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Knowledge and Practices of Preventive Measure Among Medical Students Against HIV/AIDS

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Abstract

INTRODUCTION

Knowledge means having information and skill acquired through experience or education to be aware of something

Objective of study

The objective of study will be to

- Determine knowledge and practices about preventive measures agao#inst AIDS among medical student .

Material and method

- Study design
  Cross sectional descriptive study.
- Duration
  Study was conducted from jan 2016 to june 2016
- Sample size
  250 medical students50 from each class
  150 females' 100 males
- Sampling Technique
  By simple randm sampling technique 250 students 50 from each class of which 20 males and 30 females were randomly selected
- Inclusion Criteria
  Medical students fromm all 5 classes
- Exclusive criteria
  Not willing to be included in the study
- Data collection

Data was collected through performed pretested questionnaire that comprises of 2 parts

Part 1 include age, education,family income etc.

Part 2 include study variables, knowledge about AIDS and about its prevention

- Data Analysis

  Data was analyzed manually. Frequency and percentages were calculated for qualitative variables.

INTRODUCTION

Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) is a spectrum of conditions caused by infection with the human immunodeficiency virus (HIV).HIV stands for human immunodeficiency virus, the virus that causes AIDS (Acquired Immuno Deficiency Syndrome).

H: Human

1: Immunodeficiency

Virus

HIV breaks down the body's defense against infection and disease—the body's immune system—by infecting specific white blood cells, leading to a weakened immune system. When the immune system becomes weak or compromised, the body loses its protection against illness. As time passes, the immune system is unable to fight the HIV infection and the person may develop serious and deadly diseases, including other infections. When a person is infected with HIV, the person is known as HIV-infected. "HIV-positive" is when person who is HIV-infected has tested positive for HIV.AIDS is an acronym for acquired immunodeficiency syndrome and refers to the most advanced stage of HIV infection. A: Acquired, (not inherited) to differentiate from a genetic or inherited condition that causes immune dysfunction I: Immuno-, because it attacks the immune system and increases susceptibility to infection. D: Deficiency of certain white blood cells in the immune system. S: Syndrome, meaning a group of symptoms or illnesses that result frðm the HIV infection.

HIV is the virus that causes infection. The person who is HIV-infected may have no signs of illness but can still infect others. Most people who are HIV-infected will develop AIDS after a period of time, which may be several months to more than 15 years. AIDS is a group of serious illnesses and opportunistic infections that develop

after being infected with HIV for a long period of time. A diagnosis of AIDS is based on specific clinical criteria and laboratory test results.HIV-1 & HIV-2 both types are transmitted the same way, and both are associated with similar opportunistic infections and AIDS. HIV-I is more common worldwide.HIV-2 is less easily transmitted than is HIV-I, and it is less pathogenic, meaning that the period betweeninitial infection and illness is longer. In some areas, a person may be infected with both HIV-I and HIV-2. While HIV-2 can be transmitted from an infected mother to her child, this appears to be rare (0% to 5% transmission rate in breastfed infants in the absence of any interventions). 1AIDS is transmitted via three main routes: The most common mode of transmission is the transfer of body secretions through sexual contact. This is accomplished through exposure of mucous membranes of the rectum, vagina or mouth to blood, semen or vaginal secretions containing the HIV virus. Blood or blood products can transmit the virus, most often through the sharing of contaminated syringes and needles. HIV can be spread during pregnancy from mother to fetus. You cannot get AIDS/HIV from touching someone or sharing items, such as cups or pencils, or through coughing and sneezing. Additionally, HIV is not spread through routine contact in restaurants, the workplace or school. However, sharing a razor does pose a small risk in that blood from a minor nick can be transmitted from one person to another.2 Immediately following infection with HIV, most individuals develop a brief, nonspecific "viral illness" consisting of low grade fever, rash, muscle aches, headache and/or fatigue. Like any other viral illness, these symptoms resolve over a period of five to 10 days. Then for a period of several years (sometimes as long as several decades), people infected with HIV are asymptomatic (no symptoms). However, their immune system is gradually being destroyed by the virus. When this destruction has progressed to a critical point, symptoms of AIDS appear. These symptoms are as follows: Extreme fatigue Rapid weight loss from an unknown cause (more than 10 lbs. In two months for no reason) Appearance of swollen or tender glands in the neck, armpits or groin, for no apparent reason, lasting for more than four weeks Unexplained shortness of breath, frequently accompanied by a dry cough, not due to allergies or smoking Persistent diarrhea Intermittent high fever or soaking night sweats of unknown origin.3 A marked change in an

illness pattem, either in frequency, severity, or length of sickness Appearance of one or more purple spots on the surface of the skin, inside the mouth, anus or nasal passages Whitish coating on the tongue, throat or vagina Forgetfulness, confusion and other signs of mental deterioration It can take as short as a year to as long as 10 to 15 years to go from being infected with HIV to "full-blown" AIDS.4

LITERATURE REVIEWS

The following select interventions and research studies have been carried out in some prisons in India by various governmental and non-governmental organizations for addressing the problem of HIV/AIDS. The UNAIDS (United Nations Program on AIDS) Inter-Agency Task Team (IATT) on Education was established in 2002, with the aim of improving and accelerating the education response to HIV and AIDS. Its specific objectives are to promote and suppoft good practices in the education sector related to HIV and AIDS and to encourage alignment and harmonization within and across agencies to support global and country-level actions. The IATT (Inter Agency Task Team) membership includes bilateral and private donors, and civil society organizations. Children affected and infected by HIV and AIDS as a significant group of the most marginalized (Case studies for making this case, and find size documentation of good practice to respond to their needs).Examination of the education policy, teaching and learning processes and curricula — their marginalizing and de-marginalizing impact on learners in a world with HIV and AIDS. Estimating the teaching needs, costing the efforts to reach the most marginalized, due to HIV and AIDS.5

