge among youth in slum on water & sanitation issues	Frequency	Percent
Yes a lot	19	15.8
No	69	57.5
not much	32	26.7
Total	120	100.0

Toilets are available in homes of hundred percent respondents so no cases of defecation in open have been observed in slums of Rawalpindi and Islamabad. Almost seventy-seven percent respondents shared that toilet in homes are deprived of flush facility.

Distribution of Respondents according to availability of toilets at homes

Availability of Toilet in Home	Frequency	Percent
Yes	120	100.0

Distribution of Respondents according to type of toilets at homes

Type of toilet in home	Frequency	Percent
Seat Installed with no flush facility	92	76.7
Seat Installed with flush facility	28	23.3
Total	120	100.0

When asked about the use of soap while washing hands, hundred percent shared that they wash hands with soap. Although 74% of the respondents were aware of two important occasions of washing hands with soap i.e. after defecation and before taking a meal but significant percentage of respondents i.e. twenty percent considered washing hands with soap important, only after defecation.

Distribution of respondents regarding washing hands with soap

Use of soap while washing hands	Frequency	Percent
Yes	120	100.0

Distribution of respondents regarding their opinion about important occasions of washing hands with soap

Occasions of washing hands with Soap	Frequency	Percent
After Defecation	24	20.0
After Defecation + Before Meal	88	73.3
Do not know	8	6.7
Total	120	100.0

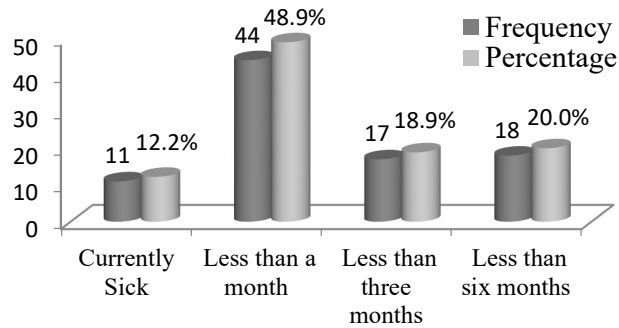
Blocks/Hurdles for the process of communication regarding Water and Sanitation

Respondents shared a number of blocks/hurdles in the flow of information regarding water and sanitation issues in slums of Rawalpindi and Islamabad. Most significant block/hurdle according to male youth of slums was ignorance of government departments towards the issues of water and sanitation in their areas. Due to lack of initiative at government departments' part people in slums also have become numb towards these issues. Moreover, people feel shame while talking on these issues. Low literacy among majority of population also hampers them paying attention to the issue. Off course, anything which is not important for people is not a popular topic for them. Sense of ownership of issues is also missing among masses of slums regarding water and sanitation issues, which also keep them away getting information about these tribulations.

Respondents also conversed that although there are individuals in their communities who have concerns over these issues but their number is really low. When they want to raise these issues in front of others, people avoid to get into matter putting forward their low socio-economic status. Low income and lack of resources deter most of the inhabitants to think on issues other than most important ones or survival. People do not get time to talk about water and sanitation as they are mostly busy in earning and livelihood activities.

Following graph depicts that out of the ninety respondents who were ailing, over sixty percent respondents were either sick currently or had fallen ill in last one month. All respondents who face illness in last one year fell ill in less than six months' period at the time of study.

Distribution of respondents according to their illness regarding span of time period



The most commonly found illness among male youth of slums of Rawalpindi and Islamabad is fever which caught almost seventy percent of respondents. Other commonly found disease among male youth of slums is flu which infected over sixteen percent of the respondents. About thirteen percent respondents were affected by other diseases which included skin problems, digestive system illnesses, chest infection and tuberculosis etc.

