



Impact of Quality of Life, Social Awareness and Political Willingness on Prevention from HIV/AIDS in Pakistan: A Mediation and Moderation Model

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ARTICLE INFO

Article History:

Received: May 09, 2023
Revised: June 28, 2023
Accepted: June 29, 2023
Available Online: June 30, 2023

Keywords:

Health-consciousness
HIV/AIDS
Political Willingness
Social Awareness
Religiosity

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

Currently, modern world is focusing on the control of fatal diseases including HIV/AIDS. However, in developing countries these diseases are spreading rapidly. There are various factors, which encourage HIV/AIDS. One of the major reasons is lack of awareness among public. In Pakistan, scholars did not discuss the role of awareness about HIV/AIDS as a prevention tool. This study is one of the efforts to observe the impact of quality of life, social awareness and political will on the prevention of HIV/AIDS in Pakistan. Majority of the past literature concentrated on the issue of HIV/AIDS; however, there is paucity of literature on highlighting the major factors of HIV/AIDS prevention. Therefore, this is one of the few studies, which formally investigated the major factors contributing towards the prevention of HIV/AIDS, particularly in the Sind province of Pakistan. A questionnaire was utilized to collect the data. Partial Least Square (PLS 3)-Structural Equation Modelling (SEM) was used to analyse the data. It is found that political willingness, social awareness and quality of life has a significant relation with HIV/AIDS prevention. In order to formulate the strategy, this study is important for governments and NGOs to consider social awareness, government willingness and quality of life as a tool to prevent HIV/AIDS in Pakistan.

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1. Introduction

The issue of HIV/AIDS is not openly discussed in Pakistan where the adult people are the main victim of this disease. Pakistan's 60% population is below 30 years of age (statistics, 2018) where the highest number of HIV/AIDS victims are included. Studies have mentioned that Pakistan is a developing country with a population of 220 million and more than 60% of population lived in rural areas (statistics, 2018). According to Arif (2019), in Pakistan, HIV cases increased by 45% from 2010 to 2017 with an increase of 20000 per year. Moreover, according to the report of National AIDS Control Program Pakistan, more than 165000 people are living with AIDS out of which only 15% of people are aware of their disease level. Particularly, the province of Pakistan, namely, Sind is suffering from HIV/AIDS. Recent studies such as Arif (2019) and A. Ahmed, Hashmi, and Khan (2019) described that the ratio of HIV patients increased dangerously in Pakistan which gives rise to the question against the performance of AIDS Control Program working nationwide. Specifically, in year 2019, 26041 people were screened from the only one district Larkana of Sind province of Pakistan and results were alarming that 751 people were infected and not even all of them were aware about their HIV problem. Increase in the cases of HIV/AIDS in Sind is the first motivational factor of this study; therefore, this study is one of the attempts to highlight HIV/AIDS prevention in Sind, Pakistan.

Currently, modern world is focusing on the control of fatal diseases including HIV/AIDS. However, in developing countries these diseases are spreading rapidly, for example in Somalia, Africa, Nigeria and Pakistan (Abu-Raddad et al., 2010; Mumtaz et al., 2011; Paul K, 2019). There are various factors which encourage the HIV/AIDS. First, one of the major reasons is lack of awareness among the public. In Pakistan, scholars did not discuss the role of awareness about HIV/AIDS as a prevention tool. In past, many studies were carried out on this issue of HIV virus transfer in different parts of the world. Most of the studies have mentioned that this virus is transferred from one body to other through physical connection such as sex, blood transfer, injection used by already infected person, drug abused injection (Mumtaz et al., 2011; Paul K, 2019; Strathdee, Zafar, Brahmbhatt, Baksh, & ul Hassan, 2003). According to Abu-Raddad et al. (2010) and Mumtaz et al. (2011), in the Middle East and Africa the HIV virus cases are increasing day by day due to sexual relationship between men and men as well as men and women. Moreover, Studies explain that lack of sexual knowledge and social awareness about HIV/AIDS also a main contributor specifically, in the rural areas of developing and under developing countries, i.e., Pakistan (Farid-ul-Hasnain, Johansson, Gulzar, & Krantz, 2013; Naif, Hwaid, Hasan, Khalifa, & Humadi, 2019; Nwagwu, 2008). Therefore, there is need to create awareness among general public to prevent from HIV/AIDS.

Second, previous studies, have also stated that there are various social factors also which directly effect this issue of AIDS transfer or HIV virus transfusion such as poverty. Poor people want to achieve quality of life by adopting sexual activities as profession which spreads HIV/AIDS. People specifically in developing and under developing countries are poor and they need money to attain a significant level in quality of life. Hence, due to this poverty, women are getting involved in sexual activities for economic gains (Broadhead & Heckathorn, 1994; Finnegan, 2007). Which is also known as prostitution, this is one of the main source of this disease (Da et al., 2016; Mehrabi, Tamam, Bolong, & Hasan, 2016). Therefore, studies on HIV/AIDS lack the role of "quality of life" among general public. Literature has discussed the role of various factors in HIV/AIDS prevention; however, quality of life is ignored.

Third, unfortunately, in developing countries, political governments are not playing a role to raise the quality of life in creating social awareness to develop the people's health-conscious behavior; thus, cases of HIV increase continuously. Literature reveals that to control any disease a unanimous effort from all the stake holders such as government, doctors, teachers, Parents, general public is needed (Naif et al., 2019). Researchers and scholars are not focusing on the role of political government to use its resources and infrastructure to create this awareness in the youth specifically in the rural areas. Literature lacks the role of political issue in HIV/AIDS prevention. Some other studies have mentioned that there are several political factors which are needed to be addressed in future to secure our new generation from this type of fatal disease (Paul K, 2019). Fourth, role of religious culture is also very significant in this context specifically, in Muslim countries. Because religion gives the instruction to avoid such sins like sex, drug abuse, unethical practices and also mentions the punishments to stop the people from committing sins (Islam, Ahmad, Ghailan, & Hoque, 2019). Islam is the religion of Muslims and Islam mentions very severe punishments for those people who commit sins like sex, drug abuse, and even create problems for general public. Hence, in the case of Pakistan, induction of Islamic culture in the medical and general education systems curriculum will help to save young generation from HIV/AIDS and other fatal diseases (Irfan et al., 2019). Fifth and final factor is that people are not health-conscious. Governments are not playing role in creating social awareness to develop the people's health-conscious behavior; thus, cases of HIV increase continuously. Therefore, health-conscious behavior is an important factor (Novella, 2019) which can play a role to decrease or increase HIV/AIDS. This factor is ignored by the literature in relation to the HIV/AIDS prevention.