Teachers as 'learners' i.e. how training programs are or are not preparing teachers to teach the most marginalized (specific interest expressed by the GMR team in counseling/psychosocial aspects) Schools as centers for care and support for those marginalized by HIV and AIDS service provision and referral Cases and information from outside East and South Africa, preferably from East and South East Asia, are also welcome as well as those from developed countries.5

This document responds to these suggested areas of input, and includes: Case studies from different regions and on different thematic areas. A full reference list for further consultation Children affected by

AIDS are those children under 1 8 with additional vulnerabilities and disadvantages due to HIV and AIDS, including: Having parents who are HIV infected or suffering from AIDS, leading or living in child-headed households, living in families that are caring for orphans or other additional family members due to AIDS, living in communities severely devastated by HIV and AIDS being orphaned due to AIDS (maternal, paternal or both), living with HIV since birth, having been newly infected with HIV, being especially vulnerable and at risk of HIV infection due to lack of economic or gendered power in the face of the epidemic.6

In 2007, there were 2 million children under 15 years of age living with HIV — 8 times more than in 1990. 370,000 children under 15 years were newly infected with HIV in 2007, representing 17% of new infections [UNAIDS (United Nations Program on AIDS) 2008]. Sub-Saharan Africa remains the most affected region, with almost 90% of the world's children with HIV living in this region alone. Almost two-thirds of all young people (aged 15-24) with HIV live in sub-Saharan Africa. In this region, approximately 75% of new infections among young people are among young women. In southern Africa the gender disparities in HIV infection are particularly striking — in Malawi, South Africa, Swaziland and Zimbabwe; HIV prevalence in young men aged 15-24 was 2%,4%, 4%, and 6% respectively, among young women of the same age, the prevalence was 9%, 17%, 22% and 11%. In some populations in sub Saharan Africa, a fifth of girls less than 18 years of age are infected with HIV.6

In 2007, nearly 12 million children under age 18 in sub-Saharan Africa were estimated to have lost one or both parents to HIV, representing about 37% of parental loss from all causes. Zimbabwe reports that 24% of its children (aged 0—17) have lost one or both parents to HIV (UNAIDS 2008). If the current inadequate pace of scaleup of access to antiretroviral therapy (ART) continues, the number of children under age 18 orphaned as a result of HIV is expected to grow to more than 14 million by 2015. Achieving universal treatment access by 2010, however, would reduce the number of orphans in 2015 by more than five million. Most children orphaned by AIDS live with their extended families, usually grandparents, and most often grandmothers. An analysis of data from Demographic and Health Surveys (DHS) in Burkina Faso,

Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria and Uganda found over 85% of orphans not living with the surviving parent were living with extended family. In addition, grandparents are more likely to be caretakers in high prevalence countries (in more than 50% of cases), whereas in low prevalence countries grandparents were identified as caretakers in 2040% of cases. In South Africa, Arrington (2008) found that orphans are still absorbed into extended families but single orphans are increasingly less likely to live with the surviving parent and there is an increasing reliance on grandparents as caregivers. In Thailand, grandparents were found to be the main caretakers for 55% of all orphans due toAIDS and 67% of double orphans due to AIDS, although siblings, especially sisters, also become caretakers for their HIV-infected brothers and sisters, as well as for their children. A recent study in Malawi, South Africa and the United Republic of Tanzania found that all but a small minority of orphaned children are being integrated into kinship, community and other support networks. There was no evidence of an increase in child-headed households in these countries.7

There is evidence that fostered children may experience discrimination and abuse in non-kin households. The forms and level of discrimination and abuse vary and include sexual abuse of the orphans by stepfathers, relatives, and neighbors or reduced educational opportunities. Children in informal foster care arrangements may also face challenges in legal protection in cases where a legal guardian is not designated, thereby denying them the full legal protection of their rights. A South African study concluded that the probability of school enrollment is inversely proportional to the degree of relatedness of the child to the household head. In Ghana and Niger, orphans living in a household headed by a non-relative were four times less likely to be enrolled in school than those living in a household headed by a relative, and orphans living with grandparents had no difference in enrolment than compared to nonorphans. In Niger, the magnitude differed but the trend was the same — the stronger the family relation, the more likelihood of being enrolled .8

Overlapping marginalization — links between poverty and HIV

While poor individuals and households are not necessarily more likely to become

infected with HIV. The impact of HIV and AIDS is often magnified in' conditions of poverty. For example, the financial burden associated with HIV for the poorest households in India represents 82% of annual income, while the comparable burden for the wealthiest families is slightly more than 20%. Deepening poverty has been found to reduce children's access to food, particularly in families that have taken in orphans.9

HIV can impact the income composition of affected households. In South Africa, for example, a recent study found that affected households were more dependent on nonemployment sources of income (consisting primarily of government grants) and a lower proportion of their income was derived from employment than non-affected households. Affected households face higher dependency ratios, are more subject to morbidity and mortality and face higher unemployment levels. HIV-affected households face increased expenditures, especially for health. In Cambodia, health spending was a significantly higher (22%) percentage of household expenditures in 500 HIV-affected households than in the 500 unaffected households in the study (8%). Sixty-three percent of affected families said they spent less on children's needs in order to pay for health care or purchased less food to pay for health care (69%) as compared to unaffected families, 44% and 53%, respectively. In South Africa, where affected households are generally larger than non-affected ones, the decline in adult equivalent income is often 40-50% more than non-affected households. While there is evidence that affected families manage to reduce the income gap in the two years after the head of household's death, the impoverishment effect lasts several years.1 1