Distribution of respondents according to kind of illness they caught

Kind of illness	Frequency	Percent
Fever	62	68.9
cough	1	1.1
Flu	15	16.7
others	12	13.3
Total	90	100

80% of the respondents did seek treatment of their illness. Most popular treatment method among respondents remained Allopathic followed by Homeopathic and *Yonani Tibb/Hikmat*. Respondents mainly shared the reasons of cost effectiveness or being in approach for selection of health services provider. Respondents generally did not seem concerned of quality of medication and competency of health services provider.

Distribution of Respondents according to their behavior of seeking treatment

Intention of getting treatment by respondents	Frequency	Percent
Yes	73	81.1
No	17	18.9
Total	90	100.0

Distribution of respondents regarding their choice for treatment

Type of treatment	Frequency	Percent
Allopathic	48	65.8
Homeopathic	13	17.8
Hikmat/Yonani Tib	12	16.4
Total	73	100.0

More than fifty percent of the respondents accessed health service provider on foot as in most of the cases health service facility is situated within the community. These facilities are small private clinics of allopathic doctors, homeopathic doctors and *Hakeems*. Other most used mode of accessing health services providing facility is public transport when respondents accessed government health service facility for example Central Military Hospital (CMH) in Rawalpindi or Poly Clinic Hospital in ICT. Almost eighteen percent of respondents also use their own transport to access health facility to seek treatment.

Distribution of respondents according to their choice for mode of transportation to access health services facility

Mode of accessing Health Facility	Frequency	Percent
On Foot	39	53.4
Public transport	20	27.4
Cab/Rickshaw	1	1.4
Personal Transport	13	17.8
Total	73	100

Problems faced by male youth in physical environment of slum

Male youth of slums face numerous problems in physical environment of their areas. They mentioned that the life of people in slums is never tension free. People in slums face a number of tensions on daily basis as well as lifelong stresses occupy permanent places in their lives. Daily basis problems for young males in slums are like fetching water from far off source, lack of arrangements and resources to better deal with harshness of weather, lack of cleanliness in area, absence of good water and sanitation facility etc. Long term stressors for male youth of slums of Rawalpindi and Islamabad are poor socio-economic status, lack of educational opportunities, lack of health facilities and lack of livelihood possibilities especially high paid jobs etc. They told that minimizing these stresses and tensions is one of the requirements for good health.

Absence of clean environment in slums is a big hassle as everyone has to face it while living in the area. Unpaved streets become muddy and filthy during rain. Bad sewerage system in

slums make rainy season more troublesome for the residents as rainy water gathers in streets and walking on foot becomes almost impossible. Appalling solid waste management in the area adds into predicament as solid waste in streets chocks whatever available sewerage system and life of people becomes even more miserable. Waste water carrying human feces stands in pathways and causing foul smell in all over the surroundings.

According to respondents, piles of the solid waste could be observed in communities, mostly in the center of living areas of communities or empty places on the margins of slums. As most of the slums in Rawalpindi and Islamabad are situated on the bank of “Nullah Lai”, people in the area have continuous danger of exposing to waste water filled with all kind of filth. Children play in open area on the bank of “Nullah Lai” which is not only the playground for them but also dumping place for most of the slum communities. Open unpaved sewerage system carries the waste water and excreta of human to “Nullah Lai” running right through the communities. Drinking water supply is trusted by most of the people in these slums but source has never been tested for its quality in most of the slums under study. Such an environment bears a lot of demerits in terms of health for the residents of the area. Common diseases in slums areas are fever, digestive track complications, skin illnesses and asthma etc. in summers mosquitoes reproduce in plenty in these communities being at the bank of “Nulla Lai”, creating peril of Malaria. Respondents shared that the situation worsens in summer nights during night long load shedding off electricity and they have to spent night outside home.

In communities where Christians were in majority, a substantial number of young people are involved in using drugs like Charras and Alcohol but not many admitted using such items in later part of interview. According to many respondents, easy availability of such inebriants for young people in the area is a causing a great loss for young people.

Unavailability of proper play grounds, lack of plantation and trees in the area, no health service providers or poor quality of health service providers and shortage of resources also engender obstacles for male youth in slums of Rawalpindi and Islamabad to maintain their health.

