HIV/AIDS policy agenda setting in Iran

Rahim Khodayari - Zarnaq[1], Hamid Ravaghi*[2], Ali Mohammad Mosaddeghrad[3]
Abbas Sedaghat[4], Minoo Mohraz[5]

Abstract

  Background: HIV/AIDS control are one of the most important goals of the health systems. The aim of this study was to determine how HIV/AIDS control was initiated among policy makers' agenda setting in Iran.

  Methods: A qualitative research (semi-structured interview) was conducted using Kingdon's framework (problem, policy and politics streams, and policy windows and policy entrepreneurs) to analysis HIV/AIDS agenda setting in Iran. Thirty-two policy makers, managers, specialists, and researchers were interviewed. Also, 30 policy documents were analyzed. Framework analysis method was used for data analysis.

  Results: the increase of HIV among Injecting drug users (IDUs) and Female Sex Workers (FSWs), lack of control of their high-risk behaviors, and exceeding the HIV into concentrated phase were examples of problem stream. Policy stream was evidence-based solutions that highlighted the need for changing strategies for dealing with such a problem and finding technically feasible and acceptable solutions. Iran's participation in United Nations General Assembly special sessions on HIV/AIDS (UNGASS), the establishment of National AIDS Committee; highlighting AIDS control in Iran's five years development program and the support of the judiciary system of harm reduction policies were examples of politics stream. Policy entrepreneurs linking these streams put the HIV/AIDS on the national agenda (policy windows) and provide their solutions.

  Conclusion: There were mutual interactions among these three streams and sometimes, they weakened or reinforced each other. Future studies are recommended to understand the interactions between these streams' parts and perhaps develop further Kingdon's framework, especially in the health sector.

  Keywords: HIV/AIDS Policy, Agenda setting, Multiple streams framework, Health system.

Introduction

A major crisis the world faces today is HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome). The spread of HIV/AIDS has affected millions of people worldwide. According to the Joint United Nations Program on HIV/AIDS (UNAIDS) 2014 report, 78 million people around the world have been infected with HIV, resulting in approximately 29 million deaths since the epidemic began decades ago (1,2).

To fight against HIV, the international community has begun some activities. For example, the first day of December named as world AIDS day in 1988 is dedicated to raising awareness of the AIDS pandemic caused by the spread of HIV infection, and mourning those who have died of the disease. Government and health officials, non-governmental organizations and individuals around the world observe the day, often with education on AIDS prevention and control (2). The United Nations (UN) considers AIDS is not simply a medical issue but is one of the fundamental obsta-

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[1]. Assistant Professor, Iranian Center of Excellence in Health Management, Department of Health Service Management, School of Health Service Management and Medical Informatics, Tabriz University of Medical Sciences, Tabriz, Iran. rahimzarnagh@gmail.com

[2]. (**Corresponding author**) Associate Professor, Department of Health Services Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran. Rravaghi.h@iums.ac.ir

[3]. Assistant Professor, Department of Health Management and Economics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran. mosadeghrad@yahoo.com

[4]. MD, MPH, Centre for Infectious Disease Control, Ministry of Health and Medical Education, Tehran, Iran. abbas.sedaghat@yahoo.com

[5]. Professor, Iranian Research Center for HIV/AIDS (IRCHA), Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Tehran, Iran. minoomohraz@ams.ac.ir

cles to human development (3). In the first special session of United Nations General Assembly on AIDS (UNGASS), Declaration of Commitment on AIDS (DoC) was approved with all countries agreement in 2001. In that session, the international community set common targets for reducing the spread of HIV/AIDS and alleviating its impact (3,4).

In 2003, WHO and UNAIDS launched "3 by 5" (Treating 3 million by 2005) innovation to help low and middle-income countries to increase accessibility for antiretroviral treatments (5). These organizations have developed and implemented international strategies to fight AIDS, and they often peruse substantial changes in health systems to enhance Collaboration and Service Integration in the Prevention and Control of HIV Infection.

