

**Islamic Shariah  
Guidance  
On  
AIDS**

**AIDS: The Ailment, Its Origin, Spread, Symptoms,  
Prevention & Social Interaction, Rights of AIDS Patients  
& Society, and Other Medico-Legal Issues**

**IFA Publications**  
**161-F, Basement, Joga Bai, Jamia Nagar**  
**New Delhi-110025**

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**Name of the book** : **Islamic Shariah Guidance on AIDS**  
**Summarised, & Translated by:** **Salar M. Khan**  
**First Edition** : **2005**  
**Second Edition** : **2009**

**Publishers**

**IFA Publications**  
161-F, Basement, Jogabai,  
Jamia Nagar, New Delhi-25  
**E-mail:ifapublication@gmail.com**

**Price:**  
Rs. 30/-

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## Forward

Islam considers every ailment as a test of His *Ummah* by Allah; hence it keeps a very sympathetic attitude towards the patients. Islam considers that the body of a human being is given to him by Allah as a trust, therefore, its protection and care is every one's religious duty. That is why the Islamic jurists have determined that medical remedy is not contrary to the trust in Allah, piety and self-discipline. Allah does not discourage research and there is no ailment of which a remedy has not been provided by Him.

Every age has seen new problems. We, too, are witnessing a large number of new problems caused due to the changes in economic setups and social ethos. The AIDS is one such ailment which has caused multidimensional social problems. We all know that the disease itself is a product of a faulty lifestyle popularised by the changing civilisational values especially the western ones.

The cure of AIDS has not so far been discovered despite some of the best of researches in this regard. Its terror is hanging over the world like the proverbial Damocles' sword. People all over the world are coming in contact of the dreadful HIV which causes the AIDS and dying in large numbers. Despite all the advances in the field of medical science, the humanity is watching these deaths helplessly.

The disease has close relationship with irresponsible and unprotected sexual activities with a number of partners. Indulgence in homosexuality is another source of its spread. Blood transfusion of an AIDS patient into the body of a healthy person; or the slightest prick of the needle of an AIDS patient's syringe into the finger of a doctor or nurse has potential to transfer HIV. The drug addicts who use the unsafe syringes freely to inject psychopathic drugs into their veins can easily get this virus through the infected needles. The virus also gets transmitted when someone with open wound comes in the

contact of the blood of AIDS victim. It also transfers into the body of a man from the AIDS affected woman during intercourse and from the AIDS affected mother to her baby in her womb or during the birth.

The most dangerous aspect of this disease is that a person infected by this virus can spread it in no time by his/her unchecked sexual activities. However, it is not contagious. We can live with an HIV positive/AIDS patient in our homes like any normal person, kiss him, hug him, eat and sit with him and treat him like any other family member.

However, it does not mean that the AIDS is a problem-free ailment as far as our socialization is concerned. In fact this fatal disease has created many problems for the patient, his/her relatives and the society in which such a person lives.

Therefore, the guidance of *Shariah* is required to direct the patient and the society at large about the right course of action. Feeling the exigency of this problem the Islamic *Fiqh* Academy (India) decided to get guidance from the Islamic scholars, Islamic jurists and medical experts on the subject. A comprehensive questionnaire on the subject was circulated among them. In response to the questionnaire more than fifty Islamic scholars and jurists presented their papers. These papers were presented and discussed in the 8<sup>th</sup> seminar of the Academy.

This booklet is the outcome of the number of articles presented in the seminar. The seminar was held at Aligarh Muslim University, Aligarh. The seminar deliberated the issue of Medical Ethics in the context of the AIDS which is spreading like wild fire in the different parts of the globe, and has gripped some of the highly developed as well as under developed countries.

Here it shall be appropriate to inform about the methodology of conducting such scholarly seminars by the *Faqih-ul-Asr* (the

jurist of our time) *Qazi* Mujahidul Islam Qasmi (May Allah shower His Blessings on him). He was a deft moderator of these *Fiqhi* seminars of the Academy. His method was to thrash out the issue in the smallest possible details and then let all the scholars discuss it thoroughly and advance the arguments in favour of their respective opinions. He allowed recording of all the opinions on the issues under discussion and never forced his own opinion on the participants.

It is pertinent to mention here that all the opinions, whether majority or minority, have their bases in the Holy Qur'an and *Sunnah*. An opinion held by lesser number of jurists may also be correct. Allah only knows which one of the opinions is correct. Therefore, a common Muslim, if he or she bona fide believes, can lawfully and legitimately follow the minority opinion on any issue.

By the grace of Allah the Academy has produced 17 *majallas* containing the selected research papers presented in these seminars.

The Academy has also been actively pursuing promotion of the *Fiqhi* knowledge. After translating in Urdu all the 40 volumes of the *Fiqhi* Encyclopaedia of the Ministry of Awqaf, Kuwait, the Academy has embarked upon ambitious programme of preparing literature on the issues which have been discussed in its *Fiqhi* seminars in a brief and cogent manner. It has been decided that the literature should not only include summary of the papers presented in the seminars but should provide necessary additions as well in a simple and comprehensible language and style.

The present work is part of the series of such literature. The original book containing research papers presented in the seminar was edited by Hazrat *Qazi* Mujahidul Islam Qasmi. The book has been summarized, and translated by Br. Salar M. Khan. Though he did not have any formal education in any Islamic seminary, still, his interest and grasp of the basic

concepts and issues concerning Islamic jurisprudence and law have been marvelous. He is a practicing advocate in the Indian courts and a regular contributor to many newspapers and magazines. He has the privilege of interacting and, thereby, learning from *Qazi* Mujahidul Islam Qasmi. May Allah reward him?

I hope, and pray to Allah that present endeavour of the Academy to spread the *Fiqhi* knowledge among the common people may succeed. May Allah bless the Academy and allow it perpetuity. May Allah cause the endeavours of this Academy a source of His everlasting blessings upon its founder *Qazi* Mujahidul Islam Qasmi.

May Allah Accept My Supplications, Aameen!

***(Khalid Saifullah Rahmani)***  
General Secretary  
Islamic *Fiqh* Academy (India)  
**16 Muharram Al Haram A.H.**  
**March 8, 2004 A.C.**



## **The Questionnaire Circulated By the IFA (India) Among Islamic Scholars and Jurists to Seek Their Responses**

1. Whether an AIDS patient/HIV positive person is justified in keeping his family and relatives uninformed about his disease fearing that the disclosure may make him an untouchable in his family and society; or such a person is bound to inform them clearly about his ailment?
2. In case an AIDS patient/ HIV positive person is concealing the disease from his family and others, and she/he also insists upon his/her doctor not to disclose such a status; what would be the legal responsibility of the doctor as per Islamic *Shariah* in such a case? In other words, whether the doctor should keep the secret of his patient or disclose the same?
3. What is the responsibility of the family, friends, relatives and society as per Islamic *Shariah* in relation to AIDS patients or other persons suffering from any other dreadful disease like plague, etc?
4. If an AIDS patient, who is well acquainted with the dangerous and dreadful consequences of the disease, does something intentionally to transfer the infection to someone else e.g. he indulges in sexual intercourse with his healthy wife and thereby transfers the virus to her, or donates his contaminated blood to some needy person requiring blood transfusion and such a contaminated blood is transfused to such a person and consequently virus gets transferred to the person; shall such an AIDS patient, who deliberately caused transfer of the virus, be liable to be punished for his deliberate act? If yes, what shall be the punishment?

Whether an AIDS patient shall still be a sinner and guilty if such a person, though the she/he did not have

any intention to transfer the virus but knows fully well about the methods of transfer of the virus, indulges in sexual intercourse or donates his/her blood for transfusion to some needy person?

5. Whether a Muslim woman is entitled to seek dissolution of marriage on the ground that her husband is infected with HIV or AIDS after her marriage with her? Moreover, whether a Muslim woman is entitled to seek dissolution of marriage on the ground that her husband contracted the marriage by concealing his HIV positive/AIDS status?
6. Whether it is proper to terminate such a pregnancy if a woman is infected with the HIV or is suffering from AIDS gets pregnant and medically there is every possibility that the virus would get transferred to the child during the gestation period or during the child birth or during the nursing period?

What shall be the *Shariah* position if such a woman is not willing to terminate her pregnancy; can she be persuaded to do so by her husband or the Health officials on the grounds that such a child would be a danger to the society and burden on the government?

7. Will it be a correct step to debar the AIDS affected children from admission in schools and deprive them from education while it is a known fact that this virus is not contagious, and does not get transferred by touching, kissing, hugging, eating or sitting with an AIDS patient. If a child suffering from AIDS is admitted in a school, certainly there is no danger of getting other children infected in general circumstances.

However, there is a possibility that an affected child may get hurt during play or in a brawl with other children and the virus may get transferred if any HIV positive or AIDS patient child starts bleeding and this infected blood gets in contact with the healthy children, or by indulging in sexually promiscuous behaviour.

8. What shall be the responsibilities of the parents, friends, relatives and society towards an HIV positive or AIDS-affected child in the light of Islamic teachings?
9. Whether a person suffering from any disease like AIDS, cancer, plague, etc. can be declared to be suffering from a mortal disease (*marazul maut*)? If yes, whether such a person would be declared on death-bed and would the *Shariah* injunctions apply accordingly?



