Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE
DOI: 10.53555/cdpcgp03

KNOWLEDGE, ATTITUDE AND WILLINGNESS OF PHYSICIAN TO TREAT HIV/AIDS PATIENTS ATTENDING ANTI-RETROVIRAL CLINICS IN THE PUNJAB, PAKISTAN

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ABSTRACT

Background: HIV/AIDS is a public health problems and has been since long stigmatized due to its initial method of transmission. This stigma and discrimination also account for refusal of services in public and private sectors. HIV/AIDS attached stigma and discrimination is also found amongst and with health care providers attached with care of this disease. To treat HIV/AIDS anti retrovirals drugs are used in various combinations, commonly referred to as highly active retroviral therapy. Very few studies are available about discrimination behavior of health care providers including doctors, nurses and other hospital staff, so this study was planned to have an idea of description of knowledge, attitude and willingness practices.

Objective: To find out the knowledge, attitude and willingness of Physicians to treat HIV/AIDS patients, attending Anti-retroviral Clinics of Punjab, Pakistan

Methodology: This cross sectional study was done at all Anti-retroviral Clinics, established in Public Sector in Punjab, Pakistan. Total 62 physicians were enrolled. Informed consent and demographic detail was noted. about knowledge, attitude and willingness of Physician to treat HIV/AIDS patients were found out with the help of questionnaire. All the collected data was entered and analyzed on SPSS version 24.

Results: Among 62 healthcare professionals participants having age range between 20 - <30 years were 12(19.35%), 27(43.55%) participants were male and 45(72.58%) participants had post-graduation. all the 62 (100%) participants responded that HIV/AIDS is a sexually transmitted disease, it is also transmitted through unsafe blood transfusion, unsafe needle and syringe, mother to child. 32(51.6%) among physicians of our region. The attitude and willingness of the physicians of region was found to be satisfactory (84.1%) towards HIV/AIDS patients. 1.6% to 12.9% were invariably stigmatized during patient care in different aspects.

Key words: *Physician, HIV/AIDS, Antiretroviral Therapy*

INTRODUCTION:

HIV/AIDS is a disease as well as a very big social issue. And to understand the social aspect of HIV/AIDS all the risk factors and influencing behavior is important and to treat this disease like are anti-retroviral therapy (ART), and adherence and prevention of secondary transmission are need to be understood. Pakistan is one of the country with a huge number of AIDS, one of the reason is that the occurrence of this disease is relatable with poverty, hunger, influencing, under development, illiteracy and influencing.[1]

Many health programs are conducted in Pakistan related to AIDS and these are conducted to aware the people and provide them proper knowledge about disease, after many studies conducted during 90's resulted that to spread knowledge about disease is not enough to prevent the disease and to change the behavior of people towards AIDS. As no vaccine is there and no cost effective treatment was present so it was though just to change the social behavior of people towards this disease will be a worthy option.[2] Though, research is covering the involvement of behavior and human rights, which needed to be changed. In Pakistan, the occurrence of HIV differs on bases discrimination and disgrace between high risk groups. This stigma is resulted in two different ways.[3]

First is this that there is negligence from community and health care workers towards the HIV patients and they do not support them or take care of them properly and at second there is the fear of stigma that can dissuade many people to get them tested. Stigma, normally explained as discrimination, disregarding, questioning, and prejudice is a reality in any society and it is absolute thrust upon persons living with HIV/AIDS (PLWHA), their family members and those who are directly in contact with this pandemic disease. The problem of stigma contains significant importance on health policies and intervention efforts of HIV/ AIDS control Programs of any country. [4]

The barriers to HIV/ AIDS prevention and control include but not limited to (a) The social and structural barriers including poverty, cultural beliefs, stigma etc on demand side (b) the health department and policy related barriers including staff capacity, rude or disgraced attitude of health care providers and weak policies on HIV testing or lab reporting on services and supply side (c) HIV/ AIDS program barriers including the disintegrated data, poor data sharing, in adequate health information system and lack of funding.