In communities highly affected by HIV, many children live in households in which their own parents have fostered or are fostering orphans. In a study in Buganda, southern Uganda in 2000, 152 households were interviewed, containing 342 non orphaned children and 383 orphans. In the majority of cases, households reported no distinction between levels of care given to orphans or to the guardian's own biological children. Researchers posited that all children in the household suffer the same economic and other deprivations resulting from spreading resources more thinly as a 'coping' response to the epidemic. Parikh et al (2007) also found no statistically significant differences in most education,

health and labor outcomes between orphans and the non-orphans with whom they live (cohort of 197 recent orphans and 528 nonorphans aged 9-16 years) in KwaZulu Natal, South Africa. 12

Special needs of HIV-positive children

Like other children with chronic diseases and disabilities, children with HIV face health problems which can affect school entry and progression. However, HIVpositive children are subject to different classes of special needs. The infection can inflict neurological damage leading to delays in development, loss of acquired motor, speech, adaptive and social skills and decreased interactions with the surrounding environment. There is evidence that early initiation of antiretroviral therapy can assist in avoiding or limiting some of this damage. Children with symptomatic HIV disease may suffer from associated morbidities such as respiratory infections, malnutrition and diarrheal disease in greater frequency and severity. In Kenya, children of HIVinfected parents were likely to be underweight and wasted and less likely to receive. medical care for acute respiratory infections (ARI) and diarrhea. They are often facing significant psychosocial health stresses in their environment with the likelihood of bereavement, poverty, and changes in caregivers. The family stresses and pressures are complicated for the HIV-positive children by the fact that they have to cope with their own illness as well. This is particularly true for children who need to manage their medical needs, including for antiretroviral therapy (ART), and who wish to protect confidentiality about their HIV status in the school setting.13

Educational status of children affected by AIDS

There is conflicting evidence on the impact of HIV-related orphan hood on school attendance rates. In 56 countries where recent household survey data are available, orphans who had lost both parents were, on average, 12% less likely to attend school than non-orphans. In countries with HIV prevalence greater than 5%, orphans were only 4% less likely to be in school than non-orphans, suggesting that heavily affected countries are closing some of the educational disparities seen earlier in the epidemic (UNAIDS, 2008). A report using data collected in recent nationally representative Demographic and Health Surveys (DHS) and AIDS Indicator Surveys (AIS) in Cameroon, Côte d'Ivoire, Kenya, Lesotho, Malawi, Tanzania, Uganda, and

Zimbabwe found that, in all countries, OVC (Orphan & Vulnerable Children) were less likely to attend school than non-OVC (non-Orphan & Vulnerable Children) when they reached adolescence; however they were as or more likely than non-OVC to attend school earlier on, between age 5 and 14. In this analysis, OVC in countries with relatively lower levels of HIV prevalence were found to be more likely to attend school than children living with both parents who are not infected with HIV; however, in higher HIV prevalence countries, there was little or no difference in school rates between OVC and non-OVC children. In this report, however, adolescent orphans and vulnerable children are considerably less likely to attend school in all countries. Across the 7 countries with available data, the gap in school attendance between OVC and non-OVC aged 517 was greatest in Tanzania (by almost 12%). In all countries apart from Cote d'Ivoire, the proportion of children aged 5-17 attending school Was lowest among orphans, followed by children in households affected by chronic illness.14

The following select interventions and research studies have been carried out in some prisons in India by various governmental and non-governmental organizations foraddressing the problem of HIV/AIDS in Indian prisons: The Gujarat State AIDS Control Society, a unit of the National AIDS Control Organization, initiated a pilot project on behavior change communication interventions in 1998 in the Surat District Prison. In 2001, the interventions were replicated in nine prisons all over the state . 15

Another study by UNODC (United Nation Office on Drug & Crime) (2007) revealed that homosexual activity, both coercive and consensual, took place inside prisons. In this regard, the Hindustan Latex I Limited established a technical resource unit to manage targeted interventions under agreement with the Andhra Pradesh State AIDS Control Society. Initially, four prisons were selected for the intervention program, which was up-scaled to eight after a rapid assessment of needs. The intervention focused on behavior change communication sessions, STD care and counseling, peer education, condom distribution and a referral system for partner treatment. The process highlighted the need for systematic needs assessment and phased up-scaling, sensitization and involvement of key stakeholders like prison officials and inmates, proper advocacy and sensitization

activities, and avoidance of initial media attention in order to provide a greater sense of privacy, security and freedom to the concerned project implementers.16

Partnerships for Sexual Health Prison projects in Andhra Pradesh:

A large amount of material on migration and HIV has been published in recent years. This review focused on relevant international, regional and national grey literature, including EU policy documents and country reports. The review did not lÕok at legislation in participating countries regarding access to HIV prevention, treatment, care and support as this had already been addressed by earlier studies. Key global and European publications identified by the review are highlighted below at the global level, publications emphasize the importance of human rights, the impact of the health status of migrants on broader public health and the need for specifically designed and targeted HIV interventions for marginalized migrant populations.17

International Guidelines on HIV/AIDS and Human Rights (UNAIDS 2006), developed by UNAIDS and the UN Centre for Human Rights, emphasize that 'There is no public health rationale for restricting liberty of movement or choice of residence on the grounds of HIV status and any restrictions on these rights based on suspectedor real HIV status alone, including HIV screening of international travellers, are discriminatory and cannot be justified by public health concerns'. With respect to migrants, the document recommends that States support the implementation of specially designed and targeted HIV prevention and care programs for those who have less access to mainstream programs due to language, poverty, social or legal or physical marginalization, e.g. minorities, migrants, indigenous peoples, refugees and internally displaced persons. The guidelines also emphasize the link between protection of human rights and effective HIV programs and the specific needs of groups that may be disproportionately affected including migrants and that. Lack of human rights protection disempowers these groups to avoid infection and to cope with HIV, if affected by it. 17