Various studies discussed the issue of HIV/AIDS in Pakistan (Iqbal et al., 2019; Manzoor, Khan, Navied, & Abbas, 2019; Tirmizi, Khan, Tirmizi, & Tirmizi, 2019); however, the HIV/AIDS prevention is not highlighted by the previous studies. The lack of research on HIV/AIDS prevention is one of the root causes for increase in HIV/AIDS in Sind, Pakistan. Literature lacks the role of social awareness, quality of life, political willingness, health-conscious behaviors and religion in HIV/AIDS prevention, particularly in Sind. Therefore, this study is an attempt to fill this literature gap by investigating the various major factors of HIV/AIDS prevention. This is the

second motivational factor of the current study. Thus, the objective of this study is to investigate the factors that contribute to HIV/AIDS prevention in Sind, Pakistan.

The current study has valuable insights which contributed both theoretically and practically. This study contributed to the literature by investigating the relationship between social awareness, quality of life, political willingness, health-conscious behaviors and religion in HIV/AIDS prevention. This is the pioneer study which discussed the relationship between these variables in the context of HIV/AIDS. Especially, this study is most significant because it addressed the alarming situation in Sind and provides the way to handle HIV/AIDS. The relationship between these variables has vital importance for practitioners. Specifically, this study is important for non-profit organizations, for instance, government organizations working in Sind to handle HIV/AIDS. Therefore, while making the strategies to reduce HIV/AIDS, this study provides valuable insights.

2. Literature Review

2.1. HIV Prevention

AIDS is name of a fatal disease which is transferred from one person to another through fluid transfer from the patient of HIV to a healthy person. For example, blood transfer, used injection and through sexual relation (Islam et al., 2019; Mumtaz et al., 2011; Strathdee et al., 2003). This disease is currently considered as incurable in the world. The only way of prevention of this disease is the safety measures. Previous studies reveal that the root causes of this disease are lack of social awareness in general public, poor quality of life, low educational level, and most importantly lack of political willingness to create awareness and drive campaigns for it (Irfan et al., 2019; Paul K, 2019). Currently, HIV is spreading dangerously with the high ratio in developing countries including Pakistan (Mehrabi et al., 2016; Paul K, 2019). The main reason is the factor mentioned above that people in developing countries are not educated and there are no social campaigns driven by the political government to create the social awareness against these diseases. Another important factor is religious factor due to which people feel hesitation to discuss about their sexual relations and people do not have awareness about sexual safety measures and all these factors are directly related to the health--conscious behavior(Naif et al., 2019).

Studies have clearly mentioned that the main reasons of this alarming increase in the cases of HIV are lack of social awareness, lack of knowledge about HIV, low political willingness in the sense of poor administration and control on health and AIDS Control Program, poor governmental policies, poor quality of life/ poverty, and failure of concerned authorities to develop the health-conscious behavior among people (Emmanuel, Achakzai, & Reza, 2019; Waheed & Zaheer, 2019). Hence, government must take necessary steps to create social awareness about sexual relations, blood transfusion, drug abuse, improve the peoples quality of life and stop prostitution, arrange seminars, and launch emergency campaigns to develop the health-conscious behavior in people for the prevention of the HIV/AIDS in Pakistan (Irfan et al., 2019; Ujan, Bhutto, & Ismaili, 2019; Waheed & Zaheer, 2019). Moreover, studies have also mentioned that practice and campaign of Islamic culture and values will play a vital role to develop a health-conscious behavior in people and in the prevention of HIV/AIDS in all Muslim countries specifically in Pakistan (Ibrahim & Songwathana, 2009; Iqbal et al., 2019; Naif et al., 2019; Rajabali, Khan, Warraich, Khanani, & Ali, 2008). Therefore, this study focusses on the role of factors such as, people's quality of life, social awareness, and political willingness in developing health-conscious behavior of people to prevent the people from HIV/AIDS in Pakistan.

2.2. Social Awareness

Generally, social awareness means to transfer knowledge and Information to other people. However, in the context of medical social awareness, it means to spread information and knowledge about fatal diseases to general public for the prevention of such diseases (Kumar & Rashid, 2018). According to Kumar and Rashid (2018), due to social awareness, newly infected cases of HIV/ AIDS have reduced by 35% worldwide annually. However, these statistics are different from developing countries due to other factors like lack of education, lack of financial resources, poor public health administration and not proper use of social media as a tool of social awareness (Lyson et al., 2018). Studies reveal that role of social awareness is very crucial in disease control programs. There are many sources to create social awareness in general public in modern world including seminars, workshops, declaration of special days, lectures,

campaigns, such as print media campaign, electronic media, TV commercials, and social media campaigns (Awasthi & Awasthi, 2019; Mkanta et al., 2018; Wang et al., 2018).

Recently, literature on the transformation of HIV/AIDS specifically, in developing countries shows that role of social awareness is very crucial. Recently, countries like Nigeria, Ghana, China, India and African countries have invested a handsome amount for creating social awareness among people for prevention of fatal disease like HIV/AIDS (Mkanta et al., 2018; Olansky et al., 2019). However, in Muslim countries people generally avoid to talk about sex and discuss about sexual issues and complications due to religious restrictions and cultural and moral values (Naif et al., 2019). Consequently, these fatal diseases transfer from one person to another and cases of HIV/AIDS increase every year and all the campaigns along with the budgets go wasted. Therefore, studies have suggested that government must use suitable platforms for an effective campaign focusing on literacy rate and include such knowledge and information in text books (Kaymakamzade et al., 2018; Rushing, 2018). Hence, in Pakistan, literacy rate is only 58% and also Pakistan is a Muslim country where people feel hesitation to discuss about sexual issues and other personal diseases. Therefore, government must need to focus on social awareness about HIV/AIDS through teachers, schools and books to save new generation from such fatal diseases (A. Ahmed et al., 2019; S. Ahmed, 2013).