Cross Comparisons

Cross-tabulation of age and perception of health condition shows the cross comparison of age and health condition of respondents in last 12 months. Majority of respondents had a mediocre health condition in last 12 months. Most of the respondents were found in the age bracket of 15 – 18 years and mostly they thought themselves i.e. almost 44%, in not good not bad health condition during last 12 months. 38% respondents in the age bracket of 22 – 24 years were also of the view that they had mediocre health condition in last 12 months. It seems through the cross comparison that as male youth of the slums of Rawalpindi and Islamabad move into older age cohorts they mostly considered themselves in mediocre health conditions.

Cross-tabulation of Age & perception of Health Condition of Respondents in last 12 months

Age Ranges	Health Condition of Respondents in Last 12 months
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		Not Good Not Bad Condition	Good Health Condition	Total
15 -- 18	Frequency	32	26	58
	Percentage	43.8%	55.3%	48.3%
19 -- 21	Frequency	13	15	28
	Percentage	17.8%	31.9%	23.3%
22 -- 24	Frequency	28	6	34
	Percentage	38.4%	12.8%	28.3%
Total		73	47	120

It is evident from the following table that majority of respondents of all ages consider themselves in poor health conditions in comparison to male youth of belonging to areas outside slums. Most respondents considering themselves in poor health condition fall in the age bracket of 15 – 18 years. Although none of the respondents considered themselves in good health conditions while comparing to health conditions of youth of other others area but it seems that the feeling of inferiority regarding health conditions is a common phenomenon in all ages though it declines as the male youth members grows older.

Cross-tabulation of Age Ranges and Comparison of health of male youth in slums with health of male youth outside slums

Age Ranges		Comparison of health of male youth in slums with health of male youth outside slums			Total
		Poor Health Conditions	Not Good Not Bad Health Condition	Good Health Condition	
15 -- 18	Frequency	39	19	0	58
	Percentage	60.0%	40.4%	.0%	48.3%
19 -- 21	Frequency	14	14	0	28
	Percentage	21.5%	29.8%	.0%	23.3%
22 -- 24	Frequency	12	14	8	34
	Percentage	18.5%	29.8%	100.0%	28.3%
Total		65	47	8	120

A cross comparison of Health condition of respondents in last one month and number of persons living in dwelling is presented. Majority i.e. over hundred respondents thought their

health either in mediocre condition of or less. Over eighty percent of the respondents had 6-11 persons living in their homes. Most of the respondents living with a range of 6 – 8 persons in their homes had a mediocre health condition. On the other hand, number of respondents in poor health conditions increases with the increase in number of people in their dwellings.

Cross-tabulation of Number of Persons living in home and health condition of respondents in Last one month

Number of Persons living in home		Health Condition of Respondents in Last 1 month			Total
		Poor Health Condition	Not Good Not Bad Health Condition	Good Health Condition	
3 -- 5	Frequency	6	7	0	13
	Percentage	33.3%	8.4%	.0%	10.8%
6 -- 8	Frequency	5	54	11	70
	Percentage	27.8%	65.1%	57.9%	58.3%
9 -- 11	Frequency	7	22	8	37
	Percentage	38.9%	26.5%	42.1%	30.8%
Total	Frequency	18	83	19	120

Cross-tabulation of sources of information on health and hygiene and age ranges of respondent shows that the strongest sources of information on health and hygiene for all age phases of male youth in slums is family. Second most important source of information on health and hygiene for male youth slums of Rawalpindi and Islamabad comes out to be friends/peers. It appears that the strength of family as source of information weakens in later stages of youth but a reciprocal trend is obvious with regards to friends/peer as source of information regarding health and hygiene.