Therefore, in 2006 United Nations through its political declaration on HIV/ AIDS gave full emphasis on stigma and prejudice and decided it key element in warfare against this global pandemic.[5] HIV stigma is universally persistent and harmful. In Asia, HIV stigma and discrimination (HSD) toward PLWHA is a general process when performed on individual level, family, and the institutional levels, and the health care segment is no exclusion.[6]

When government and private sectors deny admit patients with HIV the Stigma and discrimination is urged. After getting positive status of HIV, some patients when concern with doctors they did not allow them to get medical facilities. Therefore those patients isolate themselves for whole life. Firstly doctors did not diagnosed them and deny to prescribe any medicine.to handle the HIV situation there are two big issues Stigma and discrimination and due to these quality diagnosis and services are not being provided to the patients. These factors of HIV-related stigma and discrimination are not good in many ways for treatment of HIV and are discussed in lots of researches earlier. Due to the stigma there is less interest in taking precautionary measures about the HIV because people will not go through diagnostic test will not attend counseling sessions and how to prevent a child to getting this from mother, an incomplete or late exposure of HIV serostatus to spouses and family members, and improper care and support, such as delay or refusal of treatment, with people living with HIV (PLHWA) or not to move out of station to get the medical treatment due to the fear of breaks of privacy and arrogances of medical services provider.[7]

To spread the awareness of HIV in country, to spread the understanding of stigma and discrimination aspects by coordination on country level is equally important. To train the health care providers is also one of the most important step. And also increase their knowledge about how to take precautionary measures and understand the stigma and discrimination of HIV. Also give

them training about the results of negligence and ignorance and all the misconceptions and fears of health care workers about HIV.[8]

Those who have HIV are negatively treated by other people at large number they are also stigmatized. Many studies are performed universally on the stigma and discrimination of HIV by Health Care Workers (HCW). As the behaviors of people changes country wise so it is very important to know the risk factor of stigma and discrimination to overcome this problem. Yet, in the Pakistani setting, HIV-related discrimination in medical colleges was directed mainly in PLWHA, and less research was performed on procedure by perception of HCWs. The attitude of health care workers was not different from the other people. Very few studies are available about discrimination behavior of health care providers which include doctors, nurses and other hospital staff towards people living with PLWHA. In view of this, a description of this issue needs to be addressed. It will also provide the context for the future research studies

OBJECTIVE OF THE STUDY

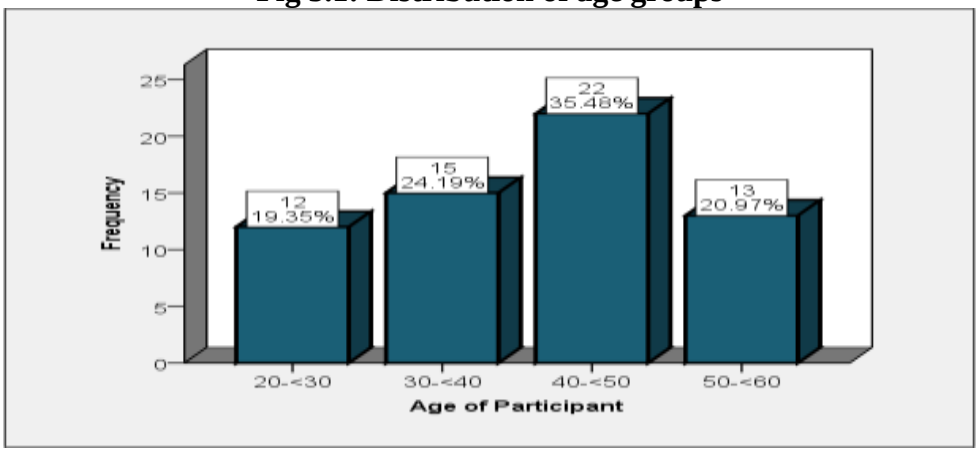
To find out the knowledge, attitude and willingness of Physicians to treat HIV/AIDS patients, attending Anti-retroviral Clinics of Punjab, Pakistan

MATERIAL AND METHODS

This cross sectional study was done at all Anti-retroviral Clinics, established in Public Sector in Punjab, Pakistan. Total 62 physicians were enrolled. Informed consent and demographic detail was noted. about knowledge, attitude and willingness of Physician to treat HIV/AIDS patients were found out with the help of questionnaire. All the collected data was entered and analyzed on SPSS version 24.

RESULTS:

Fig 5.1: Distribution of age groups



In our study total 62 healthcare professionals participated. The participants having age range between 20 - <30 years were 12(19.35%), the participants having age range between 30 - <40 years were 15(24.19%), the participants having age range between 40 - <50 years were 22(35.48%) and the participants having age range between 50 - <60 years were 13(20.97%).