H₁: Social Awareness has direct relation with prevention of HIV/AIDS

2.3. Quality of Life

The concept of life quality is conceptualized from various aspects such as economic aspect in term of financial resource for living; social aspect such as social status in society and per capita income is the common measure of quality of life of a nation (Nussbaum & Sen, 1993). However, one other aspect is health related quality of life. This means that what is the survival ratio, health conditions, and quality of health care facilities available for population (Gill & Feinstein, 1994; Guyatt, Feeny, & Patrick, 1993). According to Whiteside (2002), there is a significant relation between poverty and epidemic. As the poverty increases the risk of HIV/AIDS increases specifically, in poor countries where people are very poor, and it is difficult for them to earn money. As a consequence, the women particularly start prostitution to earn money which is the main cause of HIV/AIDS. Secondly, due to poor quality of life, people are not able to get education to buy good food, and consequently, a psychological and financial pressure develops on both genders, i.e., male and female in a house. This pressure leads to the use of unethical means to earn money. Hence, females start prostitution and males start to do illegal activities like selling of drugs, theft, robbery and street crimes (Steinert, Cluver, Melendez-Torres, & Herrero Romero, 2017).

Therefore, these unethical or social evils such as drug abuse are one of the main causes of AIDS. Males of poor families start to use drugs and use injections to inject those drugs into their body and these injections are used many times which is a main cause of HIV transfer in Pakistan (Steinert et al., 2017; Strathdee et al., 2003; Whiteside, 2002). Moreover, studies have stated that relation of poverty and HIV/AIDS is still unexplored specifically in developing countries and it is very necessary to examine this relationship to find the root causes of HIV/AIDS (Steinert et al., 2017). The findings of the study reveal that the risk of AIDS is high in rural areas as compared to urban areas and suggested that economic interventions are necessary to raise the living quality of poor people (Lachman, Cluver, Boyes, Kuo, & Casale, 2014; Steinert et al., 2017). Finally, blood donation or blood selling is also one of the sources of HIV transfer along with poor health screening system. Due to the poverty or bad quality of life, people of rural areas are forced to sell their blood in hospitals to earn money. Hence, when blood of an infected person is transferred to a healthy person without proper screening then HIV will transfer easily (Waheed & Zaheer, 2019).

Studies such as Pronyk et al. (2008), Hargreaves et al. (2009), Islam et al. (2019), stated that the role of microfinance institutions is very vital to raise the people's quality of life and in the prevention of HIV/AIDS specifically in developing countries like Pakistan. Hence, government must pay attention towards the microfinance intervention for AIDS control and prevention program to improve the people's quality of life (Murshid & Bowen, 2019).

H₂: Quality of life have direct relation with prevention of HIV/AIDS.

2.4. Political Willingness

Political willingness/will is the construct which indicates towards the interest, engagement or willingness of a political government or stakeholders to do some positive work or take a positive action for a collective society welfare. For example, interest or priority of a government to reduce the poverty from a country and to show its willingness to do this, political government takes some positive and reasonable actions which shows the willingness of the government (Brinkerhoff, 2010). Studies have mentioned that political will plays a very vital role in the solution of social and economic issues of general public such as education, health, employment provision, and poverty reduction specially in developing countries (Brinkerhoff, 2010; Frieden, 2010). Pervious literature reveals that in developing countries, the issue of corruption is very high, and all the foreign aid given by the developed countries for the health reforms, education, and welfare of general public is stolen by the corrupt politicians which shows the will of political institutions towards their society (Stubbs, Kentikelenis, Stuckler, McKee, & King, 2017).

In the context of health, many international institutions such as World Bank, IMF, United Nations and countries give aids such as financial aid to control the disease in developing countries, i.e., Africa, Middle East, Sub Saharan countries and south Asian countries like Pakistan every year. However, statistics shows the worst picture every year in the form of enhanced ratios of HIV/AIDS cases in developing countries (Abu-Raddad et al., 2010; Arif, 2019). Studies have stated that the one main factor behind this failure of international aid and fund is the poor political institutions' performance, corruption and lack of political will (Stubbs et al., 2017). Hence, for the prevention of HIV/AIDS, it is necessary that political institutions change their policies and show their relevance and willingness for the implementation of policies in health and education sector. Similarly, in Pakistan, recently 750 new cases were reported in one district of Sind. After investigation, international aids control program issued a report and mentioned that the main reason behind this is the failure of political government to provide proper medical facilities in this district and lack of political will to improve the health infrastructure in Sind province of Pakistan (A. Ahmed et al., 2019; Arif, 2019). Therefore, there is a need that federal political government shows its willingness to improve the quality of life of poor people to create social awareness for the development of health-conscious behavior for the prevention of HIV/AIDS in Pakistan.

H₃: Political will/willingness has direct relation with prevention of HIV

2.5. Health Conscious Behavior

Behavior is the outcome of human psychology. In simple words, behavior means the way in which a person acts in response to others. Therefore, health-conscious behavior means the way in which people react or act towards their health status (Wei & Onn, 2016). In the context of medical studies, health-conscious behavior of a society plays a very vital role in prevention of fatal diseases like HIV/AIDS. People who have the health-conscious behavior react actively against poor health conditions and try to use all safety measures before doing any work in daily life such as washing hands before meal, take blood test reports before transfer of blood, and use of safety actions before having sex with their partner (Kelly, St Lawrence, Hood, & Brasfield, 1989). Scholars believe that behavioral interventions play a significant role in disease prevention such as HIV/AIDS (Batchelder, Carrico, Acree, Hecht, & Moskowitz, 2018; Harper, Jadwin-Cakmak, Cherenak, & Wilson, 2019; Leigh & Stall, 1993).

Studies reveal that health-conscious behavior has significant relation with prevention of disease and there are different factor affecting the development of health-conscious behavior of people such as social media, knowledge and awareness about heath, preventive measures, social awareness, and sharing information about diseases with people in rural areas will help to develop health seeking or health-conscious behavior in people which leads to disease prevention (Yoon-SukHwang, 2017). According to Yoo et al. (2018), there are mainly three factors which contribute in perception development such as information sharing, subjective norms and social media campaign and these factors lead to prevention of diseases (Adjiwanou, 2018). Some studies have mentioned that parent's education, social beliefs, cultural values also affect the human behavior. Therefore, current study considers health-conscious behavior as mediator between quality of life, social awareness, political will, and prevention of HIV/AIDS in Pakistan.