As a result of the international policies to fight against AIDS, different countries launched to develop and implement a broad range of policies at national and regional level. In Iran, from the first case of HIV in 1986, until present that fourth national strategic plan (NSP) for control of AIDS are developing and approving, policy making cycle of AIDS has passed through different phases. For example, after detection of the first HIV positive case in Iran, technical committee was established at national level and adopted overall policies to fight AIDS (6,7). The outbreak of the epidemic among injecting drug users (IDUs) in 1995 in one of the country prisons led to some activities to control the epidemy including: seeking judiciary and legislative inclusive support, collecting evidence for effective interventions, legislation such as not separating of sick prisoner from others, not preventing of harm reduction (HR) programs among IDUs and more accurate and comprehensive implementation of programs like distribution of needle and syringe and methadone maintenance therapy (MMT) (8-11).

In recent years, the rate of activities against AIDs have been differed and in last years of seventies decade and first years of

eighties decade (Solar Hijri calendar) it became easier and faster to intervene. The primary question is that why some subjects (such as AIDS) can enter the regulatory agenda while others are ignored, and why some alternatives can be paid considerable attention while others are abandoned.

Agenda setting is the process by which particular issues come onto the policy agenda from the much larger number of issues potentially worthy of attention by decision makers (12). The first level of agenda setting is Agenda Universe, includes all the issues that could be brought up and discussed. The Next level of agenda setting is Systemic Agenda which includes all the potential issues. Institutional agenda includes issues that are seriously considered by the specific institution and finally Decision Agenda, which includes issues that are about to be acted on (13).

Policy scientists always want to know how and why some issues become prominent in the eyes of policy makers and others recede from view. They have presented several theories to explain this phenomenon (14).

One of the most popular and useful frameworks is the multiple streams framework (MSF). The MSF was developed by John Kingdon (1984) based upon the "Garbage Can" model of organizational behavior (Cohen, March, and Olsen 1972) (12,15). This framework can apply to a broad range of policy areas and can be useful for describing how policies are made when there is ambiguity, lack of clarity, and lack of self-interest.

Kingdon identified three streams that flow through the political system: problems, policies, and politics (16). A problem stream consisting of data about various problems and the proponents of various problem definitions (17). Kingdon indicates that some representative mechanisms are reflecting problems' appearances, such as indicators, focusing events and feedbacks, can set legislative agendas independently (18,19).

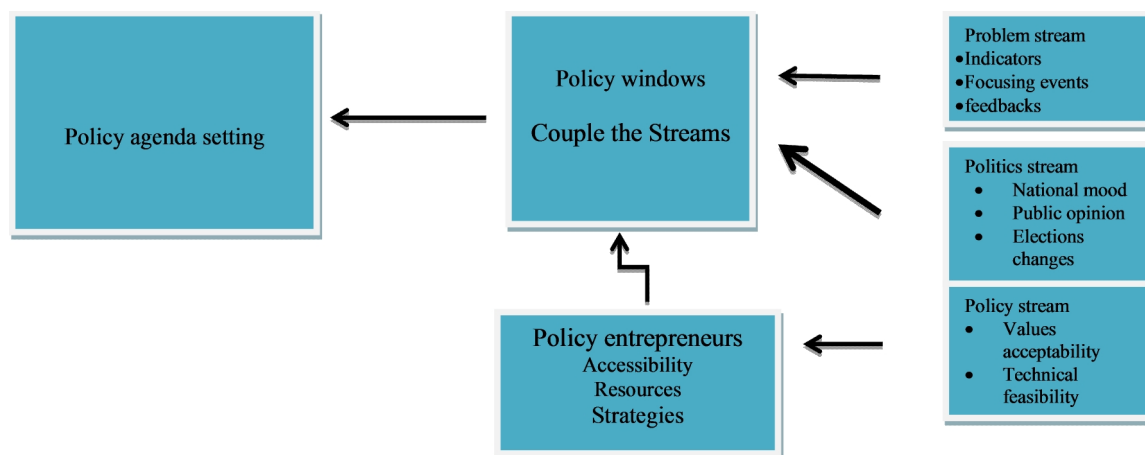A policy stream involving the proponents

Fig. 1. The Kingdon's multiple streams framework (12)

of solutions to policy problems (16). The essential aspects of ideas that become policies are that they are technically feasible and that the values they represent are acceptable to policy makers. Ideas undergo a vetting process through discussion, papers, and hearings. During this process, an idea may change, coupled with another idea, or disappear (18-20). Politics stream consists of political events that may or may not be favorable to the policy. Elections, changes in government ministers, and public protests can powerfully influence whether or not a particular problem will be solved.

