COMMENT

Should there be mandatory testing for HIV prior to marriage in India?

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Abstract

The National AIDS Prevention and Control Policy of the government of India states that testing for HIV infection should be voluntary in nature. But from time to time various state governments and the central government have announced their intent of introducing mandatory premarital testing. Though this intent has not yet been translated into action, we present our case against the adoption of such a policy by discussing various social and medical issues. These include the limited population that such a policy would target given the early age of marriage in India; issues related to its implementation considering the low marriage registration rates in India; potential of stigma and discrimination associated with it; issues with defining boundaries and the role of the state; limitations related to the HIV test itself in context of the policy, including the window period and the positive predictive value of the test; its limited impact in population groups at a high risk for HIV infection; its limited role in changing unsafe behaviours; its limited potential to enhance the empowerment of women; its conflict with existing human rights; and the adverse experience of other countries with a similar policy.

Testing for HIV infection is an important component of the National AIDS control programme of the government of India. Its current guidelines classify testing for HIV into three types (1):

- Testing of blood and blood products: Blood and blood products are tested using a single highly sensitive test. If positive, the sample is discarded. No effort is made to contact or trace the donor.
- Testing for surveillance: Unlinked anonymous testing is used for testing blood samples in the sentinel surveillance surveys that estimate HIV prevalence. Two tests are used in series; if both are positive the sample is labelled as HIVpositive.
- 3. Testing at the individual level: Individual testing can be conducted only if an individual gives voluntary informed consent after pre-test counselling during which he or she is counselled about the disease and the implications of a positive or a negative test. Three tests are employed in series on the same blood sample, the first being highly sensitive and the next two having increasing specificity. If all three are positive, then the individual is declared to be

HIV-positive. Following the result, post-test counselling is also provided. Adoption of pre-test counselling and need for informed consent prior to individual testing in the quidelines ensure that HIV testing is voluntary in nature.

The National AIDS Prevention and Control Policy (2) states that testing for HIV infection should be voluntary, only to be done if decided by an individual after pre-test counselling. But there are instances in which the government, at the state or national level, has either subjected or has proposed to subject certain groups, based on their origin or their occupation, to mandatory testing for HIV infection (3, 4, 5, 6, 7, 8):

- Students from foreign countries coming to India: Foreign students intending to study at any institution in India for a period of one year or more had to undergo mandatory HIV testing, at least till 2002. The present status of this policy is unclear as different sources give different views. The National AIDS Prevention and Control Policy states that this testing is voluntary (2), and other sources state that mandatory testing for students existed only till 2002 (5, 6). But information on the websites of the Indian (7) and the United States governments (8) suggest that such a policy may still be in place.
- Military recruits and soldiers: The intent of subjecting individuals either being drafted into or already in the military and paramilitary forces to mandatory HIV testing has been announced from time to time, though not implemented (4).
- 3. Other groups: The government of Maharashtra ordered mandatory HIV testing for all girls 12 years and older living in designated "destitute homes" (3).

An addition to the controversy surrounding mandatory HIV testing in the recent years has been the announcements by different state governments, including those of Goa, Karnataka and Andhra Pradesh, of their intention to introduce mandatory premarital HIV testing (9, 10, 11, 12, 13, 14). The National Commission for Women also recommended the adoption of a similar policy at the national level by amending the Special Marriage Act 1954 and the Hindu Marriage Act 1955 (9). The government of India announced at the World AIDS Conference in 2005 its intention to introduce premarital testing for HIV at the national level, a statement that was subsequently retracted

after the reaction of the international community (11, 15). Therefore, though the "thought" of mandatory premarital HIV testing has not yet translated into action, it would be interesting to examine various aspects associated with the implementation of such a policy in the country. We are of the opinion that such a policy should not be implemented in any state of India or in India as a whole. We would like to present various arguments and scenarios in support of our opinion.

Limited beneficiaries of a policy of mandatory premarital HIV testing

The average age of marriage in India is 20 years (16). In most South Asian countries nearly 60 per cent girls are married by 18, with one-fourth marrying by the age of 15 (17). Thus, even if one believes that such a policy would prevent individuals from indulging in risky behaviours before marriage, only a minor percentage of the susceptible population, mainly in the adolescent age group, would be targeted.

The policy of mandatory premarital HIV testing might work if the couple planning to get married have not had prior sexual relations. In that case if one of the two tests HIV-positive and they do not get married, then one could say that the policy has been successful in preventing transmission of infection to an unsuspecting partner. But if the couple already have a sexual relationship, this premise would not hold true. This scenario is very possible, as research shows that young unmarried individuals, from both rural and urban areas, do indulge in premarital sexual relationships, and a majority of them plan to marry their partners (18).

