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How Health in All Policies are developed and implemented in a developing country? A case study of a HiAP initiative in Iran

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Summary

Population health is influenced by many factors beyond the control of health system which should be addressed by other sectors through inter-sectoral collaboration (ISC). Countries have adopted diverse initiatives to operationalize ISC for health such as establishment of Councils of Health and Food Security (CHFSs) and development of provincial Health Master Plans (HMPs) in Iran. The literature, however, provides meager information on how these initiatives have been moved into the top policy agenda, how and by whom they have been formulated and what factors enable or inhibit their implementation. In addressing these knowledge gaps, we employed a qualitative case study approach, incorporating mixed methods: in-depth interviews and a textual analysis of policy documents. Iran founded the Supreme Council of Health and Food Security (SCHFS) at national level in 2006 followed by provincial and district CHFSs to ensure political commitment to ISC for health and Health in All Policies (HiAPs). In 2009, the SCHFS mandated all provincial CHFSs across the country to develop provincial HMP to operationalize the HiAP approach and Kerman was among the first provinces which responded to this call. We selected Kerman province HMP as a case study to investigate the research questions raised in this study. The study revealed two types of leverage, which played crucial role in agenda setting, policy formulation and implementation of HMP including politics (political commitment) and policy entrepreneurs. The multiple streams model was found to be informative for thinking about different stages of a policy cycle including agenda setting, policy formulation and policy implementation. It was also found to be a useful framework in analyzing HiAP initiatives as these policies do not smoothly and readily reach the policy agenda.

Key words: inter-sectoral collaboration for health, Health in All Policies, Kingdon multiple streams model, Iranian health system

INTRODUCTION

It is widely recognized that population health is influenced by many factors beyond the control of health system; a complex set of social, political, economic and environmental factors (i.e. social determinants of health) (Marmot and Wilkinson, 2005; Exworthy, 2008), which should be addressed by other sectors of society (Greaves and Bialystok, 2011). With this widespread recognition, inter-sectoral collaboration (ISC) for health has received extensive popularity and remained the focus of health promotion worldwide (Marmot, 2005; Binagwaho and Scott, 2015). ISC for health is claimed to be an effective means for improving community's health through combining, directing and mobilizing ideas, material, political and human resources from diverse sectors toward a common goal (Lasker *et al.*, 2001; Hendriks *et al.*, 2013).

Health in All Policies (HiAP), a horizontal policy strategy (Leppo *et al.*, 2013), is an emerging concept in the realm of ISC for health, which encourages developing policies for improving health across all sectors of society and advocates health as a priority of all sectors (Greaves and Bialystok, 2011). By adopting a HiAP approach, health considerations are incorporated into decision-making across all policy areas (Ståhl *et al.*, 2006; Leppo *et al.*, 2013). Implementation of HiAP strategies demands new structures and processes (Kickbusch and Buckett, 2010; Greaves and Bialystok, 2011; Leppo *et al.*, 2013).

Although many countries have adopted different HiAP initiatives, the literature, for the most part, centers on presenting case studies of such initiatives with a focus on the governance tools employed by these countries (see for example, St-Pierre, 2009; Shankardass *et al.*, 2011). Moreover, notwithstanding application of Kingdon framework in analyzing HiAP initiatives (de Leeuw, 1999; Breton and De Leeuw, 2010b; Leppo *et al.*, 2013); for instance, its application to explore potential for HiAP in development assistance for health (Leppo *et al.*, 2013), there is still little information on how HiAP initiatives have been moved into the top policy agenda, how and by whom they have been formulated, and what factors influence policy formulation and implementation, especially in the context of developing countries. Answering questions such as these will help determine the barriers to the policy implementation (Kingdon, 1995; Buse *et al.*, 2005; Mannheimer *et al.*, 2007) since the implementation process is an inseparable part of agenda setting and policy formulation (Buse *et al.*, 2005). Further, there is an equal knowledge gap on the implementation and impact of these initiatives on health improvements (Adeleye and Ofili, 2010; Hyder *et al.*, 2010; Baum *et al.*, 2014). The impact evaluation, however, is not the focus of this research. This study aimed to fill these knowledge gaps by examining agenda setting, formulation, and implementation of a HiAP initiative, in this study a provincial Health Master Plan (HMP), in the context of a developing country such as Iran. Given the explorative nature of this research, a qualitative research stance was adopted. To the best our knowledge, this is one of the meager qualitative research studies that has employed diverse qualitative methods including interviews and policy document analysis to examine agenda setting, formulation, and implementation of a HiAP initiative in the context of a developing country. The article will contribute to practice in that it provides practical implications, which policy makers and policy implementers may want to consider to improve the process of formulation and implementation of HiAP initiatives.