In Kingdon's view, the streams usually operate independently of each other, except when a "window of opportunity" permits policy entrepreneurs to couple the various streams (12,15,16). Because for an issue to become an agenda, more than one stream needs to be joined at a critical point. These moments are called policy windows and are opportunities to focus attention on particular problems. Timing is crucial because it influences which problems, policies, or politics are in the forefront at any particular point (12-16).

When all of them are coupled together with the advocation and promotion of policy entrepreneurs, the open window can create an opportunity to move them up on the decision agenda (Fig. 1) (15-17). Although the MSF is not always as clear and in normally consistent as one might like (16),

it appears to be applicable to a wide variety of policy areas (20-27) and is cited about eighty times annually in the social science citation index (16).

This article draws on the MSF to better understand the how and why AIDS control was initiated among policy-makers' agenda setting in Iran.

Methods

The exploratory qualitative study was conducted based on document review, key informant interviews and applied MSF which focuses on understanding HIV/AIDS agenda setting process retrospectively in Iran. The study was conducted during 2014-2015 at the national level of the country. The approach of the study was retrospective and to demonstrate AIDS policy agenda setting in Iran's national level. This method has been validated for setting the agenda of national policies (22).

To find key informants, purposive sampling and snowballing sampling was used. First, by reviewing documents and literature, key informants in the national level were revealed, and then, we asked them to introduce other sources. In total, 32 persons (9 women and 23 men) participated in these interviews. Respondents were officials from the 14 chief or middle governmental or semi-governmental managers, six international organizations managers who were resident in Iran and NGOs, five specialists of AIDS and infectious diseases,

three researchers and four legislators. The average age of interviewees was 49 years, the average work experience in the HIV/AIDS field was 15 years and their academic degrees were mainly Ph.D. or MD. Governmental officials included; managers from Ministry of health (MoH), Ministry of Welfare and welfare organization, Ministry of Education, Ministry of Interior, Blood Transfusion Organization, Drug Control Headquarters, and IRIB.

Before starting data collection for this study, comprehensive search on the internet was done, then, major related documents were identified. In next step, by referring to the Center for Infectious Diseases Control (MoH) and Iran Research Center for HIV/AIDs (IRCHA), those documents were obtained. Afterward, in the purposive method, using the contents of those documents, and interviewees' recommendations and guides, other documents were identified. In total, 30 documents including 6 upstream documents (the health general policies, Iran' health vision program, NSPs), 11 national and relevant country reports (monitoring reports of UNGASS, interior reports of different organizations, International presented reports), 7 acts, circulars, regulations, and rules approved by government and also the papers and projects were related to HIV/AIDS policies.

To achieve key informants and policy documents, data collection was done by supporting of IRCHA and Center for Infectious Diseases Control of MoH. When informant persons were demonstrated, necessary information was given to them, and Informed consent about the interview was acquired. Interviews were semi-structured and were done using topic guide which obtained from a research background and specialist ideas. Also, the questions of interviews had been revised three times. Conducting the interviews under conditions of privacy in the offices of the informants. The average duration to interview was 45 minutes that was recorded by voices recorder. The interviews were done till reaching data saturation and finally 32 key informants were interviewed. In the case of documents, after getting of owner institutions' permission, they became accessible, and necessary information and data was collected. Some documents were found by searching in the web.

This study has been approved by Ethical Committee of TUMS by a code of 8921557002.

Data Analysis

This study used framework analysis (28) based on applying MSF. The framework analysis description phase included; implementation of interviews, the remainder of important notes during the interview, and frequent reading of implemented text and policies document. This was done for maximum familiarization of researchers with data. Analysis phase contained categorize, and determination of prime levels and interpretation phase included coding process and final interoperation according to synthesis and clarification of data. In this step, MAXQDA version 10software was used.

Quality of research

For trustworthiness of results, four criteria (credibility, conformability, dependency, and transferability) were used (29-30). To increase the credibility of study and separate researchers 'preoccupation (prolonged engagement), the participants were entered to study who were likely to have insider knowledge and insights into the HIV and its policies in Iran. Triangulation was used in all phases of research such as the methods of collection (interview, observation of writing, and observation of documents). To increase the conformability, opposite and negative issues in results were examined to find out the reasons. Also, researchers' continued presence and spending enough time, being careful in all phases, and clarity of methodology made data became objective and increased conformability. The dependency of results was analyzed by colleagues' complementary comments in coding process and analyzing of interview

text, and the results were given to several interviewees to receive necessary feedback. To increase transferability, suitable samples were studied, at the same time; data was collected and analyzed.