## **AIDS: The Medico-Legal Issues & Islamic Shariah**

**Qazi Mujahidul Islam Qasmi**

What gave birth to the AIDS? The sexual licentiousness, which is the gift of present civilisation, is the root cause of this dreadful disease. No genuine efforts are being made to stop its spread. Instead, it has become a hot topic for discussion as a dreadful disease all over the world- in media and academic circles.

Undoubtedly, this is a curse of Allah. The civilisation, which adopted sexual anarchy and achievement of physical desires by all means without caring for their legitimacy, was sure to receive this gift from God.

Today we are witnessing that the present civilisation is engrossed in finding justification of homosexuality and demanding legal sanction for same sex relationships. We are witnessing that genetic engineering has taken this issue too far by advancing the proposition that the reason for preference to same sex or homosexuality lies in the genetic composition of a person. Illegitimate and illicit sexual relationships are root cause of the origin and spread of this dreadful disease.

The present civilisation has used the television programmes, pornographic movies, and sensual exposure of female bodies to spread lewd and indecent behaviour in the society. It's a pity that some women have allowed themselves to be commoditised and commercialised, and used for this immoral endeavour in the mistaken notion of women's liberation.

The above are the reasons and factors responsible for the onslaught of this disease as a punishment from the God. Therefore, we must rise to the occasion and tell the world without any reservation in clear and unequivocal terms that the present civilisation, especially the western civilisation, has

destroyed the society through sexual promiscuity and anarchy. We must come together and demand curb on such tendencies to save high moral and ethical values of the society.

To my mind participants of this seminar need to make it clear to the world that spread of AIDS cannot be stopped without eliminating the factors underlying it.

We are here to deliberate upon the issue of AIDS as jurists. A *faqih* (jurist) has a duty to look on the realities confronting the society. We must acknowledge that the AIDS is staring in the face of the society. The disease has caused many social problems. In this regard we need to ponder that what should be the behaviour of that society and common man towards the persons afflicted with the AIDS or such other despicable disease.

We should keep in mind that Islam bounds us to take care of all such patients even if the person got afflicted with the disease due to his/her own morally deprave actions. Here we also need to appreciate that the AIDS is not always caused by morally deprave actions of the patient. The person may get infected by the HIV quite innocently like blood transfusion or such other manner.

We cannot differentiate between the individual who got infected due to sexual promiscuous behaviour and another individual who has got this infection quite innocently. Allah only knows such matters. We need to treat and behave with all the AIDS patients as per the teachings of Islam.

We need to appreciate that there are no big moral questions involved as far as our behaviour with the AIDS patients is concerned. The questions arising out of such issues have been put forth and we also have their responses before us.

Take the case of medical doctors, generally a doctor is bound by some restrictions contained in various codes and cannot take

recourse to certain treatments without obtaining consent of the patient or somebody closely related to him or her. However, what a doctor should do when he is confident that either the delay caused by fulfilling the procedural formalities could result in the death of the patient or it is impossible to fulfill the necessary formalities?

In such a situation, the doctor should act as per his duty towards humanity and he should be allowed to act as per his own professional judgment and should not be held responsible even if the patient does not recover and die provided he does not commit any negligence or does not act to further his own commercial interests or with profit motive. Some scholars have opined that if any negligence or the motive to advance commercial interests is proved, such a doctor shall be punished.

In this regard the issue of concealing or revealing the secret arises. To my mind this is not a big issue and we need not to waste our time discussing the same. The Islamic *Shariah* has clearly laid down that “*La zarar wa la zeraar fil Islam*”. We need to see that what is more harmful; which of the two – concealing or revealing- would be more harmful. In such situation we would try to prevent the greater harm. Islamic *Shariah* position on such issues is “*Ahoon ul zararain*”.

Another principle of Islamic *Shariah* applicable in such situation is the comparison of the harm meeting an individual and the society as a whole. In a situation where a choice is to be made between preventing harm to an individual or the society, we must choose prevention of harm to the society, and put up with the harm to the individual.

Take a situation where a person who has animosity with another person and such a person knows that he/she is suffering from AIDS and donates his/her blood to such a person with an intention to cause the infection.

In this connection the phrase *Amr mauhoom* (probable action) has been used extensively. In my opinion, the scholars and the jurists participating in the present seminar feel that perhaps the rate of spread of diseases is extraordinary today. This cannot be said to be *Amr mauhoom* or probable action only. I feel that the scholars and the jurists have used the word *Amr mauhoom* in the sense of possibility.

In the case of AIDS, no doctor can say that the disease would be certainly transmitted to another person but can always say that this is a possibility. Now the issue of possibility is pitted against certainty. When there is a conflict between the possibility and the certainty; the possibility means that there is only a probability of harm while certainty means that the harm is sure to come. As a matter of principle, Islamic *Fiqh* directs the avoidance of harm which is sure to come as against the probable harm.

We should also appreciate another important point: there is one thing called a simple possibility while there is another called strong possibility. Islamic jurists have taken strong possibility as equal to the certainty. Therefore I would suggest you to differentiate between a simple possibility and a strong possibility as per the opinion of the experts on the subject while deciding about the issues relating to the AIDS.

The issue of dissolution of marriage has been raised in great detail by a scholar. The basic point in the discussion is that if the husband gets afflicted with a disease which is harmful for the wife then she would have a right to get the marriage dissolved provided the husband was suffering from the disease at the time of contracting the marriage. Another point raised in the discussion is that availability of such a right shall be restricted to the diseases which have already been specified by the earlier jurists and no analogy could be drawn to bring new diseases in this criterion.

I believe that both the issues are important. Let me make clear that in this matter we generally follow rules of Maliki School of Islamic jurisprudence. As far as the Hanafi School of Islamic jurisprudence is concerned, we all know that both Imam Abu Hanifa and Imam Abu Yusuf do not recognise the right of dissolution of marriage by the wife on this basis.

As per the Hanafi School, a wife shall not be granted right to dissolution of marriage on the basis of inability of the husband to maintain her. According to this rule a wife shall not be granted right to dissolve the marriage even if the husband is not able to maintain her due to some handicap or any other reason or simply for the reason that he does not earn anything to maintain her; to use the *fiqhi* term “*Musi u al nafqah*” is no basis for dissolution of marriage.

The underlying rationale for such a rule of Hanafi School is that the maintenance is a financial right while object of marriage is the fulfillment of conjugal rights. In a marriage, financial rights are subordinate to the conjugal rights, and non-fulfillment of a subordinate right does not extinguish the basic objective. When they were asked about the question of impotency of the husband, it was said that in this situation the wife is deprived of the real object of the marriage while in case of non-provision of maintenance she is not deprived of the real object but only a subordinate right is violated. According to the jurists such a woman would have right to seek loans on behalf of her husband.

Now the question is: who would lend money to the wife of a person who has no financial resources or does not earn? May be in those times people used to extend loans to such wives but in our days nobody extends loans to such a poor woman. What the woman would do? She would become an object of pastime for the people and her modesty and chastity would be endangered, as she does not have an elixir to keep her body and soul together.



Therefore, despite being theoretically stronger the opinion of the Hanafi School has been discarded, as adoption of this rule would have resulted in difficulties in the society as the solution provided was not sufficient. The opinion of the Shafeie School of Islamic jurisprudence has been adopted in this matter.

Another important point in this connection is that the fulfillment of conjugal rights is certainly the objective of marriage but this is a secondary object. The primary object of the marriage is the protection of modesty and chastity. If due to poverty of the husband, and consequently his inability to provide for the maintenance of the wife, the modesty and chastity of the wife gets endangered, then the wife shall have right to dissolve the marriage as the primary object of marriage is in danger.

We prefer Maliki School of Islamic jurisprudence in these matters for the reason that this School bases itself on the *zarar* (harm). I do not see any reason for restricting ourselves to the diseases mentioned by the classical jurists, or not taking into account other diseases which were not there during their times for the purpose of dissolution of a marriage. Even if there had been a mandate in the Holy Qur'an and *Sunnah* stating that for such and such disease the separation would be affected, still such a mandate would have been "*Mu'allal bil-illa*"; it does not prevent *qiyas* (analogical reasoning).

Maliki School bases its reasoning on the harm, and rules as per the necessity. Our scholars should keep in mind that a woman whose husband has contracted AIDS lives in the perpetual fear of getting infected with the disease and she has exposure to the most certain form of transmission of the disease i.e. sexual intercourse. She has to live with the AIDS patient under the fear of getting infected with this dreadful disease which causes severe psychological trauma for her. I do not want to get involved in the lengthy discussion, as has been said by Imam Muhammad, whether before or after the marriage. But I would like to quote his words as has been recorded in the *Majma' ul*

*anhar Sharah Multaqi-al-abhar*. He says, “If it is not possible for the wife to live with her husband without any harm”. These words are very significant.

We may sermonize, advice good counsel, tell the virtues of endurance, forbearance, trust in Allah, etc. We may even tell her that she would be rewarded immensely by Allah for her forbearance. Undoubtedly she would be rewarded for her patience, forbearance, and the trust she reposed in Allah. In fact this is the course of action advised by the Holy Prophet Muhammad (Peace Be upon Him). He (P.B.U.H.) has advised to continue this relationship of marriage as far as possible.