UNAIDS, others issued a statement on human rights and travel restrictions related to HIV, which emphasize that 'HIV/AIDS-related travel restrictions have no public health justification'. Recent guidelines on

HIV testing and counseling (WHO and UNAIDS 2007) address the issue of migration populations may be particularly exposed to HIV-related risks. The EU-funded project AIDS & Mobility has produced numerous reports on the situation of migrant populations in Europe with respect to HIV. The first report has been updated twice. In 2006, country reports were compiled for the new European. Member States (NIGZ 2006) and the 'old' member states contributed trend reports.18

Information was collected from governments and NGOs and the reports reflect both achievements and challenges. One of the main achievements mentioned is the growing number of migrant organizations involved in HIV prevention and care projects. Challenges identified included the lack of culturally appropriate information and educational interventions, and communication barriers, which limit access to treatment even in countries where treatment is available to all regardless of legal status.19

Health in all policies: Prospect and potentials, published during the Finnish Presidency of the EU, highlights the need for health to be integrated in social, education, labor and housing policies and for links between local, national, European and global levels. The integrated approach is particularly important to avoid inconsistencies in policies that relate to migration and health. This approach is one ofthe principles Health and migration in the W. Challenges for health in the age of migration provide a comprehensive review of migrant health and specific risk factors related to migration. This conference report also highlights inconsistencies in policies, research and information gaps and the role of socio-economic factors. The authors propose integration of health in all relevant policies and closer cooperation both between EU Member States and with countries of origin and transit countries. A second report describes examples of good practice on migration and health in the EU, including government and NGO initiatives with a specific focus on HIV. The right to HIV/AIDS prevention, treatment, care and support for migrants and ethnic minorities in Europe: The community perspective and community recommendations were the outcome of a conference involving civil society. The report and recommendations emphasize the importance of political commitment, comprehensive, human rights approaches to public health interventions

and meaningful inclusion and involvement of concerned communities.19

The focus on migration and health during the Portuguese Presidency of the EU resulted in the publication of a range of documents including research notes. One such note argues that relatively little is known about the health of migrants in some Member States although available evidence suggests that use of health services by migrants is low, due to educational, cultural and legal factors. The author proposes that the EU play a role in facilitating exchange of knowledge and experience, both with respect to methodological research problems and to analysis and development of policies and interventions. Another research note identifies key challenges in the field of migration and health and three major areas for EU involvement: improved collection of epidemiological data, increased sharing and implementation of good practice in screening, and mechanisms to improve access to healthcare. The authors also argue that denying entry because of detected infections will be counterproductive, making it more difficult to reach infected migrants with health services.20

Access to Health Care for Undocumented Migrants in Europe, published by the Platform for International Cooperation on Undocumented Migrants reviews access to healthcare for undocumented migrants and the barriers they face in European Member States. The report found significant differences between countries, ranging from those where all healthcare is provided on a payment basis, such as Austria and Sweden, tothose that render health services to all, irrespective of legal status, such as Italy and Spain. It also found that, while all countries provide care in urgent situations, definitions of 'urgency' vary considerably. The EU-funded TAMPEP network has produced a range of publications analyzing HIV risks related to migration and sex work. One of the most recent is a European overview Institutional Strengthening and Support for HIV Prevention Activities, which summarizes factors of vulnerability among migrant sex workers. While many of these are the same as factors affecting other migrant populations, such as lack of linguistically and culturally appropriate services, marginalization and insufficient access to services, sex workers are also vulnerable because of repressive prostitution laws in some countries.21

Ethiopia is currently one of the countries most seriously affected by HIV/AIDS, with

the sixth highest number of infections in the world. This paper discusses how to combat this epidemic. As the country scales up HIV/AIDS services, increased attention is focused on identifying constraints to program expansion. One of the most important constraints is that of human resources. To maximize program impact with current resources, integration of Family Planning into existing HIV/AIDS programs is a very cost effective and an excellent point of entry. This is a study of an intervention program focused on initiating and also strengthening existing integration of FP into functional VCT, ART and PMTCT sites. The intervention encompassed an orientation on integration benefits to heads of health facilities; identification of challenges of integration and drawing of plan of action on how to overcome the challenges and improve integration. Major challenges identified were related both to health workers, such as high workload, staff burnout and turnover, as well as to efforts in scaling up of facilities operations to adequately incorporate integration and action. Although I attempted to stay within the bounds of sexuality issues related to young people in the 8-12 age groups, the lack of data specific to this group made it necessary to examine research for the older group which was usually post-15. The danger is in selection from a large literature in possibly conflating the diversity of young people's experiences across contexts. Young people in the target age group are the group that is currently less affected than other groups. They are however on the brink of moving into the age group that is most disproportionally affected by HIV/AIDS (especially for young women). Increasingly studies are advocating interventions with this age group that prepare them better for protecting and handling themselves Education policy makers are responding by broadening the Life Orientation curriculum to extend it to this group. Despite an emerging call for the necessity for intervention there are many issues and potential barriers to change to consider in advocating for a focus on sexuality and, in so doing, challenging the sexual behavior that arises from current dominant notions of sexuality.23

Arguing from the perspective of human rights-based framework and specifically addressing policy in the UK, report on international consensus-building initiatives to develop normative statements describing the principles of effective work in the fields of health promotion. They refer to The

Ottawa Charter for Health promotion, the Adelaide Declaration and the Jakarta Principles all targeting public policy for health and well-being. HIV/AIDS (UNAIDS) emphasizes the rights of young children to information and other resources to protect themselves against infection. While the South African Constitution has been developed within rights-based framework young peoples' expressions of what they want and need to know in order to negotiate the sexual world are currently not being provided adequately This requires change in of alternative masculinities and femininities. It is clear that currently some in the schooling context and many adults in the community are not providing this for young people. Addressing the sexual health school ethos and relationships amongst staff and young people is vital.24