Results

Problem stream of HIV/AIDS

The first case of HIV in Iran was a six years old hemophilic boy identified in 1985. Since then, in average five people were reported as a case of HIV every year. In 1996, there was a report of HIV epidemic among IDUs in a prison in Iran and 150 people were identified as a case of HIV. One of the top managers in health administration of the country's prisons stated:

"*Prior to 1996, the number of PLHIV was so low that nobody paid enough attention to it. Suddenly an epidemic was happened* (P7).

The HIV epidemic was a focusing event, pulled the alarm and attracted the attention of the community. Iran's neighborhood with Afghanistan and Pakistan and being an important transit route for smuggling opiates from these countries to Europe increased the number of addicted people particularly IDUs. Subsequently, the number of PLHIV has increased.

The special conditions of this disease in Iran had worsened the problem. HIV-related stigma and negative attitudes about its transmission ways presented contradictions for authorities about its prevalence publicizing.

"*At first, it was thought that AIDS is a homosexual disease. Thus, the authorities did not know how to deal with it. We do have these patients but how we could talk about homosexuals*" (P11).

Therefore, false beliefs such as appertain of disease to particular groups, guilty sufferers, being in the lower social level of infected persons (IDUs, FSWs: Female sex workers) and like these led to stigmatized status and negative attitudes. In that situation, most of policy makers and authorities didn't know how did deal with this problem. The traditional and religious context of society didn't allow collecting sufficient information about pre-marriage sex relationships and prostitution to clarifying the issue. One of the managers says:

"*In those years, there was no practical activity. However, some advocacies were done. Notifications and advice were started. But, the atmosphere was so negative and stigmatized. Most of the people said that infected people have their mistakes to get the disease. Why did they immoral behavior to be infected? But, the important thing was that the virus was spreading over and over and must be controlled anyway*" (P03).

In the latest years of the seventies the prevalence of HIV shifted from limit phase to concentrated phase. According to official reports in 2000-2003; the average prevalence of HIV among IDUs in the country is about 15%. Also at the same time, there were approximately 200 thousand IDUs across the country. Most of them had married or had different sex partners and caused transmit of HIV to others. The statistics showed the increase of HIV-infected people among prostitutes and IDUs with their partners. Therefore, the country in one trend confronted with IDU transmission route and in another trend the numbers of HIV-infected people by sexual transmission route was increasing over time. The stigmatized attitude towards PLHIV led to sufferers keeps their disease a secret as they fear the stigma and denial it that are serious obstacles to prevention and care.

Most of the people have a negative and guilty attitude towards HIV-infected people once, and many of health system's staffs refused to admit them or behaved discriminately. These issues caused to hide from most HIV-infected people and estimated number of PLHIV being more than Number of Registered Cases. Based on the data case registry system, a total of 7000 PLHIV had been identified in Iran until September 2003, but the estimates indicate that the number of PLHIV was about 30000. This increasing progression have been continued till now and according to latest official re-

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Table 1. Challenges of HIV/AIDS control in Iran
The continues incidence of infection among IDUs
The increasing of sexual and mother-to-child transmission
Unacceptable transmission routes in point of society
Moral and legal obstacles gathering information and identifying new HIV-infected cases
Low coverage of preventive and curative services for HIV-infected people
High-risk behaviors among adolescents and youth
Increasing of demand and supply of illicit drugs
Increasing of poverty, emigration to borders of metropolises, Socioeconomic problems
Instability of Political will and financial resources

port (September 2014) a total of 30000 PLHIV had been identified, but the estimates indicate that the number of PLHIV been about 80000 up 110000. Existing challenges have intensified the issue.