When people are health-conscious, they use safety measure and adopt health practices which ultimately lead to prevention of HIV. Moreover, studies reveal that people in developing countries are not properly educated, and they do not have adequate information about various diseases and their preventive measures; therefore, political institutions also fail in creating social awareness in general public (Arif, 2019; Da et al., 2016). Hence, health-conscious behavior is not developed in society and people may become victim of such fatal diseases due to their unawareness. In Pakistan, more than 60% HIV victims are unaware of their level of disease and they use wrong practices in blood transfers, exchange of same needles for injections by doctors because doctors are also not conscious while performing their duties (Arif, 2019). According to Arif (2019), recently, cases were reported in Larkana district of Sind, behind which role of a doctor was very crucial. The doctor confesses that he intentionally used the infected needle of injection at multiple patients to transfer the HIV virus because he is also victim of HIV virus. Hence, it is clear from the above discussion health that consciousness is very crucial factor for prevention of HIV in Pakistan.

- H₄: Health-conscious behavior has direct relationship with prevention of HIV/AIDS.
- H₅: Social awareness has direct relationship with Health-conscious behavior.
- H₆: Quality of life has direct relationship with Health--conscious behavior.
- H₇: Political willingness has direct relationship with Health--conscious behavior.
- H₈: Health-conscious behavior mediates the relationship between Social awareness and prevention of HIV/AIDS.
- H₉: Health-conscious behavior mediates the relationship between quality of life and prevention of HIV/AIDS.
- H₁₀: Health-conscious behavior mediates the relationship between Political Willingness and prevention of HIV/AIDS.

2.6. Religiosity

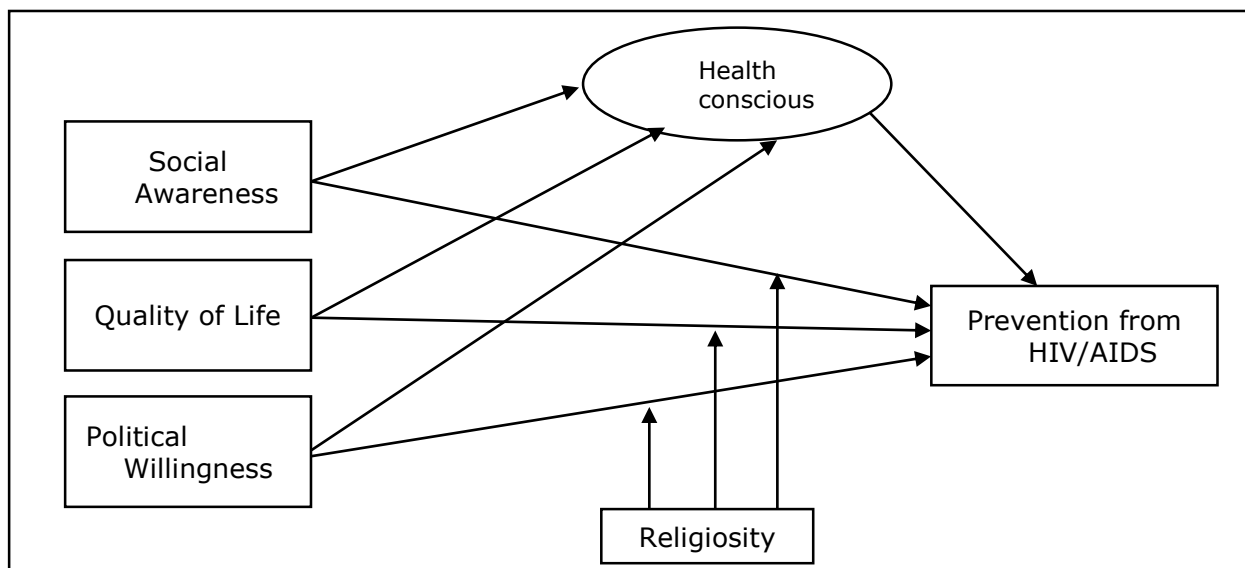
According to pervious literature, religious culture and beliefs directly affect the people's attitudes, perceptions and behaviors (Islam et al., 2019). Studies reveal that Islam is a religion which urges the people to avoid committing sins such as, Zina (sex with women other than wife), to deceive other people, to tell lie, and cause any harm to others. These are the moral standards and values of Islamic culture. Therefore, Islam also mentions punishments against sins committed by the Muslims called Haddood Law in Pakistan. According to Haddood Law, the punishment of a person committing Zina is stoning him/her to death. Hence, in those countries where Haddood laws are implemented, cases of HIV/AIDS are less in numbers because people do not indulge in illicit ways to have sex.

On the other hand, Islam promotes the healthy practices and focus on cleanliness. As the Holy Prophet (PBUH) said, "Cleanliness is half of faith". Hence, it is clear that Islam promotes healthy practices and help in the development of health-consciousness and health-conscious behavior in people. Moreover, studies such as Smolak (2010), Tham and Zanuddin (2015), Barmania and Aljunid (2016), Shaw, McCrimmon, Mergenova, Sultangaliyeva, and El-Bassel (2017), Barmaniaand Reiss (2018), and Mandzikand Young (2019) stated that religious belief and culture are important tool for creating social awareness, improving the quality of people's life and making the political government responsible to show its willingness towards the developing health-conscious culture which ultimately leads to the prevention of HIV. All these studies proposed that Islamic culture will enhance the health-consciousness in Muslims and help in prevention of HIV.

Therefore, current study uses Islamic culture as moderator between quality of life, social awareness, political willingness/will, and prevention of HIV.

- H₁₁: Religiosity has direct relationship with prevention of HIV/AIDS.
- H₁₂: Religiosity moderates the relation between social awareness and prevention of HIV/AIDS.
- H₁₃: Religiosity moderates the relation between Quality of life and prevention of HIV/AIDS.
- H₁₄: Religiosity moderates the relation between Political willingness and prevention of HIV/AIDS.

Figure 1



3. Research Methodology

3.1. Questionnaire and Pre-test

This study adapted all constructs' scales from past studies and every construct has multiple items. Social awareness was assessed by using five items adapted from sub scale of social intelligence scale (Silvera, Martinussen, & Dahl, 2001) , quality of life was evaluated by utilizing five items adapted from (Burckhardt & Anderson, 2003), political willing (public service motivation) was estimated using items adapted from (Coursey & Pandey, 2007) , five items were used to assess health-conscious behavior was adapted from (Hong, 2009), religiosity was evaluated by using five items adapted from (Koenig & Büsing, 2010), and prevention of HIV/AIDS was assessed by using six items.