Research with young people indicates that they are affected by the mixed messages they receive about sexuality, sexual behavior and HIV/AIDS from the world around them, which range from mixed messages about limiting partners, use of condoms, the existence of AIDS and pressures of an increasingly materialistic culture. Teachers in South Africa and elsewhere struggle to mediate these mixed messages, struggle with information and misinformation and deliver sex education in ways that tries to appease multiple stakeholders (parents and government) but does not seem to meet the needs of many young people sociocultural norms, values and practices that promote gender stereotypes and power imbalances between men and women. It is unlikely that this change will occur without strong role modeling. There is an untested assumption that parents object to their children being taught about sexual education while simultaneously parents talk of their feelings of inadequacy in not knowing how to help or speak to their young children. There are also concerns that to teach children about sex will encourage them to have more of it despite research to the contrary.25

Interventions with young people in Africa highlight pedagogic issues as of being importance in affecting the perceived success and reception of sexuality programs and possibly their outcomes. Sexuality education focusing on examining gender, constructions of sexual identity and the critical thinking and empowerment which are crucial for their success require methodologies emphasizing self- reflection. Some repofts indicate that young people more used to didactic styles of teaching

initially have difficulties with knowing what is expected of them in open-ended discussion and reflective questions and many teachers are uncomfortable and unfamiliar with working in this manner. However, in the right context young people are eager to talk and eager for information. Teachers also indicate that they are not comfortable but able to work with skills (conflict and negotiation) and discussions of sex and sexuality. Trusted and well trained outsiders and peers seem to do this better. Outside facilitators are often they often work with the aspects of programs requiring knowledge (the biomedical frameworks) but are less comfortable and able to work with skills (conflict and negotiation) and discussions of sex and sexuality. Trusted and well trained outsiders and peers seem to do this better. Outside facilitators are often better received and may be more skilled and messages from TV and radio are wellreceived.26

One-off events or lessons appear to have limited impact and there is a need to develop contexts where young people can exercise some leadership in relation to programs aimed at them and where their input is valued. Many of the life skills and sexuality education programs have been developed based on classic cognitive and behavioral theoretical frameworks that have informed many western and other international approaches to sex education over the past decade. These models do not adequately deal with how decision making processes are influenced by factors embedded in cultural meaning systems in different contexts. This debate can and is used as an argument to either advocate resistance to the programs because of this or to argue that it is important for a 'new' culture of response to be built up so that each new safe sex act doesn't have to be negotiated. As these negotiations are weighted in favor of males at present sexuality and sexual health programs have to focus on trying to facilitate such change while simultaneously proving coping strategies for dealing and living with aids. The cumulative reported numbers of HIV among Saudi and non-Saudi residents of Saudi Arabia to the end of 2003 were 1713 and 6064, respectively. Of 1743 HIV-infected Saudis, 872 were defined as AIDS cases according to the expanded W'HO AIDS case definition surveillance. Males accounted for 1329 HIV infections, comprising 77% of all reported cases, with a male to female ratio of about 3:1. Children under 15 years of age constituted about 970, adults over 49 years accounted for 13% of

all HIV-infected Saudis. Young patients aged 75 to 24 year accounted to 237 individuals (1401 of all cases). The trend of HIV infection among this young age group has been static for the last few years. Jeddah, fultdh and Dammam were the main regions reporting cases,

collectively reporting 67% of all cases, reaching 40%, 15% and 20% of cases, respectively. Twenty-nine percent of HIV-infected Saudis denied any risky behavior and thus the source of infection is unknown. In the remaining cases, infection probably resulted from sorrel activity in 46% of cases, blood transfusion in 17%, maternal-to child transmission in 5%, intravenous drug use in 2010 and organ transplant in 1%. The reverse is time me for both sexual transmission and cases linked with intravenous drug use where the trend is much increased in the last few years.

While suspected patients and contacts Young Adults 15-24 years.28

HIV/AIDS IN SAUDI ARABIA

About 33% of reported HIV seropositive Saudis were already dead, so the people living with HIV/ AIDS at the beginning of 2004 were only 1 165. Using the Kaplan-Meier method, the 3 year survival rate for those who were reported as AIDS patients from 1984 to 1995 was found to be 27%, while the 3-year survival rate for those reported as AIDS from 1997-2000 was 72%. The overall coverage rate of HIV reporting was 66010, so the estimated cumulative number of HIV-infected Saudis, including hidden cases until the end of the year 2003 could be about 2615.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 there has been an outbreak of HIV among injecting drug users in Sindh. Ethout vigorous and sustained action, Pakistan runs the risk of experiencing the rapid increase in HIV/AIDS among vulnerable groups seen elsewhere.29

STATE OF THE EPIDEMIC

According to UNAIDS estimates, some 70,000 to 80,000 persons, or 0.1 percent of the adult population in Pakistan, are infected with HIV. Officially reported cases are, however, much lower. Until September 2004, only some 300 cases of full-blown AIDS and another 2300 cases of HIV infection were repotted to the National AIDS Control Program. As in many

countries, underreporting is due mainly to the social stigma attached to the infection, limited surveillance and voluntary counseling and testing systems, as well as the lack of knowledge among the general population and health practitioners. Until recently, Pakistan was classified as a low-prevalence country with many risk factors that could lead to the rapid development of an epidemic. However, recent evidence indicates that the situation is changing rapidly. In 2004, a concentrated outbreak of HIV was found among Injecting Drug Users (IDUs) in Karachi, where over 20 percent of those tested were found to be infected. High levels of HIV infection 4 percent - were also found among men who have sex with men (MSM) in the city. The infection rate among Hijras was 2 percent. Nonetheless, prevalence among other high risk groups in Karachi and all vulnerable populations in Lahore is still low below I percent. The findings underline the risk of an escalating epidemic. They point to the presence of significant risk factors such as the very low use of condoms among vulnerable populations including female sex workers (FSW), MSMs, truckers, and Hijras, as well as the low use of sterile syringes among IDUs. They also reveal an alarmingly high prevalence of syphilis among Hijras 60 percent in Karachi and 33 percent in Lahore which increases the risk of HIV infection.30