Nobody can object if both the husband and the wife decide to continue their marital bond despite such a disease. This is not the issue here. The problem arises when a healthy wife refuses to live with the husband who is suffering from various diseases. The wife rises up and says that she is living under constant fear, and it would be impossible for her to live with her husband as he is suffering from such and such disease, and she cannot live with her husband without a grave risk of physical and psychological harm to her. What the *Qazi* should do in such a situation?

This is a very important issue. In my opinion, the list of diseases specified by the classical jurists is not the last word on the subject. Please allow me to say that even if such a list had been considered full and final by the classical jurists, still I do not accept the argument that no *qiyas* (analogical reasoning) can be done on the issue. If any such argument has been advanced, such a statement is against the basic principles of Islam and Islamic jurisprudence.

I believe that such injunctions are basically “*Mu'allal bil-illa*”; they can be transmitted if the *illa* is present.

Another important point is the presence of a disease at the time of marriage. In my opinion a disease of the husband causes

same harm to the wife irrespective of its presence prior to or after the marriage. The examples given by some scholars regarding this issue are perhaps based upon the statement that if a husband has performed a single sexual intercourse his responsibility is over.

In this connection I request my scholar friends to kindly go through the book “*Kitabul Faskh wal-Tafreeq*” by Maulana Abdul Samad Rahmani. The above mentioned maxim has been discussed at length in this book. And we also gather from the Holy Qur’an that even if the husband has had hundreds of sexual intercourse with his wife still if he vows not to have sexual intercourse with her for a period of four months, the *Shariah* grants right to dissolve the marriage to the wife as the situation of *Eilaa* arises. Please do not argue that no *qiyas* could be done in this matter. Hazrat Umar (*Radhi’ Allahu Ta’ala Anhu.*) kept this guidance while deciding about the grant of vacations to the soldiers. Therefore it would not be right to think that having one single sexual relationship with the wife would fulfill responsibility of the husband for a life time, and she would not have any right to dissolution of marriage on the basis of husband’s impotency.

AIDS has thrown up many issues. We need to seriously deliberate upon them and try to guide the humanity. For this purpose we need to understand the AIDS thoroughly as to how the diseases is caused, the methods of its transmission, and at the same time we also need to understand as to what are the socially important interactions which do not cause transmission of the virus responsible for this disease, etc.

At the same time we also need to ponder about plight of AIDS affected children and orphans of AIDS. The issues which we intend to discuss here mainly concern the following:

- Disclosure of AIDS or HIV positive status of a person;
- Duties and rights of an AIDS/HIV positive person;

- Transmission of HIV from one person to another;
- Legal rights of the spouse of an AIDS/HIV positive person;
- AIDS & Termination of Pregnancy; and
- Children with HIV/AIDS.

These are some of the important but multidimensional issues, in my opinion, juridical experts and subject experts need to maintain a close rapport with each other so that proper solutions could be found to the emerging problems and issues connected with the AIDS.



## **Duties and rights of a HIV positive/AIDS Affected person**

**(Summary of the Opinions of the Scholars Participating in IFA  
(India) Fiqh Seminar on AIDS)**

### **Disclosure of AIDS or HIV positive status of a person**

Disclosure of the AIDS or HIV positive status of a person is an important issue. It poses a serious dilemma. The disclosure of person's HIV positive status has a potential to socially ostracise the patient thereby causing severe problems for him. However, non-disclosure of this critical position may cause serious problems for others, for example if such a status is not known to the family and friends, the virus may get transmitted to them as they would not take any precaution while dealing with such a person.

In consonance with the dilemma, opinions of the scholars and jurists, too, has been divided on the subject. Despite potentially devastating social consequences for the HIV positive person, some scholars, relying upon the maxim "smaller harm may be put up with to avoid greater harm", have suggested that the such a status of a person should not kept a secret as this may result into transmission of the virus to others as the people coming into contact with such a person are not expected to maintain any precaution.

The scholars favouring disclosure of the information have further argued that that concealment of the ailment of this nature will be very harmful not only for the patient but also for his immediate family, relatives, and the society at large. They argue that the harm of the patient would be his personal but the harm to others would be collective and, therefore, greater. They advise that such a person should, therefore, take courage and declare his ailment to his near and dear ones as his concealing the situation would not only complicate matters for him but

would also be a potentially dangerous situation for his near and dear ones. He should not fear from the fact that he would be treated like an untouchable, and the people would shun him.

A few proponents of this rule argued that, this dreadful disease is a sort of Allah's revengeful punishment against moral degradation of the society. They also argued that it was a clear warning of Allah to all of us. Therefore, it would be moral obligation of the patient to reveal his ailment to his family members and friends.

However, according to the majority of scholars, the best way for the patient is would be to keep his HIV positive a secret as the disclosure would certainly make the victim and his family members untouchables in the society. Therefore, such a person is not bound by *Shariah* to make public his/her HIV positive status.

The opinion also gets strength from the fact that there is a general misconception and ignorance about the HIV and AIDS among the Indian masses. They further argue that for many Indians the HIV infection or AIDS is simply an incurable and ugly disease which a person generally acquires by indulging in immoral sexual activities.

Therefore, such a person would be generally disowned and discarded not only by his family members but also by the society in general due to the prevailing ignorance. Moreover, in case of the disclosure, there will be every apprehension that the friends and relatives of the victim may desert him unattended and friendless.

They further argue that the AIDS is not a contagious disease and there is no danger to anybody living with a HIV positive person. Routine ways of interaction like touching and kissing him, or eating with him do not cause transmission of the HIV. Therefore, the disclosure of the disease is not mandatory for the person.

However, this is not to say that such a person has a right to conceal his HIV positive status in each and every situation. There are many situations, which may not have anything to do with sexual behaviour, when a healthy person may come into contact with such body fluids of the patient which may transmit the virus. Therefore such a status cannot be kept a secret absolutely. Hence, there is a need that such a person and his/her family should be thoroughly educated about the precautions to be taken by them to avoid the HIV infection. It will stop the fear of spreading this virus to others.

The proponents of this opinion further say that the patient, if he is married, should take special care of avoiding sex with his wife as such an action would transfer the virus to the wife. We should remember that any unnatural sexual act is not permissible in Islam and is considered a grave sin. The person should also be educated that in case such he indulges in sexual intercourse with his already pregnant wife the foetus in the womb would also be exposed to this deadly virus.

Besides, the person should tell his/her spouse in clear terms about the HIV status and the consequences of having sex with him/her. In the best interests of such a patient, the doctors must advise avoidance of unsafe sex and also suggest every possible precaution for transmission of the virus.

Therefore, in view of its limited means of transfer, a patient is not bound to reveal his/her HIV status to others in order to avoid disgrace and dishonour to him/her as well to his/her family. It is pertinent to mention here that the *Shariah* has not made it necessary and binding on any sort of patient to reveal his/her ailments or diseases to others.

### **Duties of the Doctors**

There may be a situation where a HIV positive person or an AIDS patient not only conceals his ailment but also insists upon his doctors to keep the information about his ailment

secret. In such a situation what are the duties of the doctor? Whether an AIDS patient or HIV positive person has an absolute right to privacy in this matter? Whether the doctor is bound by the *Shariah* and the contemporary medical ethics to keep the information secret? Whether the doctor should give the wishes of his patient the foremost respect or he should disclose the ailment in the best interests of his patient, his family and relatives and the society at large?

The jurists and scholars have responded that it is the comparative harm which should guide the doctor in this matter. Differing in their mode and style, all the scholars have said substantially the same thing. Their basic opinion is that in the case of greater harm arising out of concealing the HIV status, the ailment should be disclosed otherwise disclosure is not a responsibility of the doctor.

The doctor has not been restrained by the *Shariah* to keep such ailments secret and follow the wishes of the patient. It is, however, the duty of the doctor to give the best treatment and care to the patient and give precautionary tips to the patient and his family members. In case the doctor informs others about the disease of his patient, it will be at the most dubbed as “back bite”. Back bite (*gheebah*) is certainly bad but is allowed, according to Imam Ghazali, “to save the Muslims from harm”, while Allama Shami has cited eleven reasons in its regard.

The patient in such circumstances is always afraid of the social boycott; hence he insists that the doctor should keep silence about his ailment. In such cases it is better for the doctor to cooperate with the patient especially for the reason that in case of disclosure, imaginary and uncertain harms will get precedence over definite and certain harm of social exclusion. Such a course of action on the part of the doctor is wrong in principle.

It is the right of the patient to be looked after and treated well by others. The disclosure of the AIDS/HIV positive status by the doctor will certainly result into curtailment of these rights.



However, there are certain situations when the insistence or opinion of the patient does not matter. These relates to the information to the health care agencies of the government. Such a disclosure or notification, the action of the doctor will not be counted a sin.

Some traditions have also been quoted for guidance in such matters. It has been stated that it is not deplorable to reveal somebody's vice or imperfection to others but it should not mean insult or contempt of the patient. Besides, Islam has totally rejected infectiousness of the diseases because whatever happens is in accordance to the will of Allah. However, the *Shariah* has granted some concessions for people with weak beliefs. For the strong willed and firm believers the real procedure is same as was adopted by the holy Prophet (P.B.U.H.).