All constructs were measured using a five-point Likert scale ranging from strongly disagree to strongly agree. Brislin's (1970) back translation method was used to translate a questionnaire from English to Urdu. Minhaj University Lahore's school of Urdu and Asian languages used the translation services. The questionnaire was first translated into Urdu by the first translator, and then into English by the second translator for back translation. The Urdu and English versions were examined for differences. The translator looked out the distinctions. An expert in academia and industry assessed the instrument's content validity. A pilot study was carried out by sending questionnaire to 30 respondents to get the feedback in order to ensure clarity. No amendments were required at all. Moreover, to evaluate internal consistency of all scales, reliability analysis was carried out.

3.2. Sample and Data Collection

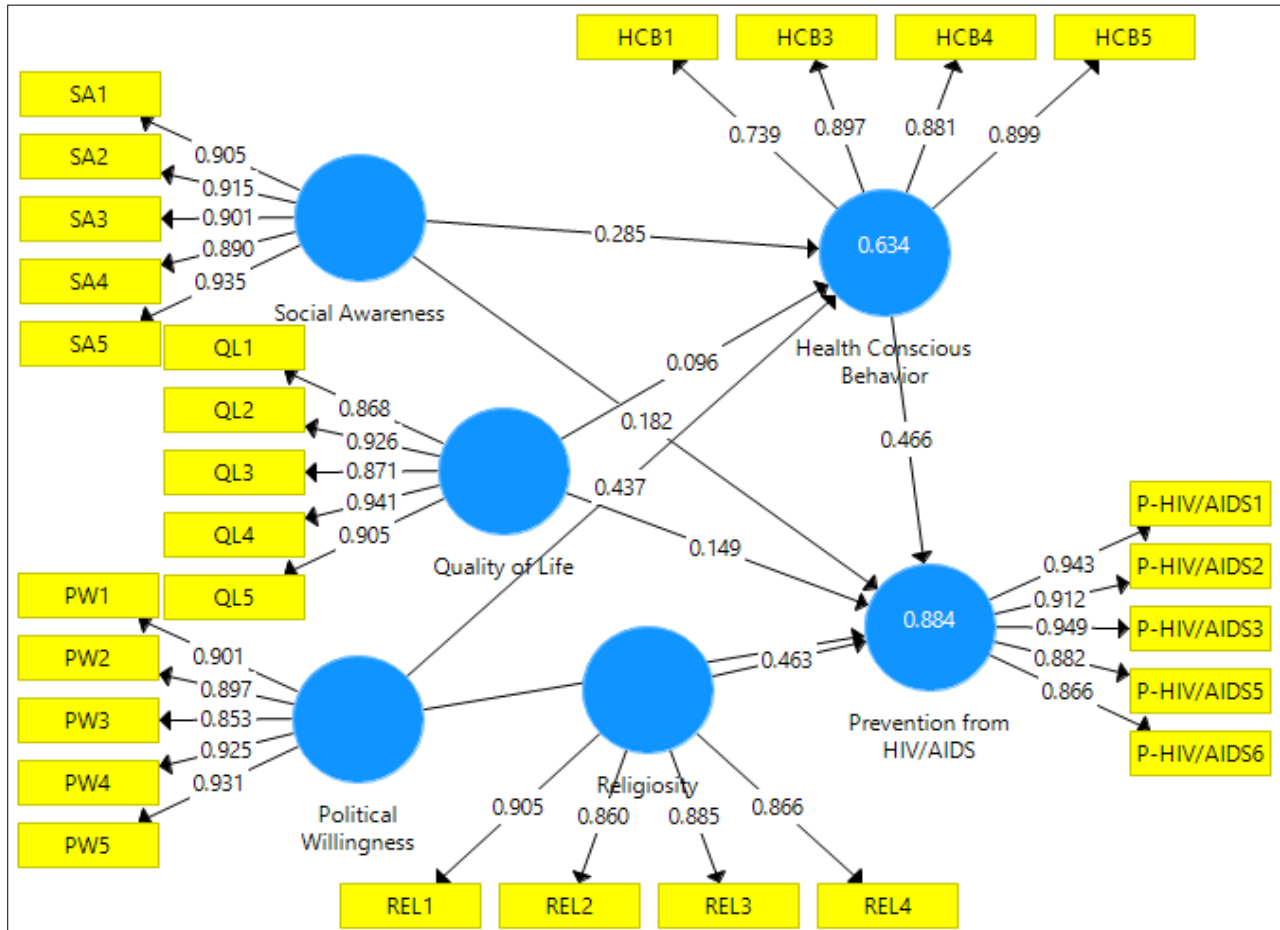
In order to collect data regarding HIV/AIDS, doctors from different hospitals were selected. According to a report by National AIDS Control Program Pakistan, till 2017, a total of 165000 patients have been infected with HIV/AIDS. The rationale of selecting Sind province of Pakistan for the current study is the emergence of majority number of cases in this particular province. Data was collected from the doctors randomly from different hospitals of districts of Sind. A self-administered questionnaire method was utilized, and simple random sampling technique was used. The purpose of the study was informed to respondents before asking them to fill the questionnaire in order to maintain the ethics of research. They were given questionnaire when they agreed to participate in this study. Total 450 questionnaires were distributed among the respondents and 337 questionnaires were received back which shows the response rate of about 74.88%. Moreover, 30 questionnaires were removed from the study. And remaining questionnaires were utilized for further analysis.