STUDY CONTEXT

In Iran bureaucracy and centralization are the governing modes in public administration, which have their roots in the long period of monarchy before the Islamic revolution in 1979 (Farazmand, 2010). In such a system, policy making usually takes place at the macro (national/central) level, and then announced to the meso (provincial) level and subsequently the micro (district/local) level for implementation. The implementation of centrally developed plans is supervised by the macro level. The centralized government in Iran is, however, subject to many problems and the efficiency and quality of services provided by this system are at risk (Farazmand, 2010). To address these pitfalls and in line with the global movement toward the New Public Management (NPM) reforms, there have been some efforts to improve the performance of the public sector through moving toward more decentralization.

One of the decentralization initiatives of the government has been the establishment of a network of Councils of Health and Food Security across the country with the aim of meeting local needs through ISC with a HiAP approach. In 2006, the country formally founded the Supreme Council of Health and Food Security (SCHFS) to ensure political commitment to HiAP (Motevalian, 2007; Damari *et al.*, 2012). Formation of the SCHFS, at the national level, was enforced by the Iranian laws; i.e. the fourth and fifth Five-Year Development Plans (hereafter 5YDP). This council, which is composed of representatives of health and non-health-related sectors, chaired by the President, aims to mobilize diverse sectors of society through coordinating ISC for health and encouraging participation in health care. The council also intends to develop evidence-based healthy public policies at the presidential (i.e. cabinet) level. Provincial and local (i.e. district) Councils of Health and

Food Security (CHFSs) were then founded across the country with the same mission and objective of the SCHFS. In 2009, the SCHFS mandated all provincial CHFSs across the country to develop provincial HMPs, a document (i.e. white paper) to operationalize the HiAP approach (Damari *et al.*, 2012), and Kerman was among the first provinces which responded to this call. Kerman province's HMP was formulated in 2011 and depicts the main health challenges of the province accompanied by the role of diverse sectors in tackling them. Three years after formulation of this document (i.e. Kerman HMP), the questions, however, remain unanswered as to how this initiative (i.e. HMP) moved into the agenda setting of policy makers in Kerman province? (e.g. was the mandate of SCHFS enough to put it in the agenda setting?), what was the approach of policy makers in developing this policy?, what were the political facilitators and drivers pushing this policy forward?, how was the policy formulated and by whom?, and finally what were the factors influencing policy implementation?

RESEARCH DESIGN

We employed qualitative methods and a case study approach in order to examine the process of agenda setting, formulation, and implementation of a HiAP initiative; here, the provincial HMP. Our research paradigm was an interpretivist/constructivist approach by which we accepted that reality is socially constructed, so we relied upon our research participants' views of the case under study (Creswell, 2009).

Conceptual framework

To guide the policy analysis we applied a political science theory to policy research in health promotion (Breton and de Leeuw, 2010a). We adopted an extended version of the Kingdon multiple streams framework (Kingdon, 1995) as the conceptual model (Ridde, 2009). The Kingdon model is mainly concerned with how issues move into the policy making agenda and how alternative solutions are translated into policy (Kingdon, 1995; Exworthy, 2008); in other words, it focuses on agenda setting. The extended version of the framework, however, can be applied to other stages of policy process including policy formulation and policy implementation (John, 1998; Ridde, 2009). The Kingdon model posits that policy changes occur in three streams (see Figure 1): problem identification (i.e. a problem or issue that arrives at the policy making agenda), policy choices (i.e. the solutions or programs that policy specialists develop, create or promote) and politics (i.e. the political and ideological views of political actors and the political climate) (Mannheimer *et al.*, 2007; Exworthy, 2008). Kingdon (Kingdon, 1995) argues that the three streams occasionally collide when a policy window opens. In other words, windows of opportunity get open when simultaneously a problem is recognized, a solution is available and the political climate is positive for change. These create critical opportunities for policy entrepreneurs to promote an issue and to tackle important policy problems. Policy entrepreneurs are viewed by Kingdon as catalysts of change who help put an issue on the policy agenda and then to the development and implementation of policies. These people can couple different streams, at opportune moments to make policy happen and push it toward implementation (Kingdon, 1995; Leppo *et al.*, 2013).

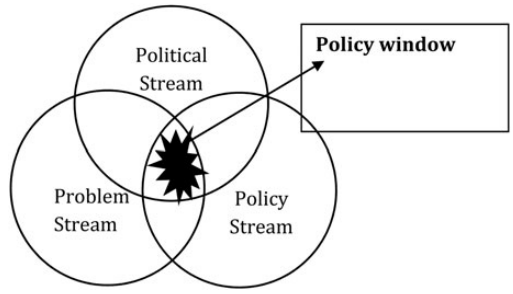

Fig. 1: Kingdon multiple streams framework.

The extended version of the multiple streams model (see Figure 2) postulates that in agenda setting, politics and problem are coupled in the presence of policy. In the formulation stage, however, the politics is coupled with policy while the problem has already been recognized and present. Yet, in the implementation, coupling of problem and policy happens at the presence of politics (Ridde, 2009). The extended version of the Kingdon model has been successfully employed to study the implementation gap in health policies regarding equity in Burkina Faso, Africa (Ridde, 2009).