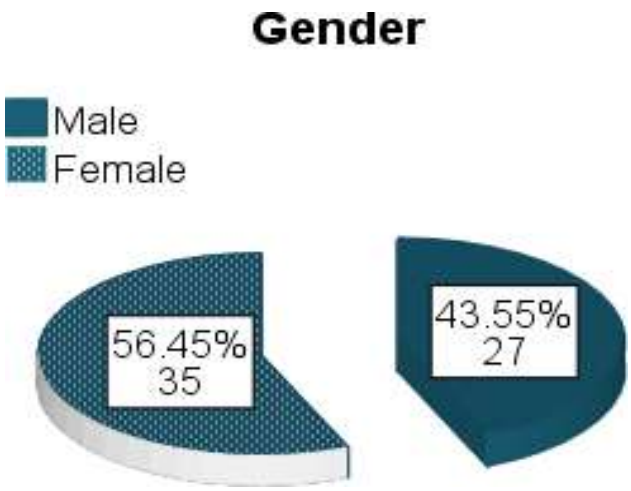
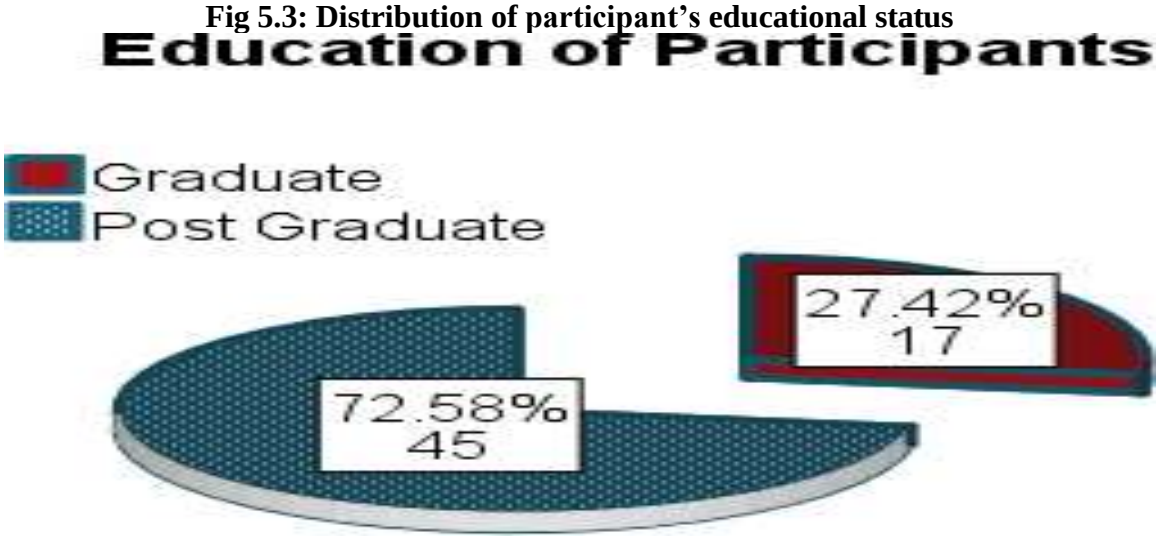


Fig 5.2: Distribution of gender

In this study 27(43.55%) participants were male and 35(56.45%) participants were females. male to female ratio of the participants was 0.7:1.

Fig 5.3: Distribution of participant's educational status



According to this study 17(27.42%) participants were graduates and 45(72.58%) participants had post-graduation.

Table 5.1: Frequency distribution of different knowledge questions(a)

Knowledge Variables	Frequency	Percent
HIV/AIDS is a sexually transmitted disease		
Yes	62	100.0
HIV/AIDS is also transmitted through unsafe blood transmission		
Yes	62	100.0
HIV/AIDS is also transmitted through unsafe needle and syringe		
Yes	62	100.0
HIV/AIDS is transmitted through mother to child		
Yes	62	100.0

In terms of knowledge variables, the all the 62 (100%) participants responded that HIV/AIDS is a sexually transmitted disease, it is transmitted through unsafe blood transmission, it is transmitted through unsafe needle and syringe, it is transmitted through mother to child.