4. Analysis

Table 1: Data Screening

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
SA1	1	0	5.07	6	1	7	1.803	-0.375	-0.76
SA2	2	0	5.413	6	1	7	1.752	-0.333	-0.891
SA3	3	0	5.395	6	1	7	1.803	0.144	-1.075
SA4	4	0	5.122	6	1	7	1.789	-0.51	-0.745
SA5	5	0	5.145	6	1	7	1.867	-0.499	-0.76
QL1	6	0	5.11	6	1	7	1.689	-0.464	-0.679
QL2	7	0	4.855	6	1	7	1.958	-1.002	-0.526
QL3	8	0	4.994	6	1	7	1.77	-0.401	-0.746
QL4	9	0	4.884	5	1	7	1.775	-0.807	-0.395
QL5	10	0	5.186	6	1	7	1.862	-0.575	-0.711
PW1	11	0	4.907	5	1	7	1.85	-0.889	-0.446
PW2	12	0	5.314	6	1	7	1.777	0.169	-1.042
PW3	13	0	5.244	6	1	7	1.781	-0.505	-0.766
PW4	14	0	5.047	6	1	7	1.768	-0.328	-0.778
PW5	15	0	5.023	6	1	7	1.807	-0.534	-0.714
HCB1	16	0	4.977	6	1	7	1.765	-0.418	-0.739
HCB2	17	0	3.884	4	1	7	1.913	-1.142	0.283
HCB3	18	0	5.314	6	1	7	1.7	0.354	-1.002
HCB4	19	0	5.326	6	1	7	1.722	-0.212	-0.832
HCB5	20	0	5.331	6	1	7	1.792	0.067	-0.991
REL1	21	0	5.308	6	1	7	1.763	-0.389	-0.844
REL2	22	0	5.32	6	1	7	1.761	0.059	-0.98
REL3	23	0	5.256	6	1	7	1.74	-0.239	-0.82
REL4	24	0	5.14	6	1	7	1.809	-0.311	-0.829
REL5	25	0	3.936	4	1	7	1.881	-1.115	0.204
P-HIV/AIDS1	26	0	5.012	5	1	7	1.839	-0.735	-0.487
P-HIV/AIDS2	27	0	5.244	6	1	7	1.794	-0.461	-0.756
P-HIV/AIDS3	28	0	4.93	5	1	7	1.777	-0.84	-0.439
P-HIV/AIDS4	29	0	4.029	4	1	7	1.828	-1.116	0.147
P-HIV/AIDS5	30	0	5.169	6	1	7	1.688	-0.144	-0.751
P-HIV/AIDS6	31	0	5.128	6	1	7	1.731	-0.719	-0.573

Figure 2: Confirmatory Factor Analysis (CFA)



4.1. Convergent Validity

The convergent validity was assessed to evaluate the measurement model by using loadings, competitive reliability (CR) and average variance extracted (AVE). The values of CR and AVE were shown in table 2 below. The values of factor loadings of all items exceeded the recommended value of 0.60. Likewise, CR all values also exceeded the recommended value of 0.70. Moreover, AVE values for all constructs under study exceeded the recommend value of 0.5 (Hair, Hult, Ringle & Sarstedt, 2016).

Table 2: Factor Loadings, Alpha, CR, AVE

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Social Awareness (SA)	SA 1	.905	.948	.961	.827
	SA 2	.915			
	SA 3	.901			
	SA 4	.890			
	SA 5	.935			
Quality of Life (QL)	QL 1	.868	.943	.957	.815
	QL 2	.926			
	QL 3	.871			
	QL 4	.941			
	QL 5	.905			
Political Willingness(PSM)	PSM 1	.901	.942	.956	.813
	PSM 2	.897			
	PSM 3	.853			
	PSM 4	.925			
	PSM 5	.931			
Health-conscious Behavior (HCB)	HCB 1	.739	.876	.916	.734
	HCB 2	Deleted			
	HCB 3	.897			
	HCB 4	.881			
	HCB 5	.899			
Religiosity (REL)	REL 1	.905	.902	.932	.773
	REL 2	.860			
	REL 3	.885			
	REL 4	.866			
	REL 5	Deleted			
Prevention of HIV/AIDS (P-HIV/AIDS)	P-HIV 1	.943	.949	.961	.830
	P-HIV 2	.912			
	P-HIV 3	.949			
	P-HIV 4	Deleted			
	P-HIV 5	.882			
	P-HIV 6	.866			

4.2. Discriminant Validity

Discriminant validity refers to the level to which a construct in reality is distinct from other variables (J. Hair, Black, Babin, Anderson, & Tatham, 2010). Two methods: Fornell & Larcker Criterion (Fornell & Larcker, 1981) and heterotrait-monotrait ratio (Henseler, Ringle, & Sarstedt, 2015) were used in this study to assess the discriminant validity.

4.3. Fornell and Larcker Criterion

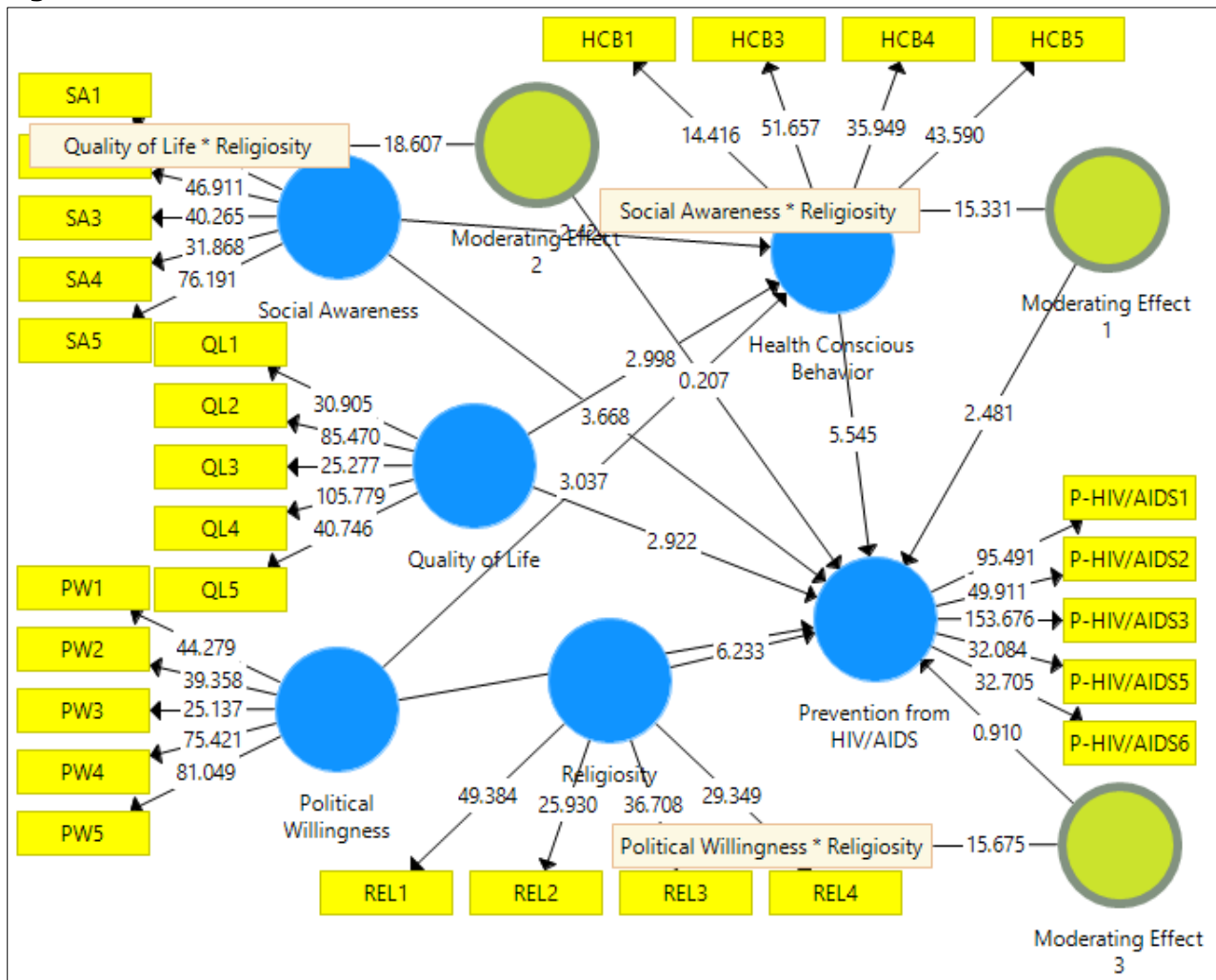
In order to measure discriminate validity initially, the Fornell and Larcker Criterion was used, and for all constructs the square root of the AVE was used and comparison was made against the values of correlation of the other constructs (Fornell and Larcker, 1981). The correlation matrix in diagonal form is used to demonstrate the square root of AVE. To establish discriminant validity, the squared correlation estimates should be less than the square root of the AVE (J. F. J. Hair, Black, Babin, Anderson, & Tatham, 2006).