Policy Stream

Based on MSF, the policy stream is similar a soup of different ideas that will compete to be accepted by the policy network. With the creation of the problem stream, the policy stream was formed. Primary Ideas were simple and clear that the problem seemed simple and clear first. Control of blood safety and provide safe blood supply is a normal reaction to blood products infected with the HIV in the imported blood. After the outbreak of the epidemic of 1996, the problems became broad and complex (as described in the problem stream) and provision of solutions became as well as hard and difficult. The first solutions based on the separation of HIV-infected prisoners with others. The solution caused to other problems. Because the prevalence of the HIV was not controlled and the stigma and discrimination of HIV-infected people were adding. A top manager working in the prisons org, said:

"*In those years bitter experiences happened in prison. For example, it happened that, they came and separated everyone was HIV positive from the others, and it was imagined that, they are (PLHIV) very dangerous because Unawareness was dominant, the transmission methods was not very clear and traditional health care system was not so responsive. So, those activities led to an increased numer of problems instead of solving them and make the stigmatized attitude toward PLHIV*" (P27).

Isolation of prisoners based on the philosophy of criminalization of drug addiction, for avoiding high-risk behaviors among prisoners. But, the result was an increase of HIV among IDUs and the other at-risk groups (1996-2003). Because, IDUs usually don't stay in prison forever. They had active sexually relationships with their spouses or other sex partners. Even though this solution had valued acceptance, but its technical feasibility was very little: They couldn't keep the prisoners in prison forever.

So, based on international evidences and experiences and successful practices in some countries, ideas on safe injecting drug and sexual relationships between people, rather than restricting them, were provided. New ideas were based on HR policies. HR seeking for making a safe environment of high risk behaviors. Therefore, needles and syringes and condoms should be supplied to high-risk groups. Also, instead of preventing drug abuse by injection, the oral drug (methadone) consumption was replaced. But these solutions didn't have value acceptability in the judiciary system. The judiciary system that was responsible for management of prisons emphasized on self-control, control of drug injection and Unlawful sexual behaviors and it didn't want to acknowledge those behaviors which are illegal and the immoral in society.

"*Since that year (1996) until 4 to 5 years, neither the judiciary system nor health system could find suitable solutions. The rational solution was that the system must prevent sharing of injecting equipment, but on that situation the judiciary system didn't agree to give needles and syringes to IDUs*

or provision of the condom to prevent unusual sex relationships. Because the judiciary system thought people shouldn't use illicit drugs or have another type of sex experiences. However, that idea was irrational" (P27).

The law criminalizing drug use led to the accumulation of more people in prisons. It makes a difficult situation for Policy Communities to provide solutions had value acceptability and technical feasibility. The solution which emphasized by health systems and their advocates was HR policies which were acceptable a successful experience at international evidence. The idea was to prevent sharing of injecting equipment, shared use of a disposable razor to trim, high-risk and unprotected sexual behavior. Policy communities (health authorities, the academic community, and researchers) sought to gather evidence to prove the effectiveness of it.

"*In 2001, VCT (Voluntary Counseling and Testing Centers) was introduced, and it was implemented for the first time in one province and its prisons which was one of high-risk regions. It was successful experience and quickly generalized throughout the country. VCT is one of the ways to prevent and control HIV that was a successful experience. After that, MMT was discussed as an alternative treatment for IDUs*" (P14).

During these years, solutions based on the prevention and control of HIV/AIDS, such as Voluntary Counseling and Testing Centers (VCT), MMT for IDUs and needle and syringe distribution program was presented to control the outbreak. For example, the first triangle or VCT clinic was established in 2000 and then gradually expanded to the throughout the country. VCT was seeking treatment for IDUs with HR approach, providing service to people with sexually transmitted infections and the support of PLHIV. The national health system aims to promote public awareness to create a positive attitude towards issue, and suitable response was given.

"*In those years (until 2003) some of the*

treatment services are provided, advocacies were existing, and documentation was done. All efforts led to result in 2003, but until that time there were not actions that have exterior signs*" (P21).

According to Kingdon's policy stream, the solutions that can keep on their stability and survive during time have more chance to inter-policy network. In a recent case, the HR policies could acquire these two criteria as a relevant solution with problem stream during the time and prepare to enter policy network.

Politics stream of HIV/AIDS

Politicians 'attention to AIDS took place since the increasing of its prevalence in decade nineties, and some actions were accomplished. For example, assigned red ribbon as the symbol of AIDS to appeal whole attention, or warnings that UN gave about negative impacts of AIDS on the development of countries. However, the political will to comprehensive combat against AIDS formed by inserting the control of AIDS in Millennium Development Goals and respectively holding UNGASS and approving DoC on HIV/AIDS. Those activities smoothed the way to political supportive behind whole actions against AIDS. One of the managers who occupies in one of the international organizations in Iran says:

"*Since the first years of decade nineties (AD), the attentions were enticed, but, 2001 was one of the milestones. Because, the control of AIDS was one of the Millennium Development Goals, it was implemented in 2001 and in 2005 and 2012 the program was revised and goal-setting developed to help us receiving the goals of AIDS control in 2030*" (P08).