In short it is the moral duty of the doctors to adopt whatever course he deems fit on case to case basis. However, the doctor must inform the family members and relatives of the patient and guide them in adopting the urgent precautionary steps in their daily life.

### **Duties of Relatives, Friends & Society**

Another important aspect relates to the legal responsibilities of the family, friends, relatives and society in relation to an AIDS patient or any other people suffering from any other dreadful contagious disease like plague.

Nearly all the scholars have unanimously opined that such a person should not be made to suffer loneliness and mental harassment. Full cooperation should be given to him in providing medicines treatment, care, service and other precautionary methods. He should not be despised but treated with kindness and mercy. In no case he should be left unattended, friendless, lonely or like an untouchable.

Almost all the scholars have opined that the friends and relatives should take all the precautionary measures while attending to the AIDS patients but in no case the patient should be left alone. Some scholars have suggested that the precaution should be taken in such a manner that the patient does not feel offended.

Some of the scholars have referred to the instance of plague in this connection. It has been said that one of the reason behind the prohibition from leaving the place affected by the plague was that the people suffering with plague may not be left without care. It has been argued that getting affected with the plague while attending to the plague patients is a “possibility” while attending and providing care to such patients is a “duty”. It has been stated that a “duty” cannot be avoided on the basis of a “possibility” of meeting harm while discharging the duty.

#### **AIDS: Whether a Mortal Disease (*Maraz-ul-Maut*)?**

The question of terming the AIDS as a “mortal disease” or a *maraz ul maut* is a very vital and important question. There are different precepts regarding the definition of a “mortal disease”. Noted jurist Haskafi writes; “if the death of a patient is certainly due to occur because of some ailment, and the patient is bed-ridden and unable to fulfill his daily needs by himself or move out of his house, his disease will be called a “mortal disease”.

The jurist Abul Lais did not think being bed-ridden as imperative condition for terming a disease as a mortal disease. According to him it was enough that the ailment should last till the death of the patient. Another eminent jurist Shami also supports this contention.

There are different definitions of a “mortal disease”. The concept is vastly different and not as simple as narrated above. However, such diseases which are generally long-lasting will be considered “mortal diseases” provided there is gradual

enhancement in the severity. If the degradation stops after reaching a certain stage and if there is no increase in their severity (and the condition remains static) for about one year, such diseases will not be considered as “mortal diseases”.

It is mentioned in “*Durr-e-Mukhtar*” that if duration of the disease of a crippled, paralytic or tuberculous patient becomes lengthy, but the patient is not bedridden, he will be considered as a healthy person. Noted jurist Hulwani has opined that the limit of the longevity of an ailment is about one year in medical parlance.

A patient or a crippled will be considered to be under the shadow of death only till such time when the ailment goes on increasing, if the disease stops increasing at a certain stage and becomes static at that point and there is no change in the condition of the patient for better or for worse for about one year, the disease will not be considered a mortal disease.

Therefore, in the light of these opinions, the AIDS is an incurable disease, and according to medical research, it will be considered a “mortal disease” only if severity of the disease goes on increasing gradually. However, according to another opinion, when AIDS, plague or cancer etc. reach incurable stage and the patient dies because of this disease without gaining any health, it will be declared as mortal disease as per Islamic *Shariah*.

According to another opinion, when a disease reaches the stage of incurability or when the disease is regularly increasing in its severity and the patient reaches a stage when he will be allowed to offer prayers sitting and not standing, it will automatically be considered a mortal disease, and the patient will be declared as the one dying from a mortal disease.

Another explanation of mortal disease is that the ailment which makes a person thin, weak and allows him to offer

prayers sitting is a mortal disease. In short, any disease which ends with the death of the patient is a mortal disease.

Orders and disposals regarding the legacy, declaration, will, divorce, etc. which are affected by mortal diseases code will be issued and decided under these very principles.

### **Transmission of HIV from one person to another**

According to majority of scholars if an AIDS patient, who is well acquainted with the dangerous and dreadful consequences of the disease, does something intentionally to transfer it to someone else e. g. she/he indulges in intercourse with any healthy person or donates his/her contaminated blood to some person requiring blood transfusion; such a HIV positive person is liable to be punished for this deliberate act and shall also be liable for compensation.

However, some scholars have opined that if the act has been done as a matter of sympathy and the object is not to transfer the virus, such a patient shall not be liable.

According to some scholars such a patient shall be a sinner but she/he shall not liable to be punished as the spouse and/or the person receiving the blood are also participants in the act, therefore, the patient alone is not guilty. Such scholars have argued that when the person being murdered also has a role or participates in the act of murder, the person causing the death shall not be liable. However, this view did not find favour with the majority of scholars.

Now, if the AIDS patient deliberately transfers the virus to someone and it becomes the cause of his/her death, the scholars of Maliki, Shafeie and Hanbali schools of thought say that he should be killed in retaliation because it is equivalent to administration of poison.

If the patient had no intention of transferring the virus but was well aware of its effect and result, he will be liable to the punishment because anybody causing harm is responsible to compensate the loss, no matter whatever are its reasons or causes or means.

Here the question also arises about the definition of contagiousness. Any disease which is transferable to another person is contagious. Its means of transfer may be different and varied, but AIDS also comes within the definition of a contagious disease because it can also be transferred to others.

Take the example of scabies. We don't know that a person has scabies under his clothes as such a person apparently looks healthy. He deliberately shakes hand (with which he has been scratching his body) with a healthy person and immediately or after some time the person also gets this disease which costs the person his/her social life or livelihood or even his/her life, the person causing the transmission of scabies will be guilty and the quantum of the guilt will decide the quantum of punishment.

However, the case of AIDS is a little different from other contagious diseases and their effects. When this virus enters in the body of a person it rests in the body for a very long time without any external appearance or change. It may remain in the body of a man for a long time, even a decade without any external manifestation indicating its presence.

During this period of inaction or hibernation of the virus if the HIV positive person unknowingly does something, which causes transfer of the disease, he cannot be held guilty or liable. However, if one knowingly does something to transfer the virus to some other healthy person he is guilty of first grade murder and shall be punished according to *Shariah* rules.

## **Legal rights of the spouse of an AIDS/HIV positive person**

There are important questions regarding the wife's rights in case the husband gets infected with the Human Immunodeficiency Virus after the marriage. Shall the wife have the right of the annulment of her *nikah* on this ground? Moreover, if an AIDS patient marries concealing his ailment; can his wife demand the annulment of her *nikah*?

Nearly all the theologians and experts have unanimously opined that in the conditions noted above the wife can demand annulment of her *nikah* as per the three Imams and Imam Mohammad.

The Maliki, Shafeie and Hanbali jurists include '*nikah*' in the affairs which can be annulled because of some defect in the husband. If such a defect was already in the husband at the time of '*nikah*' or it occurred after the '*nikah*' but the woman was not informed of it, the jurists of all the three schools of thought have opined that the woman (wife) can demand the annulment of her marriage, though there is some difference about the details of the defects causing the annulment.

Basically these defects are of two kinds; one which make one incapable of deriving any sexual pleasure from the other, and the other defect is that which is loathsome with a tendency of infectiousness like leprosy I or tuberculoid leprosy (*Jezam*) or Leprosy II or lepromatous leprosy (*Bars*).

According to Imam Abu Hanifa there is no other condition except impotency when a wife can demand separation from her husband. While Allama Kasani has said the husband should be free from all such defects like insanity, leprosy I or tuberculoid leprosy (*Jezam*) or Leprosy II or lepromatous leprosy (*Bras*), that a woman can live with her husband without any harm.

Imam Mohammad says that a wife can claim annulment of *nikah* on the ground of every such defect because of which the wife is not able to live his husband. It is also harmonious with *Shariah* outlook. In the light of these details it can be safely claimed that AIDS is also included in the list of diseases because of which the wife can have the right of separation from the husband.

Therefore, it may be said that the wife has a right to annul her *nikah* on the ground that the husband is HIV positive under the Hanafi school of jurisprudence as well for the simple fact this condition is much more dreadful than leprosy I or tuberculoid leprosy (*Jezam*) or Leprosy II or lepromatous leprosy (*Bras*). Besides, the sexual intercourse being one of the major sources of spread of this virus it is all the more qualified to be included in the ground of annulment of *nikah*.

According to Imam Abu Hanifa and Imam Abu Yusuf, a wife has no right of demanding annulment of the *nikah* on the ground of insanity of the husband; however, the Malekei *Fiqh* has allowed annulment in case of insanity because there is apprehension of the death of the wife at the hands of an insane husband. Apart from insanity of the husband, the Malekei *Fiqh* gives no right to the wife for separation.

Allama Ibn-e-Nujaim Misri is more explicit about separation of the wife from a “defective” husband. He writes “If the *Qazi* (the magistrate) announces his decision of annulment of *nikah* on the ground of some defect in the husband, this decision shall be final and binding”.

AIDS is comparatively a recent disease and may be safely included in the list of repulsive diseases on account of which the wife can appeal to the *Qazi* (judge) for annulment of the ‘*nikah*’. The aim of marriage, among other things, is the sexual satisfaction between the husband and wife, and also to procreate. According to Ibn-e-Taimiah every woman will

shrink back because of any defect in the husband which is an impediment in establishing sexual relations.