Issues with implementation and marriage registration

If an individual indulges in risky behaviour, but does not want to undergo the HIV test, then he or she may opt for marrying outside the state where the policy of testing does not apply (10). This occurred in the state of Illinois in the USA when mandatory premarital testing was introduced in the late 1980s (19). In India it is not compulsory to get married in the state of one's residence, and, therefore, this situation may very well arise. Also, if such a policy does come into effect, then it would be enforceable only in those marriages that are officially registered, the proportion of which is quite low in India (20). The Supreme Court of India ruled in February 2006 that all states should bring about legislation to make the registration of marriages mandatory, a ruling that it reiterated in October 2007. But compliance with the ruling has been slow, and certain religious communities have objected to the promulgation of such legislation (21). Thus, the percentage of marriages coming under the ambit of a mandatory premarital testing policy is likely to be low.

Potential for societal stigma and discrimination

There may be a situation in which a couple, being regular residents of the state that has adopted the policy but get married outside the state for personal reasons. It is possible that society at large may conclude that they got married outside

the state as one or both have indulged in risky behaviours or are HIV-positive, and did not want to undergo testing. This may lead to bias, stigma and discrimination.

Usually, weddings in India are social events, with the involvement of families and friends of both sides. In other words, a wedding occurs under "social scrutiny". If a potential marriage breaks up after either one or both partners test positive, the chances of breach of confidentiality becomes more imminent. Also, if a proposed marriage does not materialise for any other reason, it may be thought that it was a result of one or both prospective partners testing positive for HIV. This may lead to stigma and discrimination as well.

Defining the responsibility of the state

If one or both individuals planning to get married test positive, what should be the recourse of the state? Should it allow the marriage to be solemnised if both partners consent? If the state does not allow the marriage, does it have a right to do so? Is it not impinging on the rights of the individual? Further, if one or both test positive, not because they themselves wanted to get tested but because of state policy, should the state also take responsibility of providing them with further medical and social support? These are issues that have to be considered before implementing a mandatory testing policy.

At present HIV testing at the individual level is meant to be done after pre-test counselling, thereby addressing the issue of informed consent (2). An individual has the "right" to refuse an HIV test. The test result is meant to be communicated to the concerned individual only, and it is left to his or her discretion to communicate the result with family members or others concerned. If mandatory HIV premarital testing is enforced, then in effect it takes away the "right" of refusal from individuals who are about to married. Also, if a positive result surfaces, can the state share the information with the other uninfected partner in an effort to protect him or her without consent of the infected individual? At this time the two individuals in question are not yet legally bound to each other. Does the state have the prerogative of informing the HIV status of a person to somebody who is at present not in a legal relation with the infected person? Also, even if the state accepts its responsibility to inform the prospective uninformed partner and the marriage does not materialise, does the state also have responsibility of informing any sexual partners that the infected person may have had in the past or will be having in the future? Should the state's responsibility be only limited to protecting the partner in case of an impending wedding, or should it extend to each partner that the infected person may have had in the past or will have in the future?

If one argues that mandatory premarital testing for HIV should be implemented, then we question whether the same should be put in place for all infections having similar transmission dynamics. This would not only include diseases for which affordable treatment is easily available, such as syphilis or gonorrhea, but also diseases like hepatitis B, for which there are limited and expensive treatment options. The prevalence of these infections is higher than that of HIV in India (22, 23). Or, for that matter, should the state screen for all diseases potentially transmissible from one partner to another?

Issues related to the test itself

The "window period" in the context of HIV refers to the duration after infection in which a test is not able to detect the presence of the infection although the individual is infected and infectious (24). It is possible that an infected person is in the window period at the time a premarital mandatory test is conducted. This may give a false sense of security to the infected and non-infected partners, as well as to the state (10). Later on, depending on the sexual practices of the partners, the uninfected partner may acquire an HIV infection from the apparently uninfected partner. In such a case if the couple wants to separate and the "blame" has to put on one of the two for divorce proceedings or alimony matters, it may be contended that the premarital test was negative for both. If, in order to cover the window period, the state decides to conduct two tests as far apart as the maximum length of the window period, does it have the right to stop two willing and consenting adults from getting married at the time they wish