Iran was one of 188 countries who have committed itself to HIV control. Naturally, that was positive event to attract interior politicians' attention. The first impact of that phenomenon was the writing of the first NSP of HIV/AIDS one year later than holding UNGASS in Iran. But, it couldn't appeal political support. The sensitivity of

society and the government wasn't as enough as to support policy makers and civil institutions. In these years (2001-2002) the judiciary system in spite of rules agreed with the limited and pilot implementation of some HR policies and this could open the policy windows. Another important event was approving of "National HIV/AIDS Prevention and Control Committee" regulation in 2003. The article one says:

"*To inhibit expansion of AIDS, and its control, the National HIV/AIDS Prevention and Control Committee, which is called committee in this regulation, its working groups is built across the country*."

Also, article 2 and duties referred to:

"*macro policy making about fighting against AIDS, specifying executive organizations' and sub- institutions' policies, collaboration among them and full support to receive different preventive and controlling activities.*"

At the first time, in the fourth development program of Iran, the word of AIDS was mentioned. In the third section of this law and in chapter 7 which related to health promotion and quality of live improvement, the article 68 says:

"*MoH and related organizations must do all actions to reduce the social and individual risks and harms of addiction, prevention, and treatment of AIDs and reduction the burden of psychological disease till the finishing of the first years of fourth economic, social, and cultural development program.*"

The other substantial event which completed the process of authorities' wills to fight against AIDS was the head of the judiciary system' command to all prisons and dependent centers to the not-impede implementation of HR programs. This command was one of the most explicit supports of countries supreme authorities behind fighting against drug addiction and AIDS policies in Iran.

"*Following the head of the judiciary system' Circular that I think it was notified in 2004. Within that, it explicitly expressed that HR policies, needle and syringe distribution, and displacement treatments don't have any conflict with the judiciary system' policies. That was the milestone. After that circular and because of positive atmosphere, even, accessibility to condom and religious meetings rooms were discussed. These are the main events of that period*" (P28).

It should be said that most of the events led to the foundation of politics stream was national mood which effected by international events. In addition, Intensification of problem stream caused to the creation of national demand to the control of AIDS and notable for government and parliament members. But, the role of international organizations and policy communities in health area cannot be forgotten.

Policy windows and couple of streams

Problem and policy stream that formed long times ago and impacted each other caused strengthened of politics stream and in another hand, strengthening of politics, stream triggered to more strengthen of policy stream. This interaction can be explained as following:

With more expression of problems that be explained in problem stream of AIDS, the policy entrepreneurs became more sensitive and provided more solutions to solve the issue. Policy entrepreneurs in AIDS field were active in three dimensions and caused construction of policy stream. Individuals depended to the national health system, responsible international organizations, civil institutions and pressure groups such as mass medias. Health system wanted to expand preventive and curative services and diminish the incidence and prevalence of HIV. International organizations brought up international policies and evidence as ideas and civil institutions and pressure groups by more showing the dimensions of the issue follow to form of politics stream. But, according to Kingdon's framework; if politics streams don't exist, nothing cannot happen practically. As explained in politics stream section, UNGASS had a big influ-
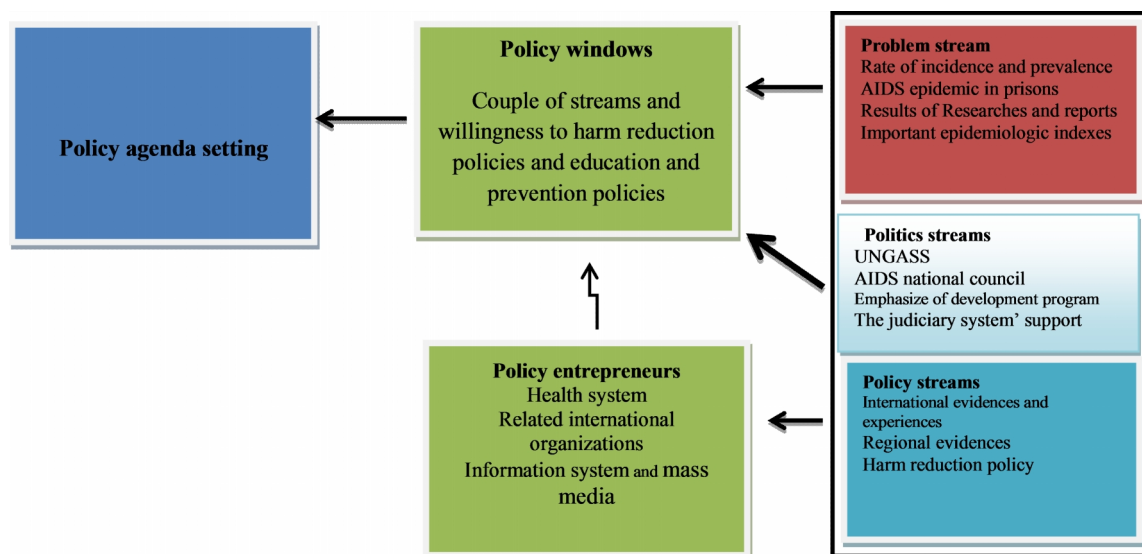
Fig. 2. The multiple streams of AIDS agenda setting in Iran