The square root values of AVE go beyond the correlation of all constructs as shown in Table 3. The off-diagonal elements were less than all diagonal elements in their corresponding columns and rows, which validate the satisfactory discriminate validity of all constructs.

Table 3: Fornell & Larcker Criterion

	Health-conscious Behavior	Political Willingness	Prevention of HIV/AIDS	Quality of Life	Religiosity
Political Willingness	0.859				
Prevention of HIV/AIDS	0.704	0.776			
Quality of Life	0.828	0.875	0.734		
Religiosity	0.816	0.757	0.88	0.679	
Social Awareness	0.84	0.857	0.719	0.856	0.716

Figure 3: Structural Model



After assessment of measurement model, the structural equation model was evaluated. The significance of the model was evaluated based on p-value and t-value. All the hypothesis were tested for the direct and indirect effects by the bootstrapping mechanism in Smart PLS 3 (Ringle, Wende & Will, 2005). Refer to Table 4, health-conscious behavior has a significant relation to prevention of HIV/AIDS ($t = 5.545, p = 0.000$), political willingness has a significant relation with health-conscious behavior ($t = 3.037, p = .003$). In addition, political willingness has also a significant relationship with prevention of HIV/AIDS ($t = 2.394, p = .017$).

Moreover, quality of life has a significant relationship with health-conscious behavior ($t = 2.998, p = .005$) and quality of life also has a significant relationship with prevention of HIV/AIDS ($t = 2.922, p = .006$). In addition, religiosity has a significant relationship with prevention of HIV/AIDS ($t = 6.233, p = .000$). Moreover, social awareness has a significant relationship with health-conscious behavior ($t = 2.424, p = .016$) and social awareness also has a significant relationship with prevention of HIV/AIDS ($t = 3.668, p = 0.000$). Therefore, H1, H2, H3, H4, H5, H6, H7 and H11, are empirically supported.

Table 4: Direct and Moderation Effect Results

	β	M	SD	T Statistics	P Values	f ²
Health-conscious Behavior -> Prevention of HIV/AIDS	0.487	0.48	0.088	5.545	0	.341
Moderating Effect 1 -> Prevention of HIV/AIDS	0.053	0.042	0.022	2.481	0.015	.026
Moderating Effect 2 -> Prevention of HIV/AIDS	0.028	0.031	0.134	0.207	0.836	.009
Moderating Effect 3 -> Prevention of HIV/AIDS	0.094	0.083	0.103	0.91	0.363	.007
Political Willingness -> Health-conscious Behavior	0.437	0.427	0.144	3.037	0.003	.023
Political Willingness -> Prevention of HIV/AIDS	0.147	0.149	0.062	2.394	0.017	.031
Quality of Life -> Health-conscious Behavior	0.096	0.098	0.033	2.998	0.005	.241
Quality of Life -> Prevention of HIV/AIDS	0.101	0.107	0.035	2.922	0.006	.15
Religiosity -> Prevention of HIV/AIDS	0.459	0.455	0.074	6.233	0	.392
Social Awareness -> Health-conscious Behavior	0.285	0.288	0.118	2.424	0.016	.089
Social Awareness -> Prevention of HIV/AIDS	0.183	0.179	0.5	3.668	0	.213