RISK FACTORS

More than 35 percent of the population lives below the poverty line, Low levels of literacy, Pofous borders, Rural to urban and intrastate migration of male populations, Trafficking of women and girls into prostitution, High stigma related to sex and sexuality, Structured commercial sex and casual sex with no regular partners, Male resistance to condom use, High prevalence of sexually transmitted diseases (STDs),

Low status of women, leading to an inability to negotiate safe sex. HIV/AIDS is a challenge that goes beyond the health sector. What is needed is the strategic involvement of all sectors poverty reduction, education, transport and roads, urban and rural sectors, gender, social development and public health.31

ISSUES AND CHALLENGES: PRIORITY AREAS

Vulnerable and High-risk Groups: Expand knowledge, access, and coverage of vulnerable populations—particularly in large cities—to a package of high impact services, through combined efforts of the government and NGOs. Implement

harmreduction initiatives for IDUs and safe sex practices for CSWs. Make effective and affordable STD services available for high-risk groups and the general population.32 General Awareness and Behavioral Change:

Undertake behavioral change communications with the following behavioral objectives: Use of condoms with no regular sexual partners, use of sterile syringes for all injections, reduction in the number of injections received, voluntary blood donation (particularly among the age group 18 to 30), use of blood for transfusion only if it has been screened for HIV, display of tolerant and caring behaviors towards people living with HIV/AIDS and members of vulnerable populations & Increase interventions among youth, police, soldiers, and migrant laborers.33

Blood and Blood Product Safety:

Ensure mandatory screening of blood and blood products in the public and private sectors for all major blood-borne infections. Conduct education campaigns to promote voluntary blood donation Develop Quality Assurance Systems for public and private blood banks to ensure that all blood is properly screened for HIV and Hepatitis B. Strengthen and expand the surveillance and monitoring system. Implement a secondgeneration HIV surveillance that tracks sero prevalence and changes in HIV-related behaviors, including the spread of STIs and HIV, sexual attitudes and behaviors, and healthcare-seeking behaviors related to STIs. Identify gaps in existing programs and •continue phased expansion of interventions.34

A descriptive cross-sectional study was conducted in the obstetrics and gynecology clinic at Isra University Hospital Hyderabad Pakistan from April to June 2007. To

determine the level of awareness about Human Immuno-deficiency Virus Infection and Auto Immuno-Deficiency Syndrome (HIV/AIDS) among women attending obstetrics and gynecology clinic. Methods: A total of 189 women attending the obstetrics and gynecology clinic between ages 20 and 50 years were included. Informed consent was taken and information was collected by a pre-designed questionnaire to assess the level of awareness about HIV/AIDS. Data analysis was done by computer software, SPSS version 11. Results: Out of the total, 86.8% women had heard about HIV/AIDS. A large majority of women knew that it is transmitted by close sexual relationship,

through infected blood, can be transmitted from mother to baby and knew that it is transmitted by reuse of infected needles while only 40.7% knew that it can be transmitted during delivery.35

The respondents had the knowledge that multiple sexual partners (79.4%), prostitutes and homosexual males (49.7%), drug addicts (49.7%) were high risk groups. Regarding prevention of AIDS, 70.9% mentioned avoiding homosexuality, 58.7% knew the use of condoms and 74.7% women knew that screening of blood in laboratories before transfusion can prevent AIDS. Conclusion: The level of awareness regarding HIV/AIDS transmission and prevention was satisfactory among women attending the out-patient department of a gynecology and obstetrics department.However, number of misconceptions needs to be corrected . Obiective of Study:

The objective of the study will be to:-

• To see knowledge and practices about preventive measures against AIDS among medical students of Quaid-e-Azam Medical College Bahawalpur.

Operational Definitions:

In our study we asked 14 questions about knowledge and 5 questions about knowledge and preventive measures against AIDS from 250 medical students of Quaid-e-Azam Medical College Bahawalpur. The response to each question was divided into two categories, correct or incorrect. The correct response to each question was given 2 marks and incorrect response was given I mark. Similarly scoring of 4 questions asked regarding practices of preventive measures was done on the basis of cumulative scoring. The knowledge and practices of preventive measures against HIV

was categorized as under:

For Knowledge

- Poor 14-18
- Satisfactory 19-24
- Good 25-28

For prevention

- o Poor 4
- Satisfactory 5-6
- Good 7-10

METHODOLOGY

Study design

Cross sectional descriptive study.

Study settings

Department of Community Medicine

Duration:

Study was conducted from January 2016 to June 2016.

Sample size

250 medical students 50 from each class.

150 Females 100 Males

Ethical Issues:

Researcher will bear expenses.

Sampling Technique:

By simple random sampling technique 250 students 50 from .each class of which 20 Males & 30 Females were randomly taken.

Inclusion Criteria:

Medical students from all 5 Classes.

Exclusion Criteria:

Not willing to be included in the study.

Data Collection:

Data was collected through preformed pretested questionnaire that comprises of 2 parts.

Part-I includes age, education, family income etc.

Part-Il includes study variables, knowledge about AIDS & knowledge

about its prevention.

> Data Analysis:

Data was analyzed manually. Frequencies & percentages were calculated for qualitative variables.

RESULTS

In our study we took sample of 250 medical students & with 3:2 ratio of females to males. By using different variables we check their knowledge regality transmission & knowledge regarding prevention of HIV AIDS.