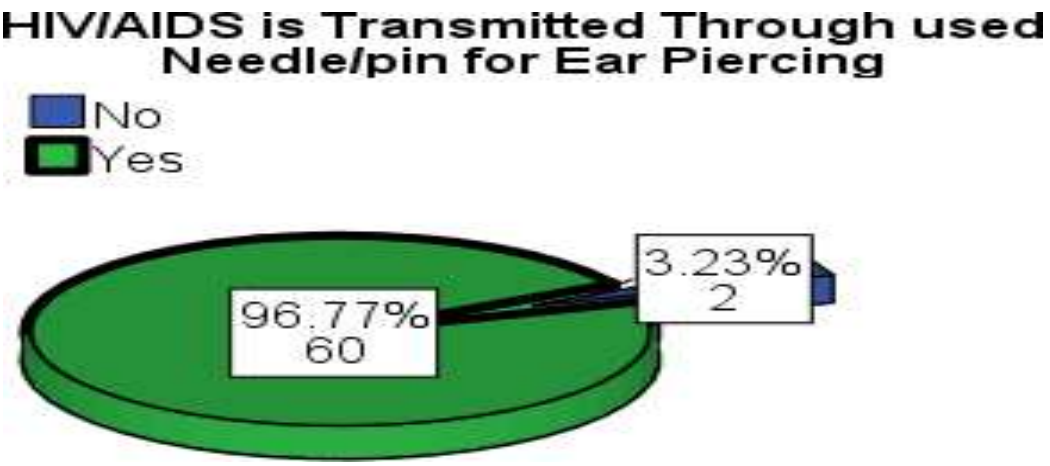


Fig 5.4: Distribution of knowledge question "HIV/AIDS transmitted through used needle/pin for ear piercing"

The study results showed that the participants who think HIV/AIDS is transmitted through used needle/pin for ear piercing were 60(96.77%).Table 5.2: Frequency distribution of different knowledge questions(b)

	Frequency	Percent
HIV/AIDS spread through meal, water air and insects		
Yes	1	1.6
No	61	98.4
HIV/AIDS can be prevented through safe sex		
Yes	62	100.0
HIV/AIDS can be prevented through safe injection		
Yes	62	100.0
HIV/AIDS can be prevented through screened blood		
Yes	62	100.0
HIV/AIDS can be prevented through follow of infection control SOPs		
Yes	62	100.0

Out of 62 participants, the participants who think that HIV/AIDS spread through meal, water air and insects were 1(1.6%), the participants who think that HIV/AIDS can be prevented through safe sex, HIV/AIDS can be prevented through safe injection, HIV/AIDS can be prevented through screened blood and HIV/AIDS can be prevented through follow of infection control SOPs wee 62(100%).

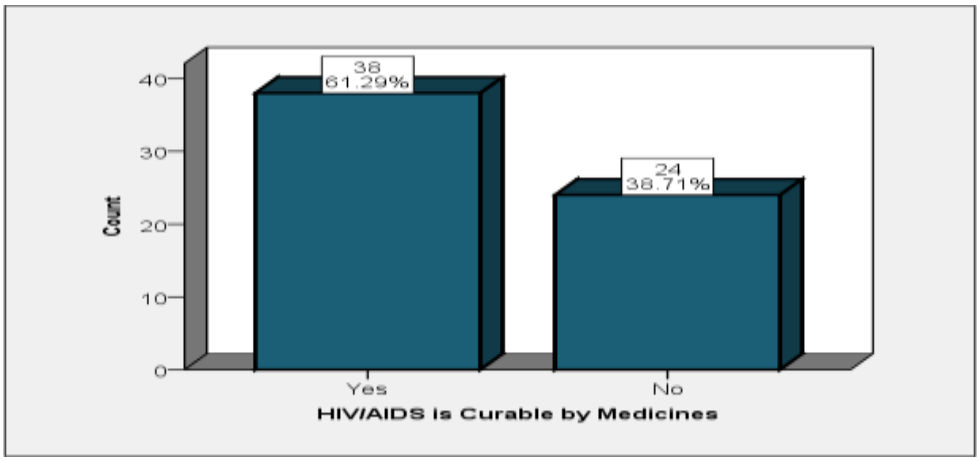


Fig 5.5: Distribution of knowledge question "HIV/is curable by medicine"

According to this study 38(61.29%) participants believed that HIV/AIDS is curable by medicine.Table 5.3: Frequency distribution of different knowledge questions(c)

	Frequency	Percent
Pre-exposure prophylaxis can be used to control HIV/AIDS		
Yes	56	90.3
No	6	9.7
Pre exposure prophylaxis can be useful in controlling HIV/AIDS		
Yes	61	98.4
No	1	1.6

In terms of knowledge questions, 56(0.3%) participants believed that pre-exposure prophylaxis can be used to control HIV/AIDS and 61(98.4%) participants believed that pre-exposure prophylaxis can be useful in controlling HIV/AIDS.