ence in forming of AIDS politics stream in Iran. Because Iran was one, the countries committed to the prevention of AIDS. Spite of that conference in 2001, no windows had been opened yet. The reason was that, to transfer international worries to Iran, one year needed to pass. That event was occurred one year later by approving the modification and reorganization of HIV/AIDS Prevention and Control Committee that led to open policy windows in 2003. The policy entrepreneurs, who formed problem stream and policy stream during that time and caused reinforcement of politics stream, used that opportunity to couple three streams. The result was putting AIDS as agenda setting using the capability of National AIDS Committee and respectively positive approach towards HR policies by the judiciary system supports. While opening of windows, the solutions such as Education and information, Strengthening of consultation system, and social protections of PLHIV put in agenda settings of related institutions and organizations.

The opening of windows caused that, the first years of decade eighties (2001-2004) became as the bright period in prevention and control of AIDS in Iran. Nonetheless, according to Kingdon's theory, it was not guaranteed that the windows would be opened forever. Change of government in 2005 and because of it, the integration of National AIDS council in the supreme council of health, the entrepreneurs lost the opportunity of opened windows and the position of AIDS in agenda setting was weakened.

Discussion

The aim of this study was to identify AIDS policy agenda setting in Iran. To achieve that aim, MSF was used, and their interactions and combination and policy entrepreneurs role in a couple of streams in policy windows was explained. Though, there are some criticisms towards this framework. One those criticisms is that, this framework is a type of rationalization which the researchers claim, but they don't utilize it overtly (24).

Other limitations of this framework are following: even though framework explained the couple of three streams, but, it doesn't determine in which conditions, the solutions how to seek out problems and the problems look for solutions. In addition, in this framework, the role of institutional orders is disregarded. Also, Zahariadis indicated other weaknesses of this model, such as independence of streams 'assumption and unclearness of policy windows role in a couple of three streams (31).

Naturally, these issues hardened the anal-

ysis of AIDS agenda setting process, and some of the analysis defects are the result of framework limitations. However, it is crucial to know that, MSF is one of the famous and important theories in a change of policy making. According to Sabatier's opinion, even though this theory isn't very explicit, but it has broad applications in policy making area (16).

The results of this research showed that it is possible to analysis the process of initiating AIDS as agenda setting by MSF. Despite Kingdon's view about being independent of three streams from each other, there were mutual interactions among these three streams. Problem and policy streams that formed long times ago and impacted each other caused strengthened of politics stream and in another hand, strengthening of politics stream caused to strengthen of policy stream. The act of Policy Entrepreneurs (health area specialist were active in MoH and other governmental and semi-governmental organizations, NGOs, International specialists, researchers, and mass Media) in appealing policy makers' consideration to issu and also, the recommendation of ideas and solutions to couple these streams were significant. Though, all entrepreneurs' considerations didn't include in AIDS agenda setting. For example, an extension of HR policies to decrease sexual high-risk behaviors always used to propose, but not be applied in policy agenda setting (32,33). According to Kingdon's and Sabatier's view (21), that is related to value acceptability. Extension of HR policies to sexual high-risk behaviors couldn't acquire valued acceptance of politicians, the judiciary system, and the public. But, by the influence of other countries evidence and experiences, it has proposed as a solution. Kingdon said values and ideologies have a vital role in the definition of the problem (1995). Other researchers have shown this point in their country context and have confirmed the effect of people or governments' values and ideologies in the definition of varied problems (14,27,34-36).