Conceptualized by the extended version of Kingdon model, this article seeks to answer the following research questions:

1. What were the underlying problems that led to the constitution of ISC for developing Kerman Health Master Plan? (the problem stream)
2. What was the approach of policy makers in developing Kerman Health Master Plan (the policy stream)
3. What were the political facilitators/drivers to move this initiative into the policy making agenda? (the politics stream)?
4. How did the streams couple or how did the windows of opportunity open at different stages of policy process? (windows of opportunity/coupling of streams)

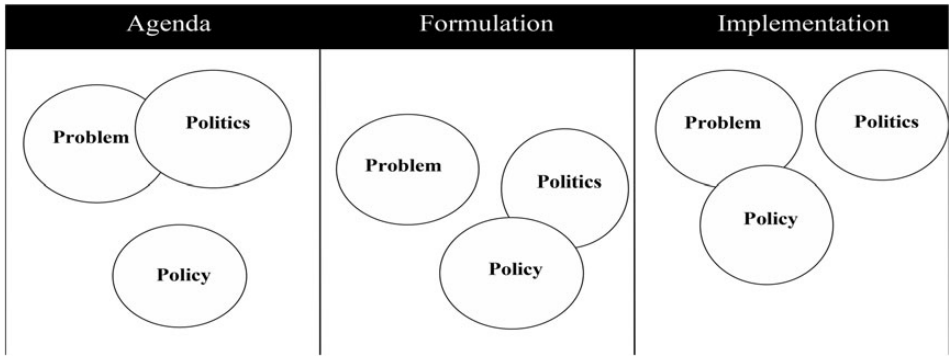

Fig. 2: Extended version of Kingdon multiple streams framework. *Source*: Ridde (2009).

5. How was the policy formulated and by whom?
6. How did the implementation look like and what were the facilitators and barriers to policy implementation?

Data collection

We conducted face-to-face in-depth interviews with different actors involved in the process of formulation and implementation of Kerman province HMP and performed documentary analysis of key policy texts.

Sampling methods

Two types of sampling methods including purposeful and snowball sampling were employed to select interviewees. We drew up an initial list of 19 organizations from the Kerman HMP document that deemed to be involved in developing this plan, of which only 8 organizations (named below) accepted to participate in this research. Snowball sampling was then followed to identify all participants involved in the process of formulating and implementing Kerman HMP. We interviewed eight officials at the Kerman University of Medical Sciences (hereafter KUMS), who were directly involved in formulating Kerman HMP, and one or two representatives from other sectors that were approached by KUMS in formulating HMP including municipality; city council; agriculture organization; industry, mine and trade organization; health insurance organization, welfare organization and police office (in total 18 interviews). We had low rate of acceptance among non-health sector organizations and, as we will report in the 'Results' section, this could be due to their lack of direct involvement in developing Kerman HMP. Interviews were conducted between July 2012 and April 2013. All interviews took place in the interviewees' work place and written permission to record the interviews was sought in all cases. Notes were also taken at all of the interviews. Interviews were all recorded and manually transcribed in Farsi but were analyzed in English.

In selecting policy documents we sought views of interviewees and also members of Kerman CHFS (see Table 1). The following policy documents were chosen and analyzed: (i) the fourth and the fifth Five-Year Development Plans (5YDP) of Iran (2005–2009; 2010–2014); (ii) Kerman HMP; (iii) 20-Year National Vision of Iran; (iv) Iranian Constitution; (v) the national SDH document; and (vi) the bylaw of Council of Health and Food Security (CHFS) at the provincial level.

Data analysis

We followed a theory-driven qualitative content analysis to analyze the interview data and excerpts from the documents by focusing on factual statements expressed in the data (Silverman, 2013). We captured extracts from policy documents in such a way as to record and preserve the original context (Patton, 2002). In the first stage, we developed an initial thematic conceptual framework based on the research questions, formulated upon the extended version of the Kingdon framework (Ritchie *et al.*, 2013). We then followed a descriptive analysis to extract the core content of data on components of the Kingdon model. In so doing, we meticulously read through the data and highlighted and extracted the content related to each stream of the Kingdon model. We then re-categorized and re-interpreted data to enable us to make conclusions based on the extended version of the Kingdon model. In the same way, through the content analysis of the collected policy documents, we employed the pre-identified Kingdon's framework components (the extended version) and their main features to construct categories. We then classified the data into these categories to support the extent to which a particular category appears in the policy documents. Finally, we organized results into agenda setting, policy formulation and policy implementation to fit the extended version of the framework.