The positive predictive value of a screening test, being applied to detect the hitherto asymptomatic cases of a particular disease, gives the probability of the disease being present in an individual who gets a positive result. It increases with the prevalence of a disease in the community. It is very likely that the persons entering a nuptial bond belong to a group in the population that has a low HIV prevalence. In such a condition, mandatory premarital HIV testing would have a low positive predictive value. It would result in a larger number of false positive tests for the disease as compared to, say, when it is applied to a high-risk population (25). Thus, a person may be labelled positive even when he or she is not, and that too when he or she did not voluntarily give consent to be tested and to be put in that situation. A positive test result, true or false, is associated with negative psychological effects such as anxiety, depression and even suicide, and negative social effects like stigma and discrimination (25). Subjecting any individual to these negative consequences cannot be justified. If a repeat test is conducted after some time to reduce false positives, is it justified to make an individual who been falsely labelled as HIVpositive undergo the negative consequences for the period till he or she is proven to be actually negative?

High- and low-risk groups

Certain groups within the population have a higher vulnerability to and prevalence of HIV infection. These include those attending sexually-transmitted disease (STD) clinics, commercial sex workers, men having sex with men and intravenous drug users (26). In our opinion, among these high-risk or vulnerable groups, with the possible exception of STD clinic attendees, only a minor proportion are likely to be marrying and coming under the ambit of a mandatory premarital HIV testing policy. If the premise of the government

is that mandatory premarital testing could control the HIV epidemic, then it may not be successful as it would be missing out to a large extent in "capturing" the HIV infection in these high-risk groups. The majority of HIV infections that would come to light would likely to be in the general population, which already has a "low" risk of HIV infection.

The ratio of the number of persons who would be screened out as positive to the total persons screened would be quite low when one screens for a disease in a low-risk population. Such a case is likely to occur if mandatory premarital screening is adopted as it did in the state of Illinois. The cost associated with identifying a single case of HIV-positive infection when mandatory premarital testing for HIV was adopted in Illinois in the late 1980s was nearly \$500,000 for each HIV infection detected (27). From a utilitarian perspective, such an approach is not justified: if the same amount of money is spent in implementing targeted interventions among the high-risk groups, the outcome in terms of the number of infections diagnosed as well in terms of the number that would be potentially prevented is likely to be higher.

Would such a policy change behaviour?

One argument for mandatory testing is that it would make more and more positive individuals aware of their HIV-positive status, thereby making them adopt safer behaviours and practices. Studies show a reduction in risky behaviour after HIV counselling and testing (28, 29). But it is not clear whether this can be attributed to testing and counselling or to psychological or environmental factors (28). The change in the behaviour of an individual, although influenced by external forces, finally rests upon his or her decision to make the change and adopt it. It seems plausible that if one has voluntary opted for an HIV test, then one has already thought it out in a rational manner and would be more inclined to adopt safer behaviours and practices if the test comes up positive, than if one has been coerced or forced into a test.

In a mandatory testing scenario, if neither the prospective husband nor wife tests positive and the two get married, would it prevent either or both from indulging in risky behaviours after marriage? With the policy enforcing mandatory HIV testing, as we stated before, it may to some extent influence the behaviour of individuals before marriage, but not after. In fact, among HIV-infected married women, the only exposure is often single-partner heterosexual sex with their husbands (30, 31). The onus of the responsibility of not indulging in risky behaviours is at the level of each individual who has entered into the contract of marriage, based on mutual trust and understanding. Therefore, individual responsibility plays a far greater role in adoption of safe behavioural practices.

Women's empowerment and mandatory testing

Some may argue that a mandatory premarital HIV testing policy would empower women, as often they are not aware of any risky behaviours on part of their prospective spouses. And having such a test would empower them to refuse marriage and save them from a troubled life in the future.

It may be possible that this is so, but again a cloud over the issue comes in form of the window period of the disease as a premarital HIV test can be only a one-time measure. As we argued before, it may reduce premarital risky behaviours to some extent, but would it stop either or both partners from the same after marriage? An example of such a scenario is the case of male migrant workers who acquire HIV infections through unsafe sexual contact in urban areas and then infect their unsuspecting partners on return to their villages (32, 33). If the state considers this aspect, would it like to introduce a mandatory HIV test, say, on an annual basis, for all couples so that they have a "fear" of indulging in risky behaviours throughout their married life? We are of the opinion that such an autocratic action would go against the spirit of democracy in a state like India.