Cross-tabulation of Source of Information about Health and Hygiene and Age Ranges of respondents

Source of Information about Health and Hygiene		Age Ranges			Total
		15 -- 18	19 -- 21	22 -- 24	
Family Members (Parents/Siblings)	Frequency	40	10	15	65
	Percentage	69.0%	35.7%	44.1%	54.2%
Peers	Frequency	6	7	14	27
	Percentage	10.3%	25.0%	41.2%	22.5%
	Frequency	0	7	0	7

Books/ Newspapers/ Magazines	Percentage	.0%	25.0%	.0%	5.8%
Media (Tv/Radio)	Frequency	12	2	3	17
	Percentage	20.7%	7.1%	8.8%	14.2%
others	Frequency	0	2	2	4
	Percentage	.0%	7.1%	5.9%	3.3%
Total	Frequency	58	28	34	120

In the following the cross-tabulation of sources of information on water and sanitation and age ranges of respondents is given. It is manifested in the table that family is most significant source of information on water and sanitation issues for male youth of all ages i.e. 15 – 24 years. Peers/friends follow in significance for male youth of slums as source of information. Media and books/newspapers/magazines also play some role in building up their information on the issues related to water and sanitation. A negative relationship between age of respondents and family as source of information on water and sanitation issues is observed while a positive relationship between peers/friends as source of information about issues of water and sanitation and age of respondents is found.

Cross-tabulation of Source of information about Water & Sanitation and Age Ranges of respondents

Source of information about water and sanitation issues		Age Ranges			Total
		15 -- 18	19 -- 21	22 -- 24	
Family Members (Parents/Siblings)	Frequency	32	12	13	57
	Percentage	55.2%	42.9%	38.2%	47.5%
Peers	Frequency	18	8	14	40
	Percentage	31.0%	28.6%	41.2%	33.3%
Books/Newspapers/Magazines	Frequency	8	6	3	17
	Percentage	13.8%	21.4%	8.8%	14.2%
Media (TV/Radio)	Frequency	0	2	4	6
	Percentage	.0%	7.1%	11.8%	5.0%
Total	Frequency	58	28	34	120

CONCLUSION

Main findings of the study are that the slums in Rawalpindi and Islamabad are mostly deprived of clean physical environment. The slums are situated at the bank of Nullah Lai which is flowing through both of the cities putting residents of slums at great health danger. According to views of respondents, the general health related problems in slums are filthy environment with dumps of solid waste, open and semi open drainage system, poor supply of drinkable water, mixing of drinking supply and sewerage water etc. commonly found diseases in the areas are diarrhea among children, skin problems, digestive track problems and TB etc.

Over 70 percent of the youth participating in the study were found having education to a level of matriculation or less. A noticeable percentage of respondents live in houses of 1 to 2 rooms while balance of the respondents enjoys a capacity of 4 rooms in their houses. Most of the Male youth generally lack knowledge regarding health and hygiene and their practices like delay in taking bath, using unhygienic water for drinking, not taking exercise etc. also lead them to their bad health. Water is supplied in most of the houses but still many of respondents have to fetch water from taps available in streets.

Toilets are available in homes and almost all respondents wash hands with soap after defecation. Majority of youth in slums fell ill in last 12 months and they also thought that they had bad health in comparison to male youth living outside slums. Majority of respondents seek medical services from nearest doctor available. Respondents chose the doctor not because of his/her quality services but due to low prices and their availability in the vicinity. Majority of the respondents also believed that their bad health is caused by the filthy environment around them.

According to respondents, poverty is one of the major issues stopping the communication process on health and hygiene. Male youth in slums is expected to get involve in livelihood activities from their early age due to lack of resources so they get little chances of sharing information on other issues. Unavailability of quality health services in slums also becomes a stopper for communication process on health and hygiene. Lack of attention at government end on issues of health and sanitation also halts the process of communication and deprives people of slums to attain right information. People especially male youth do not own issues of water and sanitation so it also keeps them away from talking on the issues. Low number of people realizing the importance of such issues also put them on the back seat and issues do not catch the attention of people to converse on.