Table 5.4: Frequency distribution of different knowledge questions(d)

	Frequency	Percent
HIV/AIDS is transmitted sexually and through mother to child if ART is used regularly		
Yes	10	16.1
No	52	83.9
After needle stick injury, health care workers should use PEP (Post exposure Prophylaxis)		
Yes	62	100.0

According to this study 10(16.1%) participants believed that HIV/AIDS is transmitted sexually and through mother to child if ART is used regularly and 62(100%) participants believed that after needle stick injury, health care workers should use PEP (Post exposure Prophylaxis)

Table 5.5: Frequency distribution of different questions about attitude and willingness practices

	Frequency	Percent
I don't like my job because i deal with HIV/AIDS patients		
Strongly Disagree	43	69.4
Disagree	15	24.2
Agree	4	6.5
My co-workers have discriminated against me due to my Job nature		
Strongly Disagree	30	48.4
Disagree	28	45.2
Agree	3	4.8
Strongly Agree	1	1.6
My family members have discriminated against me due to my job nature		
Strongly Disagree	34	54.8
Disagree	24	38.7
Agree	4	6.5

In terms of attitude and willingness practices 4(6.5%) participants strongly disagreed that "I don't like my job because i deal with HIV/AIDS patients". 30(48.4%) participants strongly disagreed that "my co-workers have discriminated against me due to my Job nature". 34(54.8%) participants strongly disagreed with "family members have discriminated against me due to my job nature".

Table 5.6: Frequency distribution of different questions about attitude and willingness practices (a)

	Frequency	Percent
I feel that some friends have rejected me because of my job nature		
Strongly Disagree	38	61.3
Disagree	21	33.9
Agree	3	4.8
Due to my job nature, others seem to feel awkward and tense when they are around me		
Strongly Disagree	32	51.6
Disagree	26	41.9
Agree	3	4.8
Strongly Agree	1	1.6
I am reluctant to see HIV/AIDS patients		
Strongly Disagree	34	54.8
Disagree	23	37.1
Agree	4	6.5
Strongly Agree	1	1.6

In terms of attitude and willingness practices, 32(51.6%) participants were strongly disagreed with the statement that "due to my job nature, others seem to feel awkward and tense when they are around me". The 34(54.8%) participants were strongly disagreed with the statement "I am reluctant to see HIV/AIDS patients".

Table 5.7: Frequency distribution of different questions about attitude and willingness practices (b)

	Frequency	Percent
I treat badly with HIV/AIDS patients		
Strongly Disagree	37	59.7
Disagree	24	38.7
Agree	1	1.6
I am reluctant to clean/change bed of HIV/AIDS patients		
Strongly Disagree	34	54.8
Disagree	18	29.0
Agree	9	14.5
Strongly Agree	1	1.6
I maintain distance from HIV/AIDS patients		
Strongly Disagree	26	41.9
Disagree	30	48.4
Agree	6	9.7