AIDS also holds the same condition, but in comparison to all other defects and diseases it is found more repulsive and loathsome. If a man acquires this virus, a woman would try to avoid him and both of them will be deprived of sexual pleasure and procreation.

AIDS was unheard of in ancient times, and insanity, leprosy I or tuberculoid leprosy (*Jezam*) or Leprosy II or lepromatous leprosy (*Bras*) were considered as general cause for the annulment. But our era is medically more advanced and apart from the above mentioned three diseases all other painful, contagious and repulsive diseases like syphilis and gonorrhoea are also considered among the hateful diseases on which a wife can demand annulment of her '*nikah*'.

### **AIDS & Termination of Pregnancy**

There is important question relating to the pregnancy of a women with AIDS. Whether a woman with AIDS, who. got pregnant, and medically there is apprehension of the transfer of HIV into the child in her womb during the gestation period, or at time of the child birth, or during the nursing period; can such a woman terminate her pregnancy because of the fear of the transfer of the virus into the child?

Another situation may arise when such a woman is not ready or willing to terminate her pregnancy; can she be forced by her husband or governmental agencies to undergo abortion on the ground that the child will be a danger to the society and a burden on the government?

All the participants are unanimous that a woman can have the abortion only till the time life does not enter into the foetus. She is not allowed to abort the child after this period.



Here it is pertinent to mention that there are two stages of pregnancy. The first stage is of the first four months or one hundred and twenty (120) days. During this period the foetus is lifeless.

The second stage comes after the completion of the first 120 days when the foetus begins to take human shape gradually and life enters in it. After completion of the full gestation period of approx. nine months the child comes out into this world.

Abortion can be allowed during the first 120 days for various reasons but after this period permission cannot be granted for abortion even if there is every apprehension of the child would be infected with the virus. Such an abortion shall amount to murder.

A child born with a fatal hereditary disease is obviously a serious reason, and in such cases termination of pregnancy can be allowed only during the first 120 days.

Another opinion is that if an AIDS affected woman becomes pregnant, abortion is not necessary because it does not necessarily mean that the virus will transfer into the child from the mother and the child will become an AIDS victim. Even if the child is infected by the HIV, there is no justification to kill the child before his birth. The justification can be only under the condition when there is threat to the life of the mother.

The fact is that *Shariah* has not only discouraged abortion but it is considered a very despicable and deplorable act. In the first stage of pregnancy it can be permitted but in the second stage neither the husband nor the governmental health care agencies have right to pressurize the mother to abort the child.

According to some prominent jurists of various schools of thought the very act of abortion, even within the period of the first 120 days, is not in accordance with *Shariah*. As soon as the ovum is fertilized it becomes a respectable representative of

a soul, therefore, even at that very initial stage, the abortion amounts to the murder of a living person.

It clearly means that after entering in the womb of mother the drop of sperm has the capability of life and if it is destroyed by way of abortion its punishment will become binding. Even if some deliberate action of the mother aborts the child she will be responsible for the murder of the child in her womb.

The child is an integral part of the woman's body even when it is a lifeless foetus and no human being has a right of cutting out and throwing away any part of the body. Moreover, the human being has been created as the most respectable of all the creatures by Allah; therefore, the respectability demands that no person should murder another person.

Therefore, after going through all these details, there will be no legal right to abort the child on a mere possibility that the child would be a burden on the society and a danger for others. However the expectant mother can go for abortion if her own life is in danger.

### **Children with HIV/AIDS**

A child is the most precious thing for the parents for whom their love and affection is boundless, no matter even if the child is suffering from some dreadful disease. It has been medically established that the AIDS affected children do not enjoy a long life and hardly live beyond their fifteenth birthday.

In such cases the parents shower their love on these children all the more. A child gets the virus of HIV/AIDS only through two ways, (1) either the child gets it through inheritance from their AIDS affected parents or get it through HIV infected blood transfusion in infancy because of some ailment or weakness.

The child is the most innocent victim of this virus; hence he should be the centre of the love and sympathy of not only the parents but also of relatives and the society as well. The society should not leave this child unattended or abandoned to die a painful death like a destitute child, unwanted by parents, relatives or the society or the health agencies of the state.

This child should be allowed to live with dignity, lead a happy and normal childhood, and get education in general schools. In case the parents, due to their poverty, are not able to provide the child with medicines, medical care and good food, it is the responsibility of the government and the society to take such children under their care, admit them in children's homes and provide them with careful and sympathetic doctors and nurses.

In no case these children should feel that the people are looking at them with hate and fear, and trying to avoid their company.

### **Education of HIV Positive/AIDS affected Children**

The provision of education for HIV positive children is one of the important issues confronting the society. Whether it would be a correct step to debar all the AIDS affected children from admission in school? Whether it would not be unfair to deprive them from education while it is a known fact that this virus does not spread in day to day routine activities of a child?

It is now established beyond doubt that the virus is not transferred by touching, kissing, hugging, eating or sitting with an AIDS patient. If a child suffering from AIDS is admitted in a school certainly there is no danger of getting other children infected under general circumstances.

However, this is not to say that there is absolutely no danger to fellow children as there is a possibility that such a child may get hurt while playing or in a brawl with other children and starts bleeding and this blood may transfer this virus.

Nearly all the participants have opined that the AIDS affected children should be allowed to lead a normal childhood and should not be deprived the right of education. However essential precautions should be undertaken.

If their number is sufficiently large, special institutions should be opened for them because education is the basic right of every child no matter under what circumstances he lives, and for what duration of life such a child is able to live.

In case there are plentiful AIDS affected children in a society/city/state, the NGOs or the government may open separate schools for them but when there are only a few and limited cases separate schools can not be opened. However the teachers and students of these schools should be informed about this virus and the children affected by it and also about the precautions to be adopted in connection with these children. Therefore these children may be admitted in general schools and receive education along with other healthy children.

These innocent children cannot be denied education with others only on the basis of apprehensions, superstitions and the dread of a distant future. The medical experts have stated that this disease is contagious only in the context of sexual relationship or unsafe sex, oral sex or blood transfusion, etc. The virus can also enter into the body of others by transfer the blood of the victim through an open wound of the other person.

Such situations very seldom arise and can be avoided by adopting suitable precaution and general vigilance by the staff. Accidents happen only when the children are running. They can lose their balance or stumble and get hurt specially in the knees and sometimes bleed. Special care should be taken by the teachers or the games in-charges to avoid such accidents.



**The Resolution Adopted by the Islamic *Fiqh*  
Academy (India) in its 8th Seminar held at the Aligarh  
Muslim University, Aligarh (U.P) from Oct. 22 - 24,  
1995**

The Eighth Islamic *Fiqh* Seminar of the Islamic *Fiqh* Academy (India) was held at the Aligarh Muslim University Campus, Aligarh (Uttar Pradesh). The seminar was hosted by the Department of Sunni Theology, Aligarh Muslim University. Many scholars, jurists and representatives of reputed seminaries from India representing all schools of thought as well as a number of academicians from the AMU participated. Sheikh Wahba Zuhaili, a renowned Muslim jurist of Syria, was the chief guest. The resolution adopted by the seminar is as follows:

1. If a person, not disclosing that he is suffering form AIDS, contracts a marriage, the wife shall have the right to have the marriage dissolved. She will have the same right in the case of her husband contracting AIDS subsequent to marriage provided that the disease assumes serious proportions.
2. If a woman suffering form AIDS gets pregnant and a qualified doctor opines that in all likelihood the child in the womb will also develop AIDS, in that case, prior to the life coming into the foetus, the period for which the Muslim jurists have determined as 120 days, permission for abortion may be granted.
3. If an AIDS patient is completely in the grip of the disease, and is rendered incapable of performing normal functions of life, such a person will be treated as the one on the death- bed.
4. It is the moral responsibility of an AIDS patient to inform his family and others related to him/her about the ailment, and also take all necessary precautionary measures.

5. If an AIDS patient insists upon his doctor to keep his/her HIV/AIDS status a secret, and if the doctor is of the opinion that by so doing there is a likelihood of injury to the members of patient's household, to patient's relatives and to the society at large, then it will be incumbent upon the doctor to disclose the information to the relatives of the patient and to the concerned agency of the government.
6. In respect of the persons suffering from AIDS or other infectious disease, it is the duty of their families, relatives, and the society as a whole, not to leave them isolated and uncared for. Taking all necessary precautions, good care of the patients should be taken and due cooperation should be offered in their treatment.
7. It is improper to keep the AIDS-infected children deprived of education. Observing due precautions, proper arrangements for their education should be made.
8. Restrictions on movement in and out of plague-affected areas are desirable except in cases of extreme necessity.
9. It is *haram* (forbidden) and a major sin for an AIDS patient to knowingly transmit the disease to any other person. Such a person will be liable for penalization keeping in view the nature of the act and for the harmful affect it has on an individual or on the society as a whole.



## **HIV Infection and AIDS**

### **An Overview**

#### **Origin of AIDS:**

Debate around the origin of AIDS has sparked considerable interest and controversy since the beginning of the epidemic. However, in trying to identify where AIDS originated, there is a danger that people may try and use the debate to attribute blame for the disease to particular groups of individuals or certain lifestyles.

The first cases of AIDS occurred in the USA in 1981, but they provide little information about the source of the disease. There is now clear evidence that the disease AIDS is caused by the virus HIV. So to find the source of AIDS we need to look for the origin of HIV.