Male youth also realize that tensions and stresses in their lives, for instance fetching water from far off sources, lack of resources and arrangements to deal with callous weather, pressure of livelihood from very early age also play very important role in their lives regarding their health.

Recommendations

1. Male youth is found concerned regarding issues of health and hygiene in slums of Rawalpindi and Islamabad. It is suggested that ample effort needs to be done to raise awareness on these issues. A comprehensive need assessment especially designed for different groups of males, females, adults or children is recommended to work with them in future.

2. Awareness raising activity should include information enhancing on health and hygiene as well as sensitization towards the issue water and sanitation.
3. Male youth mentioned that they face a lot of tensions and stress in their lives due to lack of opportunities for them in various walks of life. Although those opportunities are needed to provide to male youth to cope with their stress but that is not possible in the short term. An instant solution may be to conduct a complete stress management training program for youth of slums of Rawalpindi and Islamabad.
4. According to respondents in most of the slums water supply source has never been tested. Mixing of sewerage water with water supply lines is also a usual observation of respondents in slums. It is suggested to install water filtration plants for neighboring slums for instance G-7/1 and G-7/2. Places where such installations are not possible, in those areas government departments or NGOs should conduct comprehensive training programs to teach people cheap but effective water filtration methods.
5. Contemporarily, majority of people are aware of Non-Government Organizations (NGOs) working on social issues. People in most area accept NGOs as agents of change and as replacement of government agencies in many social matters. Solid waste management and sanitation is one of them, NGOs could be involved in awareness raising and training activities on said issues for male youth of slums.
6. NGOs may also be involved in mobilizing the community to solve their health and hygiene and water and sanitation issues on self-help basis. International donor agencies like United Nations, World Bank and many other international NGOs are keenly interested in improving the environment of slums in developing as well as under developed countries. Such agencies may be engaged for financial support.
7. Empty places in slums of Rawalpindi and Islamabad are generally used as dumping place of solid waste generated by the community as well as the play grounds for male youth of the areas in most of the cases. This exposes boys to germs and ultimately leads to diseases of various types for example digestive tract illnesses or skin problems. It is proposed to establish a solid waste management system in slums which may vacant these empty places develop proper play grounds for boys of slums which are in easy access of them. This will not only minimize their exposure to germs but also will help in developing healthy attitude towards taking exercise.
8. Low literacy rate is a big hurdle in the flow of accurate information for majority of male youth in slums. Education opportunities should be provided to youth of slums in Rawalpindi and Islamabad on affordable cost for the parents. Adult learning centers should be started for male youth who have crossed the age limit of child.

9. Government should include basic knowledge on health and hygiene and water and sanitation in education curricula with practical at all levels. Topics may cover personal hygiene, stress management, sensitization regarding environmental health, cost effective water purification methods and precautionary measures from commonly found diseases etc.
10. Nullah Lai has been a great threat to health of dwellers of slums in Rawalpindi and Islamabad as it offers perfect conditions for development of many health pathologies. In the long term future government should arrange other places where these dwellers can move for better environment and improved living conditions.
11. A complete and comprehensive scan of diseases of male youth of slums of Rawalpindi and Islamabad must be done so that exact scenario regarding health may come to surface and future planning may be done accordingly.
12. Media can play a very important role. Male youth are mainly interested in radio and TV programs like sports and entertainment. Such programs can be hooked with programs on health and hygiene and water and sanitation to raise awareness on these issues.
13. Slums should be provided proper health services in their access both geographically as well as economically. Government departments should start clinics or dispensaries in slums to meet the needs of slums' residents. NGOs may also be involved in such activities too.
14. Drugs/inebriants are easily and heavily available in these areas as shared by the respondents during interviews. Law enforcement agencies should proactively take measures to control drugs availability in slums of Rawalpindi and Islamabad. Also rehabilitations centers should be started in or near slums so that those who are addicted to drugs become able to live a normal life after treatment. The treatment in these centers should not be expensive at all and should be government funded for those who cannot afford it at all.

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