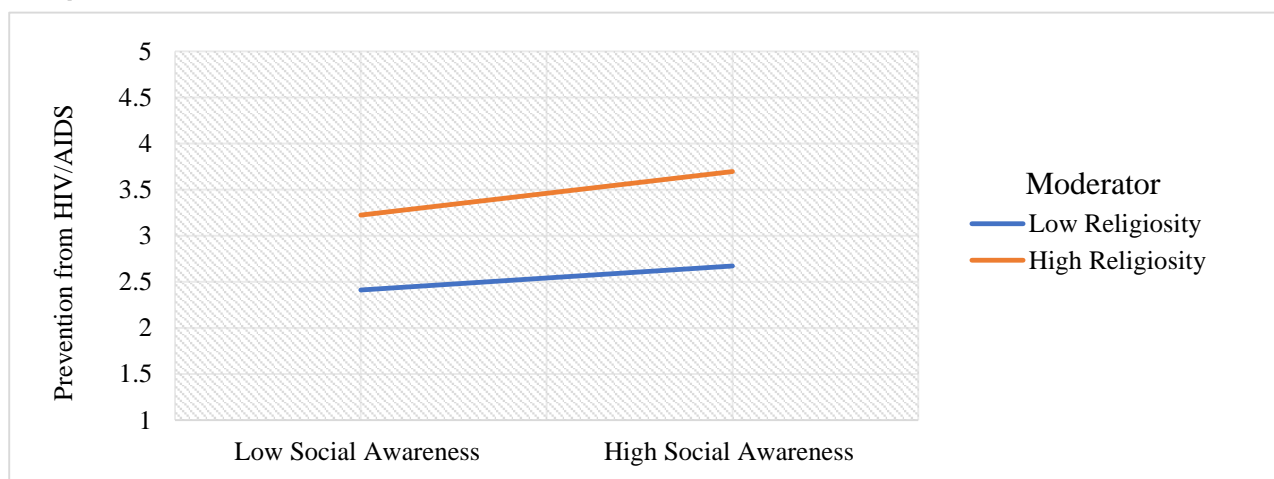
According to Table 5, Health-conscious behavior significantly mediated the relationship of political willingness and prevention of HIV/AIDS ($\beta = 0.212$, $t = 2.699$, $P = 0.007$), ($\beta = 0.139$, $t = 2.176$, $P = 0.03$) and ($\beta = 0.047$, $t = 0.968$, $P = 0.333$) thus, H10 and H8 were supported but H9 is not supported. Therefore, with respect to prevention of HIV/AIDS showed that health-conscious behavior significantly explained and mediated the relationship of political willingness and social awareness with prevention of HIV/AIDS.

Table 5: Indirect Effect

	β	M	SD	T Statistics	P Values
Political Willingness -> Health-conscious Behavior -> Prevention of HIV/AIDS	0.212	0.205	0.079	2.699	0.007
Quality of Life -> Health-conscious Behavior -> Prevention of HIV/AIDS	0.047	0.048	0.048	0.968	0.333
Social Awareness -> Health-conscious Behavior -> Prevention of HIV/AIDS	0.139	0.139	0.064	2.176	0.03

This research study investigated the moderating role of religiosity in the relationship of social awareness, political willingness, quality of life and prevention of HIV/AIDS. Results found that religiosity significantly moderates the relationship between social awareness and prevention of HIV/AIDS, but it is insignificant between quality of life and political willingness and prevention of HIV/AIDS as shown in the figure 4. Therefore, H12 is supported empirically but H13 and H14 are not supported empirically.

Figure 4: Moderation effect of religiosity between social awareness and prevention of HIV/AIDS



5. Discussion and Conclusion

Present study looked at the role of social awareness, quality of life and political willingness with the mediating role of health-conscious behavior on prevention of HIV/AIDS. Data was collected from the doctors of district hospitals in Sind province of Pakistan. The results of this study found that social awareness has a significant part in the prevention of HIV/AIDS. Social awareness is one of the elements to enhance the level of prevention of HIV/AIDS because through social awareness, information and knowledge is shared to general public about fatal disease. The results are similar to the studies by Kumar and Rashid (2018), Mkanta et al. (2018) and Olansky et al. (2019).

In addition, quality of life also has a significant relation with prevention of HIV/AIDS, as people living standards increase, they become more conscious of their health and try to keep themselves away from fatal disease. Moreover, the aspect of financial resources and the environment where they live affect their level of consciousness about their health. The results of quality of life in this study are consistent with the existing studies (Whiteside; 2002, Steinert et al., 2017; Strathdee et al., 2003).

Present study also examined the role of political willingness in the prevention of HIV/AIDS and found significant relationship between these variables. The results are in line with the past literature (Frieden; 2010, Stubbs et al., 2017) where they explained that political will plays a vital role in the solution of social issues. Political government has the responsibility to solve the issues like health, education, welfare, employment and poverty which are the potential reasons of spread of fatal diseases.

The current study also aimed to check that health-conscious behavior mediates the relationship between social awareness, political willingness and quality of life and prevention of HIV/AIDS and found significant relationship between these factors. This is the first study which is examining the mediating role of health-conscious behavior for the above said variables. The results of this study are also consistent with the past studies where they explained that health-conscious behavior of people is affected by social awareness in form of sharing information about diseases (Batchelder et al., 2018; Harper et al., 20119). They also explained that health-conscious behavior adds in development of perception such as social media campaign, subjective norms and information sharing.

Lastly, present study examined the role of religion in prevention of HIV/AIDS as moderator. In Muslim societies, people don't like to talk and listen about sex and the outcomes of sex in different scenarios. The findings of this study revealed that religion moderates the relationship between social awareness and prevention of HIV/AIDS. The findings of this study are in line with the past literature where the researchers explained that religious beliefs and culture influence the behaviors, attitudes and perceptions of people directly. Moreover, Islam urges the people to abstain from committing zina, telling lie, deceiving others and harming others.

As is mention in Pakistan Haddoo Law, there is a punishment for Muslims if they commit any sin (Islam et al., 2019). In addition, Islam emphasized on cleanliness and health practices as said by the Holy Prophet Muhammad (PBUH) "Cleanliness is half a faith". Furthermore, it is stated by the past literature that religious beliefs enhance people's quality of life, create social awareness, and make the government responsible to ensure its willingness about the development of health-conscious culture that finally leads to the prevention of HIV/AIDS (McCrimmon et al., 2017; Mandzik and Yound, 2019; Barmania and Reiss, 2018). Therefore, it is concluded that social awareness, quality of life and political willingness have the key role in the prevention of HIV/AIDS.

5.1. Implications of the Study

As for as theoretical contribution is concerned, this study adds in the existing body of knowledge because it is one of the researches which empirically examined the relationship among diverse factors of health-conscious behavior with prevention of HIV/AIDS. This is the first study in its nature which examined the role of social awareness, political willingness, quality of life and health-conscious behavior and prevention of HIV/AIDS. This is pioneer study that documented the impact of health-conscious behavior to prevent the patients of HIV/AIDS in

Sind Province. Past literature lacks the impact of health-conscious behavior in HIV/AIDS patients. Therefore, the combination of six different variables with fourteen hypotheses analysis makes this study unique and promotes the prevention of HIV/AIDS in future research streams. Thus, present study has high potential in the literature of fatal diseases.

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