The issue of the origin of HIV could go beyond one of purely academic interest, as an understanding of where the virus originated and how it evolved could be crucial in developing a vaccine against HIV and more effective treatments in the future. Also, the knowledge of how the AIDS epidemic emerged could be important in both mapping the future course of the epidemic and developing effective education and prevention programme.

## **HIV: The Virus :**

HIV is part of a family or group of viruses called lentiviruses. Lentiviruses other than HIV have been found in a wide range of nonhuman primates. These other lentiviruses are known collectively as simian (monkey) viruses (SIV) where a subscript is used to denote their species of origin.

It is now generally accepted that HIV is a descendant of simian (monkey) immunodeficiency virus (SIV). Certain simian immunodeficiency viruses bear a very close resemblance to HIV-1 and HIV-2, the two types of HIV.

For example, HIV-2 corresponds to a simian immunodeficiency virus found in the dirty mangabey monkey (SIV<sub>sm</sub>), sometimes known as the green monkey, which is indigenous to western Africa.

Until 1999 the closest counterpart that had been identified was the simian (monkey) immunodeficiency virus that was known to infect chimpanzees (SIV<sub>cpz</sub>), but this virus had significant differences between it and HIV

In February 1999 it was announced that a group of researchers from the University of Alabama had studied frozen tissue from a chimpanzee and found that the simian virus it carried (SIV<sub>cpz</sub>) was almost identical to HIV-1. The chimpanzee came from a sub-group of chimpanzees known as Pan Troglodytes, which were once common in west-central Africa.

It is claimed by the researchers that this shows that these chimpanzees were the source of HIV-1, and that the virus at some point crossed species from chimpanzees to human. However, it was not necessarily clear that chimpanzees were the original reservoir for HIV-1 because chimpanzees are only rarely infected with SIV<sub>cpz</sub>.



The findings of this 10-year long research into the origin and evolution of HIV by Paul Sharp of Nottingham University and Beatrice Hahn of the University of Alabama were published in 2003. They concluded that wild chimpanzees became infected simultaneously with two simian immunodeficiency viruses (SIVs) which had "viral sex" to form a third virus capable of infecting humans and causing AIDS.

Professor Sharp and his colleagues discovered that the chimp virus was an amalgam of the SIV infecting red-capped mangabeys and the virus found in greater spot-nosed monkeys. They believe that the hybridisation took place inside chimps that had become infected with both strains of SIV.

### **The difference between HIV-1 and HIV-2**

There are currently two types of HIV: HIV-1 and HIV-2. Worldwide, the predominant virus is HIV-1, and generally when people refer to HIV without specifying the type of virus they will be referring to HIV-1. Both HIV-1 and HIV-2 are transmitted by sexual contact, through blood, and from mother to child, and they appear to cause clinically indistinguishable AIDS.

However, HIV-2 is less easily transmitted, and the period between initial infection and illness is longer in the case of HIV-2.

### **Subtypes of HIV-1**

HIV-1 is a highly variable virus which mutates very readily. So there are many different strains of HIV-1. These strains can be classified according to groups and subtypes and there are two groups, group M and group O.

In September 1998, French researchers announced that they had found a new strain of HIV in a woman from Cameroon in West Africa. The strain does not belong to either group M or

group O, and has only been found in three other people, all in the Cameroon.

Within group M there are currently known to be at least 10 genetically distinct subtypes of HIV-1. These are subtypes A to J. In addition, Group O contains another distinct group of very heterogeneous viruses. The subtypes of group M may differ as much between subtypes as group M differs from group O.

The subtypes are very unevenly distributed throughout the world. For instance, subtype B is mostly found in the Americas, Japan, Australia, the Caribbean and Europe; subtypes A and D predominate in sub-Saharan Africa; subtype C in South Africa and India; and subtype E in Central African Republic, Thailand and other countries of Southeast Asia. Subtypes F (Brazil and Romania), G and H (Russia and Central Africa), I (Cyprus), and group O (Cameroon) are of very low prevalence. In Africa, most subtypes are found, although subtype B is less prevalent.

### **Major Differences between the subtypes**

The major difference is their genetic composition; biological differences observed *in vitro* and/or *in vivo* may reflect this.

It has also been suggested that certain subtypes may be predominantly associated with specific modes of transmission: for example, subtype B with homosexual contact and intravenous drug use (essentially via blood) and subtypes E and C, with heterosexual transmission (via a mucosal route).

Laboratory studies undertaken by Dr Max Essex of the Harvard School of Public Health in Boston have demonstrated that subtypes C and E infect and replicate more efficiently than subtype B in Langerhans cells which are present in the vaginal mucosa, cervix and the foreskin of the penis but not on the wall of the rectum. These data suggest that HIV subtypes E and C

may have a higher potential for heterosexual transmission than subtype B.

However, caution should be exercised in applying in vitro studies to real-life situations. Other variables which affect the risk of transmission, such as the stage of HIV disease, the frequency of exposure, condom use, and the presence of other sexually transmitted diseases (STDs), must also be taken into consideration before any definite conclusions can be drawn.

Some recent studies have suggested that subtype E spreads more easily than subtype B. In one study conducted in Thailand (Mastro et al., *The Lancet*, 22 January 1994), it was found that the transmission rate of subtype E among female prostitutes and their clients was higher than that for subtype B found among a general population in North America.

In a second study conducted in Thailand (Kunanusont, *The Lancet*, 29 April 1995), among 185 couples with one partner infected with HIV subtypes E or B, it was found that the probability of both partners in a couple becoming infected was higher for subtype E (69%) than for subtype B (48%). This suggests that subtype E may be more easily transmissible.

Subtype E is not new. Stored blood samples show that subtype E was already identified at the beginning of the epidemic in Central Africa and as early as 1989 in Thailand.

### **HIV: Passage to Humans**

It has been known for a long time that certain viruses can pass from animals to humans, and this process is referred to as zoonosis.

The researchers concluded that HIV could have crossed over from chimpanzees as a result of a human killing a chimp and eating it for food.

Some other rather controversial theories have contended that HIV was transferred iatrogenically i.e. via medical experiments. One particularly well publicised theory is that polio vaccines played a role in the transfer.

The journalist Edward Hooper has suggested that HIV could be traced to the testing of an oral polio vaccine called Chat as batches of the Chat vaccine may have been grown in chimp kidney cells in the Congo, the Wistar Institute and Belgium. That could have resulted in the contamination of the vaccine with chimp SIV, the simian version of HIV-1. This vaccine was then given to about a million people in the Belgian Congo, Rwanda and Burundi in the late 1950s.

However, in February 2000 the Wistar Institute in Philadelphia announced that it had discovered in its stores a phial of polio vaccine that had been used as part of this polio vaccination program. The vaccine was subsequently analyzed and in April 2001 it was announced that no trace had been found of either HIV or chimpanzee. A second analysis confirmed that only macaque monkey kidney cells, which cannot be infected with SIV or HIV, were used to make Chat.

### **Transfer of HIV: The Evidence**

During the last few years it has become possible not only to determine whether HIV is present in a blood or plasma sample, but also to determine the particular subtype of the virus. Studying the subtype of virus of some of the earliest known instances of HIV infection can help to provide clues about the time of origin and the subsequent evolution of HIV in humans.

Three of the earliest known instances of HIV infection are as follows:

1. A plasma sample taken in 1959 from an adult male living in what is now the Democratic Republic of Congo

2. HIV found in tissue samples from an African-American teenager who died in St. Louis in 1969.
3. HIV found in tissue samples from a Norwegian sailor who died around 1976.

Analysis in 1998 of the plasma sample from 1959 was interpreted as suggesting that HIV-1 was introduced into humans around the 1940s or the early 1950s, which was earlier than had previously been suggested. Other scientists have suggested that it could have been even longer, perhaps around 100 years or more ago.

In January 2000, the results of a new study presented at the 7th Conference on Retroviruses and Opportunistic Infections, suggested that the first case of HIV infection occurred around 1930 in West Africa. The study was carried out by Dr. Bette Korber of the Los Alamos National Laboratory. The estimate of 1930 (which does have a 20 year margin of error), is based on a complicated computer model of HIV's evolution.

### **Emergence of HIV in Humans: The Origin**

Many people now assume that because HIV has apparently developed from a form of SIV found in a type of chimpanzee in West Africa, that is was actually in West Africa that HIV first emerged in humans. It is then presumed that HIV spread from there around the world.

However, chimpanzees are not necessarily the original source of HIV and it is likely that the virus crossed over to humans on more than one occasion. So it is quite possible that HIV emerged at the same time in say both South America and Africa, or that it even emerged in the Americas before it emerged in Africa.

We will probably never know exactly when and where the virus first emerged, but what is clear is that sometime in the middle of the 20th century, HIV infection in humans developed into the epidemic of disease around the world that we now refer to as AIDS.

## **Spread of HIV: The Genesis of an Epidemic**

There are a number of factors that may have contributed to the sudden spread including tourism & travel, the blood transfusion, and widespread intravenous use of narcotics and psychopathic drugs.