Regarding fathers education: 10 Students fathers are illiterate (4%),5 Students father's education upto primary (2%),8 Students father's education is upto middle (3.2%),28 Students father's education is upto matric Students father's education is upto Intermediate (12.8%),122 Students father's education is upto graduation above No.l).

Regarding education of mother:65 Students mothers are illiterate (26%),20 Students mothers are is upto primary (8%),25

Students mothers are upto middle (10%),38 Students mothers are upto matric (15.2%),25 Students mothers are upto intermediate (10%),77 Students mothers are upto graduation or above (30.8%)(Table No.2).

We divide data into total 5 groups from I st year to final year. Out of 250, Students parent income of 42 students is up to 25000 (16.8%) 85 students is up to 50000 (34%) & 123 students have more than 50000 (49.2%)(Table No.3).

Out of 250 students 213 students (85.2%) studied from urban college & 37 students (14.8%) studied from rural college. (Table No.4).

148 students (59.2%) have habit of reading magazine & 102 students (40.8%) have no habit of reading magazine. (Table No.5).

221 students (88.5%) use internet & 29 students (11.6%) do not use internet. (Table No.6).

199 students (79.6%) watch TV & 51 students (20.4%) do not watch TV. (Table No.7).

Among 50 1 st year students (20%) 3 students (1.2%) have poor knowledge regarding AIDS transmission, 20 students (8%) have satisfactory knowledge about AIDS transmission and 27 students (10.8%) have good knowledge about AIDS transmission. Among 50 2nd year students (20%) 7 students (2.8%) have poor

knowledge, 16 students (6.4%) have satisfactory knowledge and 27 students (10.8%) have good knowledge about AIDS transmission. Among 50 3r year students (20%) 2 students (0.8%) have poor knowledge, 6 students (2.4%) have satisfactory knowledge and 42 students (16.8%) have good knowledge about AIDS transmission. Among 50 4th year students (20%) 2 students (0.8%) have poor knowledge, 26 students (10.4%) have satisfactory knowledge and 22 students (8.8%) have good knowledge about AIDS transmission. Among 50 5th year students (20%) no students (0.0%) have poor knowledge, 9 students (3.8%) have satisfactory knowledge and 41 students (16.4%) have good knowledge about AIDS transmission. (Table No.8).

While analyzing the knowledge about prevention of AIDS in 50 Pt year students (20%) 8 students (3.2%) have poor knowledge about prevention of AIDS, 19 students (7.6%) have satisfactory knowledge about prevention of AIDS and 23 students (9.2%) have good knowledge about

prevention of AIDS. While analyzing the knowledge about prevention of AIDS in 50 2nd year students (20%) 17 students (6.8%) have poor knowledge about prevention of AIDS, 4 students (1.6%) have satisfactory knowledge about prevention of AIDS and 219 students (11.6%) have good knowledge about prevention of AIDS. While analyzing the knowledge about prevention of AIDS in 50 3 rd year students (20%) Istudents (0.4%) have poor knowledge about prevention of

AIDS, 10 students (4%) have satisfactory knowledge about prevention of AIDS and 39 students (15.6%) have good knowledge about prevention of AIDS. While analyzing the knowledge about prevention of AIDS in 50 4th year students (20%) 9 students (3.6%) have poor knowledge about prevention of AIDS, 16 students (6.4%) have satisfactory knowledge about prevention of AIDS and 25 students (10%) have good knowledge about prevention of AIDS. While analyzing the knowledge about prevention of AIDS in 50 5th year students (20%) no students (0.0%) have poor knowledge about prevention of AIDS, 8 students (3.2%) have satisfactory knowledge about prevention of AIDS and 242 students (16.8%) have good knowledge about prevention of AIDS. (Table No.9).

Among male students having knowledge about AIDS transmission from 100 students the number of male students having good knowledge is 69, number of male students having satisfactory is 31 and number of male students having poor knowledge is 0. Among female students having knowledge about prevention of AIDS from 150

students the number of female students having good knowledge is 70, number of female students having satisfactory is 45 and number of female students having poor knowledge is 35. (Table No.10).

Among male students having knowledge about prevention of AIDS from 100 students the number of male students having good knowledge is 88, number of male students having satisfactory is 12 and number of male students having poor knowledge is 0. Among female students having knowledge about AIDS transmission from 150 students the number of female students having good knowledge is 93, number of female students having satisfactory is 46 and number of female students having poor knowledge is l l . (Table No. 11).

The number of students whose father's/ guardian's income is upto 25000 among

good knowledge about AIDS transmission is 31, among satisfactory knowledge is 6 and among poor knowledge is 0. The number of students whose father's/ guardian's income is upto 50000 among good knowledge about AIDS transmission is 54, among satisfactory knowledge is 15 and among poor knowledge is 38. (Table No. 12).

The number of students whose father's/ guardian's income is upto 25000 among good knowledge about prevention of AIDS is 31, among satisfactory knowledge is 22 and among poor knowledge is 2. The number of students whose father's/ guardian's income is upto 50000 among good knowledge about prevention of AIDS is 78, among satisfactory knowledge is 21 and among poor knowledge is 7. (Table No.13).

Regarding the use of internet the No. of medical students among category of good knowledge of AIDS transmission are 159, among category of satisfactory are 60 and among category of poor are 5. The non-internet users among category of good knowledge of AIDS are transmission are 12, among category of satisfactory knowledge are 1 1 and among category of poor are 3. (Table No. 14).

The number of students regarding the knowledge about prevention of AIDS who use internet, among good category is 179, among satisfactory category is 29 and among poor category is 16. Number of students regarding knowledge about prevention of AIDS who do not use internet among good category is 17, among satisfactory category is 3 and among poor category is 6. (Table No. 15).