Table 1: Members of Kerman CHFS

No	Position	No	Position	No	Position
1	Provincial governor (chair)	12	Head of urban water and waste water company	23	Head of army health insurance
2	Chancellor of KUMS (secretary)	13	Head of rural water and waste water company	24	Head of drug enforcement administration
3	Provincial government deputy secretary for security	14	Head of industry, mine and trade organization	25	Head of police office
4	Provincial government deputy secretary for economic coordination	15	Head of youth affairs an sports organization	26	Mayor of Kerman municipality
5	Provincial government deputy secretary for social affairs and culture	16	Head of veterinary organization	27	Head of health department at social welfare organization
6	Kerman city governor	17	Standard organization	28	KUMS deputy director for treatment
7	Head of environment protection organization	18	Head of broadcasting organization	29	KUMS deputy director for health
8	Head of agriculture organization	19	Welfare organization	30	KUMS deputy director for food and medicine
9	Head of labor, cooperative and welfare	20	Head of health insurance organization	31	Provincial governor advisor in health affairs
10	Head of education organization	21	Head of justice organization	32	Chancellor of Rafsanjan[a] city medical university
11	Chancellor of Jiroft[a] city medical university	22	Chancellor of Bam[a] city medical university		

[a]Rafsanjan, Bam and Jiroft are three districts in Kerman province that have their own medical universities; chancellors of these three universities are members of the Kerman CHFS.

The research was judged against trustworthiness criteria namely, credibility, transferability, dependability and confirmability (Guba and Lincoln, 1994). Over the course of this research, the theory has informed and been informed by the data analysis.

Ethical issues

According to Diener and Crandall (Diener and Crandall, 1978) in social science research, ethical principles center on four main issues including harm to participants; deception; invasion of privacy or lack of informed consent (Diener and Crandall, 1978). We took every precaution throughout this research in order to address these concerns. This research was approved by the ethics committee of Kerman University of Medical Sciences.

RESULTS

The results of this research are organized into three sections based on the extended version of the Kingdon framework namely agenda setting, policy formulation and policy implementation. Findings pertaining to each stream of the Kingdon framework are then presented within each section. We will elaborate on these findings in the following sections.

HMP on policy makers' agenda

Our data analysis revealed that the policy of HMP moved into the policy makers' agenda in Kerman province by coupling of problem (two key problems including low health status of the province as well as structural/system flaws) and politics (national and provincial mandates/directives) streams while this coupling was fostered by an informal network of few academics at KUMS who had good tie with officials at CHFS (i.e. policy entrepreneurs). We will further elaborate on these items in the following sections.

Problem stream

We found that a research report (i.e. evidence) was one of the main prompts for putting HMP on the agenda of policy makers. This report revealed that notwithstanding implementation of numerous health programs/interventions, no significant progress in the province health indicators, as compared with the national average, is observed over a course of 10 years.

Our data analysis further revealed two key structural/system flaws including centralized decision-making and a lack of strategic approach to health that deemed to have had a role in pushing the HMP policy into the policy

making agenda. The majority of research participants believed that the dominant mode of governance in Iran is centralization with a top-down decision-making where all policies are decided at the national level without considering local needs. This was argued to be a reason behind developing provincial HMP.

> . . . . You well know that there are huge variations among provinces in terms of socio-economic, cultural and geographical situation which all affect community's health. These differences are not considered in the national planning; so we needed a provincial health master plan to specifically target our own health problems. [Participant form health sector]

Lack of an strategic approach to health and weak strategic planning were found as other structural flaws. Research participants believed that health, or more specifically an SDH approach, has not been incorporated into the strategic planning of diverse non-health sectors. It was further revealed that the current provincial CHFS is not preforming well, due to a lack of strategic plan with no SDH approach, albeit the clear statements in legal acts/directives (e.g. articles 13 and 28 of the provincial CHFS bylaw) enforcing provincial councils to do so.

> . . . The council has the duty to review recommendations and to develop strategic plans for health promotion based on the information provided by the provincial medical university and other sectors. [Excerpt from Article 28 of the provincial CHFS bylaw]

> . . . We conducted a research project in which we assessed the content of all decisions made by the provincial council of health and food security. It was quite shocking to see that the council followed a very weak strategic planning without consideration of SDH; just sporadic isolated actions on one-off basis. So, no surprise to see lack of coordination among different sectors or their lack of attention to health. [Participant for health sector]

Politics stream

Our document analysis revealed that the move toward decentralization was accelerated at the time of the Reformist government in Iran (office tenure: August 1997–August 2005). The fourth Five-Year Development Plan (i.e. 4th 5YDP) for the years 2005/2006–2009/2010, which highlighted the role of provincial and local governments in decision-making based on their local needs, was developed at the final years of this political party tenure. Formation of the national SCHFS as well as the provincial and district (local) CHFSs was also imposed by this program (Article 84), which provided a collaboration platform (i.e. structure) for engagement of diverse stakeholders for health promotion.