### **Travel & Tourism**

The role of international travel in the spread of HIV was highlighted by the case of 'Patient Zero'. Patient Zero was a Canadian flight attendant called Gaetan Dugas who travelled extensively worldwide. Analysis of several of the early cases of AIDS showed that the infected individuals were either direct or indirect sexual contacts of the flight attendant. These cases could be traced to several different American cities demonstrating the role of international travel in spreading the virus. It also suggested that the disease was probably the consequence of a single transmissible agent.

### **Blood Transfusion**

As blood transfusions became a routine part of medical practice, this led to a growth of an industry around meeting this increased demand for blood. In some countries such as the USA paid donors were used, including intravenous drug users. This blood was then sent worldwide. Also, in the late 1960's haemophiliacs began to benefit from the blood clotting properties of a product called Factor VIII. However, to produce the coagulant, blood from thousands of individual donors had to be pooled. Factor VIII was then distributed worldwide making it likely that haemophiliacs could become exposed to new infections.

### **Narcotics & Psychopathic Drug Use**

The 1970s saw an increase in the availability of heroin following the Vietnam War and other conflicts in the Middle East, which helped stimulate a growth in intravenous drug use. This increased availability together with the development of

disposable plastic syringes and the establishment of 'shooting galleries' where people could buy drugs and rent equipment provided another route through which the virus could be passed on.

### **Other Theories on Emergence of HIV**

Other theories put forward about the origin of HIV include a number of conspiracy theories. Some people have suggested that HIV was manufactured by the CIA whilst others believe that HIV was genetically engineered.

### **HIV Diagnosis**

Routine HIV antibody tests which are currently being used for blood screening and diagnostic purposes detect virtually all subtypes of the HIV. (Most companies have modified their assays so that they detect the newly identified HIV-1 group O strains.)

It is almost certain that new HIV genetic subtypes will be discovered in the future, and indeed that new subtypes will develop as virus mutation continues to occur. The current subtypes will also continue to spread to new areas as the global epidemic continues.

However, in some countries there is very little monitoring undertaken to detect new sub-types. For example, in Britain, the government's Public Health Laboratory Service which is responsible for monitoring the spread of HIV in Britain, only analyses 2 new infections a month for sub-type information.

More research needs to be undertaken. Some HIV subtypes have been observed in the laboratory to have different growth and immunological characteristics; these differences need to be demonstrated in vivo.

It is not known whether the genetic variations in subtype E or other subtypes actually make a difference in terms of the risk of transmission or the response to antiviral therapy.

### **AIDS Vaccine**

The development of an AIDS vaccine is also affected by the range of virus subtypes as well as by the wide variety of human populations who need protection and who differ, for example, in their genetic make-up and their routes of exposure to HIV.

Inevitably, different types of candidate vaccines will have to be tested against various viral subtypes in multiple vaccine trials, conducted in both high-income and developing countries.

### **AIDS vaccine: The Need**

In the long term, a safe, effective and affordable preventive vaccine against HIV is the best hope of bringing the global epidemic under control. However, it would be a mistake to think that the development of such a vaccine will be quick or easy or to expect that once a vaccine is available it will replace other preventive measures.

Scientists are working to understand the kind of immunity a vaccine would have to induce in order to protect someone against HIV infection. The information that they generate is in turn being used by the pharmaceutical and biotechnology industry to develop "candidate vaccines" to be tested in HIV-negative human volunteers. The first human trial of an HIV-preventive vaccine was conducted in 1987 in the United States. Since then, more than 30 small-scale trials have been conducted, including 12 in developing countries (Brazil, China, Cuba, Thailand and Uganda). These trials, carried out with the participation of more than 5000 healthy volunteers have shown that the candidate vaccines are safe and that they induce immune responses that could potentially protect people against HIV infection.



## **AIDS Vaccine: The Research & Trials**

The first large-scale HIV vaccine trials, designed to show whether the candidate vaccines actually protect against HIV infection or disease, were launched in 1998 in the United States and in 1999 in Thailand. The trials involve 8000 healthy volunteers who are given one of two different versions of gp120, a protein located on the outside of the virus, depending on the virus strains prevalent in the two countries. The initial results from these trials may be available within the next two years. In parallel, other candidate HIV vaccines are being developed through different experimental approaches. Some are based on the HIV strains prevalent in developing countries. Most of these newer candidate vaccines will be tested in small-scale trials in human volunteers, and the best will proceed to large-scale evaluation for efficacy.

Most likely, the initial HIV vaccines will not be 100% effective, and they will have to be delivered as part of a comprehensive prevention package.



## AIDS

### Myths & Realities

#### **AIDS: The Meaning**

AIDS stands for Acquired Immune Deficiency Syndrome:

- *Acquired* means the person can get infected with it;
- *Immune Deficiency* means a weakness in the body's system that fights diseases.
- *Syndrome* means a set of health problems that make up a disease.

AIDS stands for **Acquired Immune Deficiency Syndrome**.

An HIV-positive person can also receive an AIDS diagnosis on the basis of certain blood tests (CD4 counts) and may not have experienced any serious illnesses. A positive HIV test does not mean that a person has AIDS.

Over time, infection with HIV (Human Immunodeficiency Virus) can weaken the immune system to the point that the system has difficulty fighting off certain infections. These types of infections are known as opportunistic infections. Many of the infections that cause problems or that can be life-threatening for people with AIDS are usually controlled by a healthy immune system. The immune system of a person with AIDS has weakened to the point that medical intervention may be necessary to prevent or treat serious illness.

## **The Difference between HIV and AIDS?**

HIV is the virus that causes AIDS.

**H** - Human: because this virus can only infect human beings.

**I** - Immuno-deficiency: because the effect of the virus is to create a deficiency, a failure to work properly, within the body's immune system.

**V** - Virus: because this organism is a virus, which means one of its characteristics is that it is incapable of reproducing by itself. It reproduces by taking over the machinery of the human cell.

**A** - Acquired: because it's a condition one must acquire or get infected with; not something transmitted through the genes

**I** - Immune: because it affects the body's immune system, the part of the body which usually works to fight off germs such as bacteria and viruses

**D** - Deficiency: because it makes the immune system deficient (makes it not work properly)

**S** - Syndrome: because someone with AIDS may experience a wide range of different diseases and opportunistic infections.

## **HIV to AIDS: The Incubation Period**

Currently, the average time between HIV infection and the appearance of signs that could lead to an AIDS diagnosis is 8-11 years. The time it takes for a person who has been infected with HIV to **seroconvert** (test positive) for HIV antibodies is commonly called the "Window Period."

This time varies greatly from person to person and can depend on many factors including a person's health status and behaviors. Today there are medical treatments that can slow

down the rate at which HIV weakens the immune system. There are other treatments that can prevent or cure some of the illnesses associated with AIDS. As with other diseases, early detection offers more options for treatment and preventative health care.

The California Office of AIDS, published in 1998, says about the window period: "statistics show that 95-97% (perhaps higher) of all infected individuals develop antibodies within 12 weeks (3-months)."

The National CDC has said that in some rare cases, it may take up to six months for one to seroconvert (test positive). At this point the results would be 99.9% accurate.

The three-month window period is normal for approximately 95% of the population. If the person feels any anxiety about relying on the 3-month result, by all means the person should have another test at 6 months.

In rare cases, it can take up to six months. Therefore, it is advisable to undergo testing at 6 months after the last possible exposure. It would be extremely rare to take longer than six months to develop detectable antibodies. It is important, during the six months between exposure and the 6-month test, to protect oneself and others from further exposures to HIV.

The combination of an Elisa/Western Blot **HIV Antibody Test** is the accepted testing method for HIV infection. This combination test is looking for the **antibodies** that develop to fight the HIV virus. There are two ways to conduct this test. Either through a **blood draws** or through the "**Orasure**" method (a sample of oral mucus obtained with a specially treated cotton pad that is placed between the cheek and lower gum for two minutes). Both forms, by blood draw or orally, have the same accuracy with their results.

Other tests that the person will hear about are **Viral Load** tests. These tests are used by physicians to monitor their patients who have already tested positive for HIV antibodies.

### **Positive Result: The Meaning**

A positive result means:

- The person is HIV-positive (carrying the virus that causes AIDS).
- The person can infect others and should try to implement precautions to prevent doing so.

A negative result means:

- No antibodies were found in the person's blood at this time.

A negative result does **NOT** mean:

- The person is not infected with HIV (if the person is still in the window period).
- The person is immune to AIDS.
- The person has a resistance to infection.
- The person will never get AIDS.

Testing positive for HIV means that the person now carries the virus that causes AIDS, though it does not mean that the person has AIDS, nor does it mean that the person will die. Although there is no cure for AIDS, many opportunistic infections that make people sick can be controlled, prevented or eliminated. This can substantially increase the longevity and quality of life for people living with AIDS.

Another important point which needs to be kept in mind is that the HIV test result reveals only HIV status the person who has been tested. The negative test result does not tell the person

about the HIV status of his/her partner(s). HIV is not necessarily transmitted every time there is an exposure. No one's test result can be used to determine another person's HIV status

### **The connection between HIV and other sexually transmitted diseases**

Having a sexually transmitted disease (STD) can increase a person's risk of becoming infected with HIV, whether or not that STD causes lesions or breaks in the skin. If the STD infection causes irritation of the skin, breaks or sores may make it easier for HIV to enter the body during sexual contact. Even an STD that causes no breaks or sores can stimulate an immune response in the genital area that can make HIV transmission more likely.