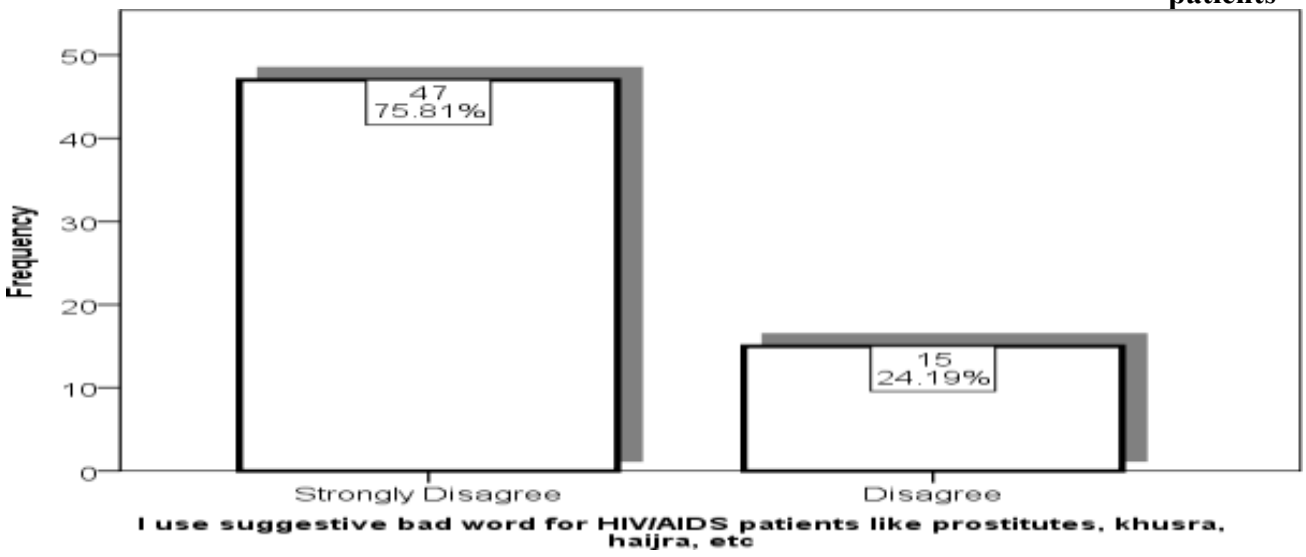
In our study in terms of attitude and willingness practices, 37(59.7%) participants strongly disagreed with the statement that "I treat badly with HIV/AIDS patients", 34(54.8%) participants strongly disagreed with the statement that "I am reluctant to clean/change bed of HIV/AIDS patients", 26(41.9%) participants strongly disagreed with the statement that "I maintain distance from HIV/AIDS patients".

Table 5.8: Frequency distribution of different questions about attitude and willingness practices (c)

	Frequency	Percent
I am reluctant to respond to any call/ request from HIV/AIDS patients due to their disease nature		
Strongly Disagree	30	48.4
Disagree	28	45.2
Agree	4	6.5
I am reluctant to get close to HIV/AIDS patients		
Strongly Disagree	34	54.8
Disagree	22	35.5
Agree	6	9.7

According to this study in terms of attitude and willingness practices , 30(48.4%) participants were strongly disagreed with the statement "I am reluctant to respond to any call/ request from HIV/AIDS patients due to their disease nature". Similarly 34(54.8%) participants were strongly disagreed with the statement that "I am reluctant to get close to HIV/AIDS patients".

Fig 5.6: Distribution of knowledge question "I use suggestive bad words for HIV/AIDS patients"



In terms of attitude and willingness practices 47(75.81%) were strongly disagreed with the statements that "I use suggestive bad words for HIV/AIDS patients like prostitutes, khusra, haijra etc"

Table 5.9: Frequency distribution of different questions about attitude and willingness practices (d)

	Frequency	Percent
I feel ashamed or discriminate when my friends or co-workers use suggestive bad words for HIV/AIDS patients like prostitutes, khusra, haijra, etc		
Strongly Disagree	26	41.9
Disagree	20	32.3
Agree	7	11.3
Strongly Agree	9	14.5
I prefer talk to patients with Face covered		
Strongly Disagree	23	37.1
Disagree	17	27.4
Agree	18	29.0
Strongly Agree	4	6.5
I feel HIV/AIDS patients as sinners		
Strongly Disagree	41	66.1
Disagree	16	25.8
Agree	5	8.1

In our study related to attitude and willingness practices 26(41.9%) participants were strongly disagreed with the statement "I feel ashamed or discriminate when my friends or co-workers use suggestive bad words for HIV/AIDS patients like prostitutes, khusra, haijra, etc", 23(37.1%) were strongly disagreed that "I prefer talk to patients with Face covered", 41(66.1%) were strongly disagreed with the statement that "I feel HIV/AIDS patients as sinners".

Table 5.10: Frequency distribution of different questions about attitude and willingness practices (e)

	Frequency	Percent
I never hold HIV/AIDS patients		
Strongly Disagree	33	53.2
Disagree	19	30.6
Agree	8	12.9
Strongly Agree	2	3.2
I don't share food or any eatable items with HIV/AIDS patients		
Strongly Disagree	24	38.7
Disagree	29	46.8
Agree	6	9.7
Strongly Agree	3	4.8
My partner threaten to abandon my current job		
Strongly Disagree	36	58.1
Disagree	26	41.9
My friends insult me due to my job nature		
Strongly Disagree	38	61.3
Disagree	21	33.9
Agree	3	4.8

Out of 62, 33(53.2%) participants were strongly disagreed with statement that "I never hold HIV/AIDS patients", 24(38.7%) participants were strongly disagreed with the statement that "I don't share food or any eatable items with HIV/AIDS patients". 36(58.1%) participants were strongly disagreed with the statement that "My partner threaten to abandon my current job", 38(61.3%) participants were strongly disagreed with the statemen that "my friends insult me due to my job nature".