> . . . In order to ensure food and nutrition security in the country, to secure a desirable food basket, to reduce the ailments caused by malnutrition, and to promote the public health in the country, government is charged to form the "High Council of Health and Food Security" through consolidation of the "Council of Food and Nutrition" and the "High Council of Health". [Excerpt from Article 88 of the 4th 5YDP]

The 5th 5YDP (2010/2011–2014/2015) also endorsed institution and duties of the CHFSs (Article 32). Forming national and provincial trans-sectoral development plans (i.e. master plans) was also enforced by this program (i.e. Article 155), where the executive bylaw of this article clearly enforces development of national and provincial HMPs. Endorsement of the provincial HMP by this instrumental national program/law was fundamental to push the policy into the agenda setting and, most importantly, to secure it through political changes. Further, in the year 2009, the national SCHFS mandated all provincial CHFS across the country to develop provincial HMPs.

> . . . The provincial developmental plan document is a strategic document identifying the key approaches toward population and manpower, the infrastructures and economics, social and cultural issues as well as the long and medium term objectives for development of the provinces within the framework of the macro-strategies of the fourth plan [4th 5YDP] and the national development with due consideration of the strengths, weaknesses, opportunities, and barriers at the provincial level. [Excerpt from Article 155 of the 4th 5YDP]

Our policy document analysis further revealed that there are other national laws/directives in support of the HiAP approach including Iranian Constitution, the 20-Year National Vision and the national SDH document. Iranian Constitution (e.g. Articles 3, 29, 43) has adopted a holistic view toward health and has recognized health as a basic human right with the government in charge of satisfying this right.

> . . . Social security with respect to retirement, unemployment, old age, disability, absence of a guardian and benefits related to being stranded, accidents, health services and medical care, provided through insurance or other means, are accepted as a universal right. The government must provide the foregoing services and financial support for every individual citizen by drawing, in accordance with the law, on the national revenues and funds obtained through public contributions. [Article 29 of the Iranian Constitution]

The Iranian 20-Year National Vision also places a great deal of emphasis on health. It clearly states that the health sector is responsible for only 25% of population health

and emphasizes that population health should be secured, for the most part, through collaboration of other sectors. This policy document gives prominence to the SDH approach.

ISC for health has also been reflected in the establishment of the Secretariat on SDH at the Ministry of Health and Medical Education (MOHME), which aims to engage all sectors of society in health promotion. The SDH strategies of the health sector, as presented in the MOHME's August 2006 Country Progress Report, have demonstrated the extent of ISC with other ministries (see Table 2).

Finally, at the provincial level, the bylaw of the provincial CHFS focuses mainly on local need assessment and prioritizing local health challenges. The duties of provincial CHFS are articulated in Articles 13 and 28 of this bylaw.

> The provincial CFHS should collect and prioritize health challenges of the province with the cooperation of provincial medical university and other sectors. [Excerpt from Article 13 of the provincial CHFS bylaw]

Policy entrepreneurs

Although there were recognized problems, as mentioned above, and also political mandates/directives (national and provincial laws/acts), but HMP did not move into the agenda of policy makers at the Kerman province until 2011 when an informal network of few academics at KUMS (i.e. policy entrepreneurs), who were in good terms with officials at CHFS, acted as catalysts of change and coupled the two streams of problems and politics. These people used evidence (i.e. survey report) to back claims that the current centralized policy making is not effective on the grounds of that not taking into account the local needs. They could convince authorities at both KUMS and CHFS to form a HiAP for developing HMP. These people, who were determined to place HMP in policy makers' agenda, had good skills in communication, lobbying and networking and enjoyed having political connections. They used their skills to persuade all influential people at CHFS to agree with development of a provincial HMP. With their lobbies, once the issue was formally raised at CHFS meeting, it was readily accepted. The presence of the policy entrepreneurs was a major success factor in opening windows of opportunity toward policy innovation (i.e. HMP) by linking the three streams of problems, policy and politics.

> I know that Dr X has been in good terms with people at Ostandari [i.e. provincial government] and other top officials of the province. With no doubt, he had crucial role in convincing Ostandar [i.e. provincial governor] to allocate budget for developing Kerman health master plan. [Member of Kerman CHFS]

Windows of opportunity

Once members of Kerman CHFS reached an agreement to develop HMP, almost at the same time, the 5th 5YDP was ratified in which a good deal of budget had been allocated to provincial governments for promoting research activities. This opened a monetary window of opportunity and prompted the provincial government to assign the core responsibility of HMP development to KUMS as a research project. Here, again, the same informal network of academics at KUMS played a crucial role via lobbying in persuading provincial government to allocate this budget for developing HMP. KUMS was assigned with a 6-month period deadline to prepare the HMP given the allocated budget.

> I don't think we would have developed Kerman health master plan, although we all knew we should do so, if the research budget had not been assigned to Ostandari [i.e. provincial government] by the Ministry of Interior. [Member of Kerman CHFS]

HMP formulation

When the provincial CHFS and most importantly the provincial governor were convinced to develop the provincial HMP, it was the time of coupling politics and policy in formulating the HMP. At this stage, there was a high commitment from the provincial governor (politics) and at the same time a good deal of budget was allocated to provincial government for research purposes that opened a monetary windows of opportunity by which the provincial governor assigned developing Kerman HMP to KUMS as a research project (policy/solution). Here, the provincial governor played a crucial role in prompting formulation of HMP (policy entrepreneur). While the HMP was in the development stage, the provincial governor was changed. The new governor, however, followed his predecessor, so there was no interruption in the HMP development following this change.