Other effective factors in notification to a problem is focusing events occurrence. Outbreak AIDS epidemic in 1996 was the focusing event, but because in that time there was no policy stream and also, the entrepreneurs couldn't appeal policy makers' consideration (politics stream), the problem wasn't entered in agenda setting. In those years, the policy stream was formed by evidence collection, doing some researches, and others' experiences. In another hand, making policy makers to be aware and sensitive led to the reinforcement of politics stream. Therefore, as mentioned before, the assumption of being independent of three streams seems difficult. Abbasi and et all showed that, in changing the law to the construction of Ministry of Science, the policy stream caused reinforcement of politics stream and proposition of agenda setting (37).

The other important issue in MSF is the function of policy windows. Even though, the result showed that, finally, reinforcement of three streams led to open of policy windows and their couple, but, according to other researches Travis, Zahardiaris (21), and Sabatier (16), these windows is contemporary, and it won't be open forever.

According to the result of this study, after the construction of National HIV/AIDS Prevention and Control Committee, development of NSP, and also, reinforcement of HR policies, simultaneously, the government change, collapse of National AIDS Committee and emerge in the supreme council of health, the window was closed. By collapsing of mentioned committee and the weaknesses of NPS implementation in next years, it seems that another problem stream has been formed. Because new problems need to new solutions, the policy stream has been formed again. Maybe, the changes of government have caused to forming of politics stream gradually, and the HIV/AIDS agenda came back to setting again in 2013. The analysis of this process needs more researches.

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Recommendations to policy entrepreneurs

As Sabatier said; the successful entrepreneur are the people have more access to policy makers, have more resources and to achieve couple purpose, they use manipulation strategy (16).

From one perspective, the policy entrepreneurs can be categorized to governmental and none, governmental entrepreneurs. The governmental entrepreneurs include; MoH experts and specialists, Drug control headquarters, State Welfare Organization, Health authorities of prisons and other governmental organizations are influential in HIV/AIDS policies. Naturally, they have more accessibility to policy makers and resources that they are able to benefit opened windows perfectly. Manipulation can also be useful. Manipulation is the attempt to remove political atmosphere ambiguity (38). Mainly, the health policy makers experience the challenging environment. They confront with diverse issues from different groups, in another hand, they face with some valued and attitude paradoxes about AIDS that many policy makers prefer to avoid involvement. The entrepreneurs should manipulate information in the way that, they can motivate policy makers to confront with AIDS and acceptance of solutions.

None governmental entrepreneurs such as thought rooms, academics, and mass media provide more assistant to policy making process. These actors can join to informal and unstructured coalition with policy making supporters by the publication of books, Inspirational papers, or research reports and help to the formation of public demand or stimulation people and policy makers' sensitivity.

Limitations

The main difficulty of this study was conducted formal interviews with key informants. Some informants don't have enough time or don't like to talk about specific aspects of the issue. Albeit, this is a common problem in policy studies which pursue individuals' ideas. In addition, because most of the interviewees are chief or middle managers in their organization, and they might don't have enough time or preoccupation during the interview, the responses may be influenced. Other limitations related to Kingdon's framework which explained already.

Conclusion

It seems that in spite of Kingdon's view, the result of this study showed that, three streams have mutual interaction with each other and the sometimes they weakened or reinforced each other. Correspondingly, they may lead to open or not open the policy windows. These interactions were obvious especially in influences of problem and policy streams to each other and reinforcement of politics stream and at the result; strengthen of policy stream by politics stream. Also, this framework has limitations and ambiguities about identifying the entrepreneurs' role during the opening of policy windows, and it couldn't explain the interactions are happened during this period. To better understanding of agenda setting process, other researchers want to use MSF to identify agenda setting process or policy change especially in the health sector, should assess and revise potential limitations which explained above, or combine it with other theories or models (38-40).

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Conflict of interest

The authors declare that they don't have any competing interests.

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