Table 1: Educational level of Respondent's Father

Variable	Frequency	%age
No Education	10	4
Up to Primary	5	2
up to Middle	8	3.2
up to Matric	28	11.2
up to Intermediate	32	12.8
up to Graduation or Above	180	72.0
Total	250	100

Table 2: Educational level of Respondent's Mother

Variable	Frequency	%age
No Education	65	26
up to Primary	20	8
up to Middle	25	10
up to Matric	38	15.2
up to Intermediate	25	10
up to Graduation or Above	77	30.8
Total	250	100

Table 3: Monthly Family Income of the Respondents

Variable	Frequency	%age
up to 25,000	42	16.8
up to 50,000	85	34
Above 50,000	123	49.2
Total	250	100

Table 4: Previous Place of Education of Respondents

Variable	Frequency	%age
Urban College	213	85.2
Rural College	37	14.8
Total	250	100

Table 5: Habit of Reading Magazine Among Respondents

Variable	Frequency	%age
Yes	148	59.2
No	102	40.8
Total	250	100

Table 6: Internet use Among Respondents

Variable	Frequency	%age
Yes	221	88.4
No	29	11.6
Total	250	100

Table 7: Television Viewing Among Respondents

Variable	Frequency	%age
Yes	199	79.6
No	51	20.4
Total	250	100

Table 8: Knowledge About AIDS Among Medical Students.

Knowledge	1st Year		2nd Year		3rd Year		4th Year		5th Year	
	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age
Poor(14-18)	03	1.2	07	2.8	02	0.8	02	0.8	00	
Satisfactory(1924)	20	08	16	6.4	06	2.4	26		09	3.6
Good(25-28)	27	10.8	27	10.8		16.8	22	8.8	41	16.4
Total	50	20	50	20	50	20	50	20	50	20

Table 9: Knowledge and Practices about Preventive Measures against AIDS among Medical Students.

Knowledge	I St Year		2nd Year		3 r Year		4t Year		5t Year	
	Freq.	O/oage	Freq.	O/oage	Freq.	%age	Freq.	O/oage	Freq.	O/oage
Poor(14-18)	08	3.2	17	6.8	01	0.4	09	3.6	oo	oo
Satisfactory(1924)	19	7.6		1.6	10	04	16	6.4	08	3.2
Good(25-28)	23	9.2	29	11.6	39	15.6	25	10	42	16.8
Total	50	20	50	20	50	20	50	20	50	20

Table 10: Gender of Students and Knowledge about AIDS.

Gender	Good	Satisfactory	Poor	Total
Male	69	31		100
Female	93	46	11	150
Total	162	77	11	250

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Table 11: Gender of Students and Knowledge and Practices about Preventive Measures Against AIDS.

Gender	Good	Satisfactory	Poor	Total
Male	88	12	00	100
Female	70	45	35	150
Total	158	57	35	250

Table 12: Income of Parents and Knowledge about AIDS.

Monthly Income of Parents	Good	Satisfactory	Poor	Total
up to 25,000	31	22	2	55
up to 50,000	40	30	2	72
More than 50,000	81	36	6	123
Total	152	88	10	250

Table 13: Income of Parents and Knowledge and Practices about Preventive Measures against AIDS.

Monthly Income of Parents	Good	Satisfactory	Poor	Total
up to 25,000	31	06		37
up to 50,000	54	15	38	107
More than 50,000	78	21	7	106
Total	163	42	45	250

Table 14: Internet Use and Knowledge about AIDS.

Internet Use	Good	Satisfactory	Poor	Total
Yes	159	60		224
	12	11		26
Total	171	82	08	250

Table 15: Internet Use and Knowledge and Practices about Preventive Measures against AIDS.

Internet Use	Good	Satisfactory	Poor	Total
Yes	179	29	16	224
	17			26
Total	196	32	22	250

DISCUSSION:

Auto-immune deficiency Syndrome is a preventable Syndrome. AIDS is an odious stigma in our society and people are generally reticent about it. The fight against HIV/AIDS revolves around the awareness about the disease among masses and the knowledge of medical students is cardinal in this fight. To assess the efficiency of our social awareness methods, a research on the awareness of medical students is devised. The reason behind choosing medical students as subjects lies in the fact that medical institute is the apogee of awareness in health related issues and medical students are the first liaison between their respective communes and medical professionals. The result shows that 14 0/0(35 out of 250) students have poor knowledge about prevention of HIV/AIDS while 5.6 0/0(14 out of 250) have poor knowledge about transmission of HIV/AIDS. Most of the students have good knowledge regarding AIDS transmission and prevention. Knowledge increases as the education, income and use of internet increases. It also shows that knowledge about transmission of AIDS among female students is good as compared to male students but the knowledge about prevention of AIDS is good among male students as compared to female students.'7

Another study in Saudi Arabia done on HIV infected patients showed: Twenty-nine percent of HIV-infected Saudis denied any risky behavior and thus the source of

infection is unknown. In the remaining cases, infection resulted from sexual activity in 46% of cases, blood transfusion in 17%, maternal-to child transmission in 5%, intravenous drug use in 2010 and organ transplant in 1% (872 total HIV infected patients). This study also shows the trend that there was a general lack of awareness.

CONCLUSION

From all or data we conclude that:

- Most of the students have good knowledge regarding AIDS transmission & prevention & knowledge Increases as education income & use of internet increases.
- Knowledge about transmission females is good as compared to males but knowledge regarding prevention of AIDS is good among males as compared to females.

Recommendations

1. There should be seminars about knowledge and prevention of AIDS among medical students
2. Decrease Urban-Rural bias in AIDS related health facilities.
3. Awareness about knowledge and prevention of AIDS should be increased by Media Exposure.

4.Government should make policies and plans to remove AIDS especially in Rural Areas.

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