Upon assigning the responsibility of developing Kerman HMP to KUMS as a research project by the provincial government, five committees were formed namely methodology, structure, technical, finance and a blending committee. The methodology committee was in charge of providing methodological instructions on how to develop the HMP; for instance by conducting in-depth face-to-face interviews with diverse stakeholders and experts. Members of this committee were also responsible for operational planning and for making sure that HMP is aligned with the national laws (e.g. Constitution, 20-year National Vision, etc.). The structure committee was liable for finding decision-making processes and ways of engaging diverse sectors. The responsibility of finding main health challenges

Table 2: ISC strategies for SDH

No	Goals	Strategy	Relevant SDH	Co-Partner
1	To provide equitable health services to the entire population	To expand the coverage of PHC in all rural and urban areas with more attention to deprived and less developed provinces	Health systems	Management and Planning Organization
		To provide high coverage of health insurance for all	Health systems	Ministry of Welfare and Social Security
		To give priority to the promotion of quality of life among the population with special needs	Social exclusion	Management and Planning Organization Ministry of Welfare and Social Security
2	To ensure free health services for families in lowest 3-decile of income	To transfer and allocate the resources in a proper way	Health systems	Ministry of Welfare and Social Security
3	To decrease the health threatening risk factors in the work and living environment	To increase the numbers of work places that can control at least one of these health threatening factors: 25% of ergonomic—40% of physical—85% of chemical factors	Employment condition	Ministries of Labor, Industry and Mining, Ministry of Finance Management and Planning Organization
4	To identify 100% of families with malnutrition due to poverty and provide intervention to 50% of the affected population	To increase family income and provide subsidies for essential food to the target population	Nutrition Social exclusion	Management and Planning Organization
		To decrease malnutrition by 10% among population in the lowest three deciles of in come	Social exclusion	
5	To maintain and promote health status of mothers and children	To decrease mental disability due to hypo-thyroidism by about 80%	Early Child Development	Management and Planning Organization
		To advocate the breast feeding program, in order to promote mother and child health		
		To reduce malnutrition among under five children to less than 12%		
		To reduce the percentage of underweight children to less than 8%		

Source: http://sdh.behdasht.gov.ir/ (accessed on 7th January 2015).

of the province was assigned to the technical committee which was composed of some epidemiologists. Finally, the blending committee was charged to merge the results of other committees and to prepare the final draft of HMP. Our data analysis revealed that the key problem in formulating HMP was a lack of direct involvement of non-health sectors as their views were only sought in one-to-one basis interviews rather than holding regular panels and constant interactions.

> Ostandar [i.e. provincial governor] assigned developing Kerman health master plan to us as a 6-month research project. [Member of KUMS]

HMP implementation

In 2011, Kerman HMP was formulated, but after three years its implementation is doomed to failure due to a number of factors including poor formulation of this policy (e.g. lack of direct involvement of non-health sectors, and wrong approach in formulating this policy; i.e. a time-bounded research project), cut of budget and above all low commitment of the provincial governor (politics).

We found that there have been a number of irregular meetings organized by the Kerman CHFS for implementing HMP strategies without any systematic plan and evaluation mechanisms for implementation.

> We have organized 8 meetings over the last two years since formulation of HMP in order to discuss about implementation of HMP strategies. In each meeting we have dealt with one of the issues targeted by the HMP such as prevalence of cancer, cardiovascular, and road accidents; we have invited relevant health and non-health sectors for each issue. [Member of Kerman CFHS]

Our research participants believed that assigning development of HMP as a research project to KUMS was a wrong approach. In their view, it was not a collaborative effort.

> I recall that I was approached only once by an academic member of Kerman University of Medical Sciences who came to my office for an interview. He showed me some evidence of the relationship between agriculture pesticides and cancer and sought my view on how we can collaboratively battle this issue and what my organization can do to fight against cancer and so on. Although the evidence he showed me was convincing, but do you think that was the right way of building a collaboration? [Participant from non-health sector]

Participants from non-health sectors were expecting to get directly involved in developing the HMP as demonstrated in the following statement. Their lack of direct involvement in developing the HMP can explain the lack of shift in their thinking because no policy learning through a collaborative decision-making took place.

> . . . We never sat around a table with other organizations to share our expertise and views and to do a brainstorm; rather, the task was assigned to few academics at medical university. If we had developed it together, it would have been a more practical acceptable plan. . . . [Participant from non-health sector]

We further found that non-health sectors whose names were among collaborators in the Kerman HMP document did not include HMP strategies in the strategic planning and action plans of their organizations. The main reasons they put forward included: no mandate by their organization, cost of implementing those strategies and no priority for those strategies.