### **The Symptoms of HIV**

The only way to determine whether the person is infected is to be tested for HIV infection. The person can't rely on symptoms to know whether or not he/she is infected with HIV. Many people who are infected with HIV don't have any symptoms at all for many years.

Similarly, a person can't rely on symptoms to establish that he/she has AIDS. The symptoms associated with AIDS are similar to the symptoms of many other diseases. AIDS is a diagnosis made by a doctor based on specific criteria established for the purpose.

Primary HIV infection is the first stage of HIV disease, when the virus first establishes itself in the body. Some researchers use the term *acute HIV infection* to describe the period of time between when a person is first infected with HIV and when antibodies against the virus are produced by the body (usually 6- 12 weeks).

Some people newly infected with HIV will experience some "flu-like" symptoms. These symptoms, which usually last no more than a few days, might include fevers, chills, night sweats and rashes (not cold-like symptoms). Other people either do not experience "acute infection," or have symptoms so mild that they may not notice them.

Given the general character of the symptoms of acute infection, they can easily have causes other than HIV, such as a flu infection. For example, if the person had some risk for HIV a few days ago and is now experiencing flu-like symptoms, it might be possible that HIV is responsible for the symptoms, but it is also possible that the person have some other viral infection.

### **The Symptoms of AIDS**

There are no common symptoms for individuals diagnosed with AIDS. When immune system damage is more severe, people may experience opportunistic infections (called **opportunistic** because they are caused by organisms which cannot induce disease in people with normal immune systems, but take the "opportunity" to flourish in people with HIV). The median time to receive an AIDS diagnosis among those infected with HIV is 7-10 years.

### **Opportunistic Infections: The Meaning & Scope**

In our bodies, we carry many germs - bacteria, protozoa, fungi, and viruses. When our immune system is working, it controls these germs. But when the immune system is weakened by HIV disease or by some medications, these germs can get out of control and cause health problems.

Infections that take advantage of weakness in the immune defenses are called "opportunistic". The phrase "opportunistic infection" is often shortened to "OI".

## **Testing for OIs**

The person can be infected with an OI, and "test positive" for it, even though the person don't have the disease. For example, almost everyone with HIV tests positive for Cytomegalovirus (CMV). But it is very rare for CMV disease to develop unless the T-cell count drops below 50, a sign of serious damage to the immune system.

To see if the person is infected with an OI, the persons blood might be tested for antigens (pieces of the germ that causes the OI) or for antibodies (proteins made by the immune system to fight the germs). If either the antigens or the antibodies are found, it means the person is infected. If the person is infected with a germ that causes an OI, and if the person's T-cells are low enough to allow that OI to develop, his/her doctor will look for signs of active disease. These are different for the different OIs.

## **OIs And AIDS**

People who aren't HIV-infected can develop OIs if their immune systems are damaged. For example, many drugs used to treat cancer suppress the immune system. Some people who get cancer treatments can develop OIs.

HIV weakens the immune system so that opportunistic infections can develop. If the person is HIV-infected and develop opportunistic infections, the person might have AIDS.

## **The Most Common OIs**

In the early years of the AIDS epidemic, OIs caused a lot of sickness and deaths. Once people started taking combination antiviral therapy, however, a lot fewer people got OIs. It's not clear how many people with HIV will get a specific OI.



- Candidiasis (Thrush) is a fungal infection of the mouth, throat, or vagina. T-cell range: can occur even with fairly high T-cells.
- Cytomegalovirus (CMV) is a viral infection that causes eye disease that can lead to blindness. T-cell range: under 50.
- Herpes simplex viruses can cause oral herpes (cold sores) or genital herpes. These are fairly common infections, but if the person has HIV, the outbreaks can be much more frequent and more severe. They can occur at any T-cell count.
- Mycobacterium avium complex (MAC or MAI) is a bacterial infection that can cause recurring fevers, general sick feelings, problems with digestion, and serious weight loss. T-cell range: under 75.
- Pneumocystis pneumonia (PCP) is a fungal infection that can cause a fatal pneumonia. T-cell range: under 200.
- Toxoplasmosis (Toxo) is a protozoal infection of the brain. T-cell range: under 100.
- Tuberculosis (TB) is a bacterial infection that attacks the lungs, and can cause meningitis. T-cell range: Everyone with HIV who tests positive for exposure to TB should be treated.

### **Prevention of OIs**

Most of the germs that cause OIs are quite common, and the person may already be carrying several of these infections. The person can reduce the risk of new infections by keeping clean and avoiding known sources of the germs that cause OIs.

Even if the person is infected with some OIs, the person can take medications that will prevent the development of active disease. This is called prophylaxis. The best way to prevent OIs is to take strong anti-HIV drugs.

## **Treatment of OIs**

For each OI, there are specific drugs, or combinations of drugs, that seem to work best. Strong antiviral drugs can allow a damaged immune system to recover and do a better job of fighting OIs.

## **The Transmission of HIV**

HIV can be transmitted from an infected person to another through:

- Blood (including menstrual blood)
- Semen
- Vaginal secretions
- Breast milk

Blood contains the highest concentration of the virus, followed by semen, followed by vaginal fluids, followed by breast milk.

## **Activities That Allow HIV Transmission**

- Unprotected sexual contact
- Direct blood contact, including injection drug needles, blood transfusions, accidents in health care settings or certain blood products
- Mother to baby (before or during birth, or through breast milk)

**Sexual intercourse (vaginal and anal):** In the genitals and the rectum, HIV may infect the mucous membranes directly or enter through cuts and sores caused during intercourse (many of which would be unnoticed). If the woman is infected, HIV is present in vaginal and cervical secretions (the wetness in a woman's vagina) and can enter the penis through the urethra (the hole at the tip) or through cuts or abrasions on the skin of the penis. The presence of other STDs can increase the risk of transmission.

**Sharing injection needles:** An injection needle can pass blood directly from one person's bloodstream to another. It is a very efficient way to transmit a blood-borne virus. Sharing needles is considered a high-risk practice.

**Mother to Child:** It is possible for an HIV-infected mother to pass the virus directly before or during birth, or through breast milk. Breast milk contains HIV, and while small amounts of breast milk do not pose significant threat of infection to adults, it is a viable means of transmission to infants.

**The following "bodily fluids" are NOT infectious:**

- Saliva
- Tears
- Sweat
- Feces
- Urine

Therefore, it is clear that HIV is not transmitted by day to day contact in the home, the workplace, schools, or social settings. HIV is not transmitted through shaking hands, hugging or a casual kiss. The person cannot become infected from a toilet seat, a drinking fountain, a doorknob, dishes, drinking glasses, food, or pets.

HIV is a fragile virus that does not live long outside the body. HIV is not an airborne or food borne virus. HIV is present in the blood, semen or vaginal secretions of an infected person and can be transmitted through unprotected sex or through sharing injection drug needles.

### **Life For A HIV Positive Person**

There is NO cure for AIDS, but these drugs are helping to prolong the lives of many people with AIDS and delaying the onset of AIDS in many people with HIV. If the person test positive, the sooner the person take steps to protect the person's health, the better. Early medical treatment, a healthy

lifestyle and a positive attitude can help the person stay well. Prompt medical care may delay the onset of AIDS and prevent some life-threatening conditions. It is important to know that a positive HIV test should always be confirmed; to be sure that it is a true positive. If the person's test result is positive, there are a number of important steps the person can take immediately to protect the person's health:

- See a doctor, even if the person doesn't feel sick. Try to find a doctor who has experience treating HIV. There are now many new drugs to treat HIV infection. There are important tests, immunizations and drug treatments that can help the person maintain good health. It is never too early to start thinking about treatment possibilities.
- Have a tuberculosis (TB) test done. The person may be infected with TB and not know it. Undetected TB can cause serious illness. TB can be treated successfully if detected early.
- Recreational drugs, alcoholic beverages and smoking can weaken the person's immune system. There are programs available to help the person stop.
- Consider joining a support group for people with HIV infection or finding out about other resources available in the person's area, such as HIV/AIDS-knowledgeable counselors for one on one therapy. There are also many newsletters available for people living with HIV and AIDS.
- There is much the person can do to stay healthy. Learning as much as the person can is a step in the right direction. Local and/or national resources may be available. Many HIV/AIDS organizations provide services free or on a sliding scale, based on ability to pay.

## The Ways to Stay Healthy for a HIV Positive Person

There are things that the person can do to stay healthy.

Medical Care: Many doctors do the following:

- Administer lab tests to evaluate the person's immune system.
- Determine if the person have other diseases that might become problematic in the future, including syphilis, TB, hepatitis-B, and toxoplasmosis.

If the person is already infected with one or more of these other illnesses, there may be treatments or prophylaxis available to prevent it from becoming more serious or recurring in the future. If the person is not already infected, doctors may be able to prevent future infection by:

- Administering vaccines. Many HIV positive people get a hepatitis-B vaccine and bacterial pneumonia vaccines, since contracting these diseases could be dangerous for immune suppressed people.
- Prescribing antiviral treatments and protease inhibitors when tests show immune system impairment.
- Checkups may be scheduled every three to six months. Some people need more frequent check-ups, particularly when they are starting new antiviral drugs.