Table 5.11: Frequency distribution of different questions about attitude and willingness practices (f)

	Frequency	Percent
My family insult me due to my job nature		
Strongly Disagree	42	67.7
Disagree	20	32.3
My relatives insult me due to my job nature		
Strongly Disagree	39	62.9
Disagree	20	32.3
Agree	1	1.6
Strongly Agree	2	3.2
I have fear of being infected from HIV/AIDS patients		
Strongly Disagree	16	25.8
Disagree	24	38.7
Agree	20	32.3
Strongly Agree	2	3.2
I fear that treating HIV/AIDS patients is a sin		
Strongly Disagree	48	77.4
Disagree	12	19.4
Agree	2	3.2

In our study 42(67.7%) participants were strongly disagreed with the statement that "My family insult me due to my job nature ", 39(62.9%) particiapnts were strongly disagreed with the statement that "My relatives insult me due to my job nature", 16(25.8%) particiapnts were strongly disagreed with the statement that "I have fear of being infected from HIV/AIDS patients ", similarly 48(77.4%) participants were strongly disagreed with the statement that "I fear that treating HIV/AIDS patients is a sin".

Table 5.12: Frequency distribution of different questions about attitude and willingness practices (g)

	Frequency	Percent
I fear that my family and friends can be infected with my job nature		
Strongly Disagree	32	51.6
Disagree	21	33.9
Agree	8	12.9
Strongly Agree	1	1.6
I take HIV/AIDS patients as normal like other patients		
Strongly Disagree	12	19.4
Disagree	5	8.1

Agree	20	32.3
Strongly Agree	25	40.3
I feel myself willing to serve and help HIV/AIDS patients		
Strongly Disagree	5	8.1
Disagree	3	4.8
Agree	21	33.9
Strongly Agree	33	53.2

In terms of attitude and willingness practices 32(51.6%) participants were strongly disagreed with the statement that "I fear that my family and friends can be infected with my job nature", 12(19.4%) participants were strongly disagreed with the statement that "I take HIV/AIDS patients as normal like other patients" and 5(8.1%) participants were strongly disagreed with the statement that "I feel myself willing to serve and help HIV/AIDS patients"

DISCUSSION:

This descriptive cross sectional survey was conducted at all (25 in number) ART (Anti-retroviral) Clinics, established in Public Sector in Punjab, Pakistan to find out the knowledge, attitude and willingness of Physicians to treat HIV/AIDS patients, attending Anti-retroviral Clinics of Punjab, Pakistan.

In Pakistan HIV/AIDS is one of the major health issues. In 61 provinces of Vietnam the number of cases of HIV was about 130,000 Vietnam according to statistics calculated, the occurrence rate of HIV in adults is 0.3% according to an estimation. 65% of patients were those who taking drugs 26% were the female sex workers. The trails of Anti-retroviral therapy ART, clinically in some places the Anti-retroviral therapy (ART) was used as trail, health care staff visible to HIV, and pregnant ladies determined to have HIV. In developing countries Absence of medical services foundations, including the absence of prepared and experienced medical services experts, made obstructions recommending Anti-retroviral drugs.[10, 11]

According to the findings of this study was observed acceptable knowledge attitude and willingness practices among physicians to treat HIV/AIDS patients, attending Anti-retroviral Clinics of Punjab, Pakistan. Studies are discussed below showing their results as. From previous study it was found that health professional who have adequate knowledge about HIV/AIDS had more focus on patient care. Lot of research has been done in European and Asian countries but there is not particular data available about the level of knowledge of health care providers about HIV/AIDS and their response towards it.[9]

Most of the doctors overviewed believed themselves to be HIV specialists. Society anticipates that physicians should know more than laypeople. To satisfy this hope, doctors might misjudge their HIV/AIDS knowledge.[12]

The results LIEN QUACH et al[12] study showed that, in general, physicians' knowledge about HIV biology was poor, and we did not find a difference in knowledge about HIV biology between specialists and generalists. This finding was consistent with previous research conducted in the United States.[10, 13,14]