> . . . We have many tasks and responsibilities within our own organizations for which we are accountable and should be responsive. The tasks assigned to us by the health master plan are not our prime concerns. . . . [Participant from non-health sector]

Yet, it was interesting to find out that almost all non-health sector participants agreed that despite implementation barriers, they would have been keeping up with implementation of HMP if the provincial government were still committed to this policy.

> . . . I can see Ostandar [i.e. provincial governor] doesn't care about health master plan anymore; so, why should I do? [Participant from non-health sector]

> . . . If the issue [i.e. implementation of HMP] was important to Ostandar [i.e. provincial governor], he would definitely allocate money to keep its implementation alive instead of simply dropping the policy [Participant from non-health sector]

DISCUSSION

The current study aimed to investigate how a HiAP initiative, i.e. the provincial HMP, was placed into the policy making agenda, how and by whom it was formulated and what are the enabling or hindering factors in its implementation. Our findings revealed how the three streams of problem, policy and politics coupled at different stages of a policy cycle including agenda setting, policy formulation and policy implementation. We discuss these findings against the background of the existing literature.

Among the key sources that bring an issue into the attention of policy makers including key events, publication of evidence, and feedback from current policies (Kingdon, 1995), evidence played a partial role in the case under study. Publication of a survey report (Rashidian *et al.*, 2014) showing the health status of the province compared with other provinces provided the initial prompt that the current health programs are not effective. This initial evidence, however, was not the sole drive to attract policy makers' attention, mainly because in developing countries, such as Iran, policy and decision-making are not normally underpinned by the scientific evidence (Elliott and Popay, 2000; Hemsley-Brown and Sharp, 2003; Bowen and Zwi, 2005). It is also well documented that researchers constitute only one stakeholder and evidence is just one source of information in policy processes (see, for example, Hyder *et al.*, 2010). There were other recognized problems such as centralized decision-making and a lack of strategic approach to health, for which there were a ready solution/policy (i.e. HMP) and structures (i.e. national SCFHS and provincial CHFSs). The stream of politics was very dominant at this stage as both solution/policy and structures were the national level mandates/directives (e.g. enforced by national laws/acts like 4th and 5th 5YDPs). It is worth mentioning that the two key national development plans (i.e. 4th and 5th 5YDPs) were developed by two opposite political parties; the 4th plan by the Reformists (Eslah-Talaban) and the 5th plan by the Conservatives (Osool-Garayan). Implementation of the 4th 5YDP and also development of the 5th 5YDP took place at the time of the Conservative party (in office from August 2005 to August 2013). The interesting

point was that the Conservative party followed the decentralization movement (e.g. endorsement of the provincial CHFSs) that had been accelerated by the Reformist party. This is mainly because the Reformists had tried to link the decentralization initiatives to ideological principles of the Islamic revolution such as better outreach to the poor, or more generally to the egalitarian ideologies (Khayatzadeh-Mahani *et al.*, 2013). This confirms the argument that politics and ideologies underlie all health promotions issues (Signal, 1998; Mannheimer *et al.*, 2007; Raphael, 2014). We contend that Bambra and colleagues (Bambra *et al.*, 2005) are correct to promote the concept of health politics with the argument that determinants of health can be controlled by political interventions (Bambra *et al.*, 2005).

Notwithstanding all efforts in developing the Kerman HMP, its implementation seems ill-fated. Our findings revealed that HMP, which could be a potential evidence and a road map for other sectors, was not employed in the strategic planning of diffident sectors which could be due to their lack of direct involvement in policy formulation. Assigning development of Kerman HMP as a research project to KUMS is also deemed to be the key factor in its flawed implementation because only health sector was actively involved in developing this policy. By this, the HiAP initiative was seen as a time-bounded project not an approach. Baum and colleagues in their evaluation of a sustainable healthy city initiative found that one of the key factors in maintaining sustainability was transition from project to approach (Baum *et al.*, 2006). The methodology of KUMS in developing HMP by conducting one-to-one interviews with diverse stakeholders instead of gathering them together deems to be another culprit in the flawed implementation as collaborative partners had no opportunity to get to know each other and to develop ways of working together (Riggs *et al.*, 2013). With a fast growing demand for ISCs to address complex health problems, attempts should be made to develop and nurture effective collaborative relations and to develop shared collaborative processes (Lawless *et al.*, 2012; Binagwaho and Scott, 2015). To be effective Kerman HMP should have been developed by direct, active and sustained involvement of all health and non-health sectors (Jones, 2008; Larsen *et al.*, 2014) and this engagement should be extended to the evaluation stage to ensure sustainability (Baum *et al.*, 2014). Further, there should have been a process that provides time for substantial interaction and relationship-building (Harris and Harris-Roxas, 2010; Lawless *et al.*, 2012). All these reasons could explain why developing Kerman HMP did not result in a shift in thinking of non-health sectors' policy makers because no policy learning including conceptual learning (e.g. redefining goals or problem definitions) and social learning (e.g. dialog and communication among diverse stakeholders) took place (Glasbergen, 1996; Lawless *et al.*, 2012; Swanson *et al.*, 2012). Cooperative planning, a process that integrates diverse stakeholders and promotes shared decision-making in a systematic way (Rutten and Gelius, 2011), results in individual learning processes among policy makers and professionals and will further lead to augmented capacities and policy change (Frahsa *et al.*, 2014).