Existing socio-cultural factors in India already put a woman at a disadvantage with regard to negotiating condom use within heterosexual married relationships (29, 34). If a couple has tested negative during mandatory premarital testing, and the woman wants the husband to use a condom, the husband might very well argue that he is "officially" HIV-negative and does not need to. So would a mandatory testing policy really empower a woman in that regard? Would the mandatory prenuptial HIV test be of any use in preventing the partner from indulging in risky behaviours after marriage? In our opinion, instead of putting a check on the propensity of an individual to indulge in risky behaviours, it might on the contrary encourage his or her propensity to do so, as "officially" to the unsuspecting partner he or she is free of infection.

Rights issues

One should also consider the human rights perspective while making a decision about implementing a policy of mandatory premarital HIV testing. The International Covenant on Civil and Political Rights states that no one "shall be subjected to arbitrary or unlawful interference with his privacy", and goes on to say that: "This right to privacy includes an obligation to seek informed consent for HIV testing, and an obligation to maintain the privacy and confidentiality of all HIV related information" (35). In the context of mandatory premarital HIV testing, where it would be mandatory to undergo a HIV test, and given that the information would be shared between the two prospective partners and may even be shared between their immediate families, directly or indirectly, there would be definite chances of the breach of the right to privacy.

The decision of marriage is meant to be a personal one that is taken by two consenting adults with mutual understanding. As per Article 16 of the Universal Declaration of Human Rights, the right to marry and to found a family encompasses the right of "men and women of full age, without any limitation due to race, nationality or religion...to marry and to found a family", to be "entitled to equal rights as to marriage, during marriage and at its dissolution", and to protection by society and the state of the family as "the natural and fundamental group unit of society" (36). The interpretation of this right in the International Guidelines on HIV/AIDS and Human Rights, 2006 Consolidated

Version, states:

Therefore, it is clear that the right of people living with HIV is infringed by mandatory pre-marital testing and/or the requirement of "AIDS-free certificates" as a precondition for the grant of marriage licenses under State laws.... People living with HIV should be able to marry and engage in sexual relations whose nature does not impose a risk of infection on their partners. People living with HIV, like all people who know or suspect that they are HIV-positive, have a responsibility to practice abstinence or safer sex in order not to expose others to infection. (36)

Experience in other countries

In the USA 30 states contemplated adoption of a mandatory premarital HIV testing strategy, but it was finally adopted by only two states, Illinois and Louisiana. In both these states it was implemented only for brief period before it was repealed (37). Further, the cost of detecting a single HIV-positive case was huge (27), and led to a jump in the percentage of marriages that were solemnised in the surrounding states that did not have the mandatory testing policy (19).

In Thailand, particularly in Johor province, a similar policy was adopted (9), but its contribution in reducing HIV transmission at the community level is not established, given that other preventive measures are also being implemented on a large scale. In Ghana a number of churches implemented mandatory HIV/AIDS testing for couples who were planning to marry, a decision that was condemned by the Ghana National Anti-AIDS Commission (GNAAC). Consequently, these churches claimed that they had shifted to a policy of voluntary counselling and testing (35).

Advocates of mandatory HIV testing policies might back their argument with the "harm principle", which, as put by 19th-century philosopher John Stuart Mill, states, "The only purpose for which power can rightfully be exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, both the physical moral, is not sufficient warrant" (38). This principle, as it has also been used, might be very well applicable in control of epidemics of acute infectious diseases by testing and isolating, or quarantining individuals for brief periods of time, but may not be applicable to the epidemic of AIDS, that too in the present era of everincreasing voices in support of human rights and respect for individual freedom and liberty. While is not proven that mandatory premarital testing is really helpful in controlling the HIV epidemic, what is known for sure is the stigma and discrimination that an HIV-positive person faces throughout his or her lifetime. Would it be sufficient to harp on the "harm principle" for promoting mandatory premarital testing to prevent harm to others when maybe an equal or even greater harm may be caused to the infected person and even to his or her immediate family as a result? Till society at large does not accept a HIV-positive person in a positive manner, does not judge each HIV-positive person on a moral scale, and does not stigmatise and discriminate against an HIV-positive individual, maintenance of confidentiality of the HIV status of any person is of paramount importance.

To conclude, we could say that the ultimate responsibility of changing one's behaviour to a nature that does not put the one's prospective partner at risk of HIV infection rests with an individual. The responsibility of the state is more towards creation of an atmosphere that enables the individual to obtain correct and complete information about HIV/AIDS, one that is conducive to voluntary counselling and testing, and supports behaviour change in a voluntary manner, rather than through coercive mandatory testing strategies.

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