Nilima Sharma et al[15] documented in their study that the level of knowledge regarding HIV and AIDS was acceptable. Similar to our study findings, A study by Azodo et al[16], (86.2% among final-year medical students in Nigeria). It is fundamental that each work be made to ensure both health care providers and patients from HIV in the dental practice as the standard way of spread of HIV/AIDS is through a singular's contact with tainted blood or other organic liquids [17]. Most of the health care workers 60% of them reported that the transmission of virus can be through the contaminated needle and the occurrence of virus through needle is less than 1%. in the study by Singh et al.[18], only 37.1% of the medical professionals reported that odds of HIV transmission

after a single contaminated needle stick injury was 0.1–0.4%. There are numerous misguided judgments about the danger of transmission through dirty needles that should be remedied. The danger of HIV transmission through accidental needle stick injury exists albeit very lower in contrast with different other ways for transmission of HIV[19].

The apprehension about treating HIV patients might be because of insufficient information on HIV transmission. Pass studies had shown that the health care workers are on lower risks [30]. For the proper management and cure of the patients the general practitioners in Pakistan have positive attitude towards the HIV disease transmitted sexually but there is lack of knowledge.[20]

Nilima Sharma et al[15] showed that the overall willingness to treat HIV positive patients was found to be high (86%) among the some health care providers but medical student showed no willingness and negative attitude and in practitioners as well according to studies conducted by Azodo et al. (58.8% among Nigerian dental students)[16], Hu et al. (49% recorded among Taiwanese students)[21], El-Maaytah et al.[32] (15% among the Jordanian), 63.3% reported by Oboror et al.[31] among the Nigerian preclinical students, 63.6% among Nigerian dentists by Uti et al.[23], 78.4% among Nigerian dentists by Utomi et al.[22], Solomon et al.[24] (62% of United states (U.S.) dental school seniors), Bennett et al.[30] (67% among dentists in US), Nuttall and Gilbert[25] (84.3% among final-year students in the United Kingdom) and Seacat and Inglehart[26] (83% among US students).

Ability to treat is believed to be the main indicator of real treatment of a HIV-positive patient [27]. In a study of 450 healthcare practitioners in India found that only 4.1% wished they were allowed to refuse to care for people with HIV/AIDS[28]

A study by Zorana Gledović et al[29] exhibited in their review discoveries that a lacking degree of information on HIV transmission and the danger later openness was noticed for the most part, information was better in doctors contrasted with other HCWs sub divisions. A rather high proportion of HCWs showed inappropriate attitude regarding the need of HIV testing of all hospitalized patients (64.7%) and obligation of HIV+ patient to report his/her HIV status (88.9%) in order to practice universal precaution. Additionally, 6.2% HCWs would refuse to treat an HIV+ patient.

The misconceptions which were observed in many of previously conducted studies could be explained because prevention activities regarding HIV/AIDS may not have provided sufficient information related HIV/AIDS.

CONCLUSION:

From the findings of this study we may concluded that adequate knowledge was noted among physicians of our region. The attitude of the physicians in region was also found to be satisfactory in which most of them were willing to treat HIV/AIDS. From the findings of this study It is suggested that If physicians had better information about HIV transmission, their attitudes might become more positive and they might then provide better care. A minor percentage have faced stigma and discrimination with patients, co-workers, friends, family.

LIMITATIONS

- ❖ One of the limitations of the study was that the reliability of self designed questionnaire was not calculated.
- ❖ Due to self designed questionnaire were could not be able to comment about overall score of knowledge attitude and willingness of the physicians
- ❖ The research was conducted at one point in time, so the knowledge of the physicians may change with new information and training, or the considerable media coverage of HIV/AIDS during the period subsequent to this research.
- ❖ One more limitation of this study was that it was done on small sample size

RECOMMENDATIONS:

- .It is recommended that the measures like seminars, awareness campaigns etc to increase knowledge and support positive attitudes and practices should be implemented at all levels of the healthcare system
- A continuous education should be part of the training of physicians to increase the level of knowledge.
- It is recommended that community campaigns should be launched to tackle this stigma
- It is recommended that in future studies should be done on this topic with validated questionnaire, so that better idea about knowledge, attitude and willingness of the physicians.

CONFLICT OF INTEREST / DISCLOSURE: The author declares no conflict of interest.

SOURCE OF FUNDING: The authors received no financial support for the research, authorship or publication of this article.

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