Another key factor in poor implementation of HMP was low political commitment (i.e. lack of appropriate support from the Kerman province governor). According to extended version of the Kingdon Multiple Streams framework, in the implementation stage the politics should encourage coupling of problem and policy streams. In our case, this did not happen and our results confirmed that without an encouraging and supportive political environment, problem and policy streams cannot be coupled (Ridde, 2009).

Further, weak implementation could be also due to lack of policy entrepreneurs at this stage who could couple the problem and policy streams by using their resources. Our results confirmed that despite the pivotal role of policy entrepreneurs as mediators or facilitators in collaborative processes, resources are rarely invested to provide this role in forming ISCs (Riggs *et al.*, 2013). de Leeuw (de Leeuw, 1999) in her review of 10 European healthy cities found that successful cities had institutionalized their entrepreneur capacities. A step further could be developing systematic entrepreneurship, which requires high degree of cooperation among several actors from diverse sectors (Bernier and Hafsi, 2007; Harting *et al.*, 2010). In systematic entrepreneurship, the innovations and changes will be performed systematically and process-based not sporadic actions depending on single entrepreneurs (Bernier and Hafsi, 2007). These potential systematic entrepreneurship roles should be investigated in further collaborative evaluation endeavors.

One further reason for failed implementation of HMP could be a lack of budget as there was a good flow of budget for policy formulation but it did not last for implementation. It is well documented that sustainable resources including budget are integral for effective sustainable collaborations (Jones, 2008; Riggs *et al.*, 2013; Larsen *et al.*, 2014). If issues such as support, capacity, resources, and timeframes are not identified in the policy proposal, one can expect poor implementation of policy (de Leeuw and Peters, 2014). Here, provincial governor could help the situation by employing an effective leadership and urging other sectors to implement HMP and by directing sustainable resources, including budget, toward policy implementation.

Limitation of the study

The main limitations, which are considered for this research, include the issue of generalizability, social desirability, subjectivity and short-term policy implementation.

The first and foremost limitation of this research could be the issue of generalizability of the findings as this research was conducted at one single province in Iran (Gerring, 2004). Our theoretical paradigm (constructionism), however, gives grounds for the selection of a single case to elucidate and provide a rich and detailed description with the aim of enhancing transferability of findings to other settings (Bryman, 2012). Further, since our research is among the first policy analysis of the ISC actions at the provincial level in Iran, our findings might be helpful for other settings.

We also contend that our research participants might have been influenced by a social desirability bias, which means that they may have described what they thought we desire to hear, rather than the truth. Also, some of them may have provided politically correct responses with respect to their roles and responsibilities. We addressed these problems by triangulation of the data collection methods including interviews and document analysis.

Subjectivity could be another limitation of this research. Although we used different sources of data and analyzed the data by three researchers in order to enhance validity and credibility of our findings, our interpretation of data may remain subjective and our results cannot claim an overall truth. However, given that our research philosophical paradigm is a constructive approach rather a positivism one, this situation is inevitable and is justifiable.

A final set of limitation of this research could be that implementation of the CHFSs at the provincial and local (i.e. district) levels and development of the provincial HMPs are new initiatives in Iran. Hence, our results should be interpreted with caution since longer-term evaluation of these policies is required.

CONCLUSIONS

This qualitative case study exploring how a policy (i.e. provincial HMP) was placed into the policy making agenda, how and by whom it was formulated, and factors inhabiting its implementation, presents many interesting insights.

The study revealed two types of leverage, which played a crucial role in putting HMP policy into the forefront of policy making and in its formulation including politics and policy entrepreneurs. The study further disclosed the key HMP implementation barriers including lack of direct involvement of non-health sectors, wrong approach in formulating the policy, cut of budget and above all low commitment of the provincial governor (politics).

Despite the rich insights yielded by this research, however, we acknowledge that there may be other important factors that did not emerge within our case; as such we recommend that future research, mostly qualitative enquiries, is required to explore agenda setting, formulation and implementation of HiAP initiatives in different political contexts.

The multiple streams model was found to be informative for thinking about different stages of a policy cycle including agenda setting, policy formulation and policy implementation. It was also found to be a useful framework in analyzing public health policies including ISC for health initiatives as these policies do not smoothly and readily arrive at the policy agenda.

ETHICAL CONSIDERATIONS

The study was approved by the ethics committee of Kerman University of Medical Sciences.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interests.

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