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Multi-sectoral Requirements of Non-Communicable Diseases Stewardship in Iran

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Abstract

Introduction: Prevention and control of non-communicable diseases (NCDs) is too complex and health sector's control over them is limited. On one side, health-related extra sector (HRES) and the wider social and economic level (WSEL) have particular effects on the NCDs. Based on the importance of the issue, the current study aims to appropriately identify requirements of the NCDs stewardship in the HRES and WSEl in the Iran.

Method: by using a qualitative approach the current study has used thematic content analysis. Targeted sampling was employed, and data were collected to the saturation point. 18 interviews were performed. The deductive approach was used for content analysis, and data were analyzed by MAXQDA version 10.

Findings: in the HRES arena, findings include: promotion of exposure level with NCDs, organized planning at higher levels of decision-making, revision and enactment of laws; in WSEL arena, findings include: promotion of inter-sectoral collaborations, designing an appropriate social system, appropriate welfare and wealth distribution policy-making, using healthy budgets and so on.

Conclusion: to reduce the impact of NCD's risk factor in societies through stewardship, strengthening of comprehensive policy-making approach for NCDs in all sectors is necessary, which by using society's content can significantly help policy-makers to make-policies in the arena of NCDS.

Key Words: Health-related extra sector; Wider social and economic level; Stewardship: Non-communicable diseases.

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Introduction

Health policy-making affected by stewardship in many dimensions, particularly at higher levels and its influence on health systems is more crucial than other functions(1). Enhancing the stewardship of health systems requires control over health determinants including Social Determinants of Health (SDH); Health Risk Factors (HRF), and the health system. Then, the wider social and economic level, health-related extra sector, and health system are categorized based on these three determinants. The Health system is defined as a sub-set of health sector that is coordinately working to achieve predetermined goals mainly focusing on providing healthcare services. It refers to all sectors, institutions, and organizations that their primary goal is the health(2, 3). Countries need health systems that not only protect their citizens against health risks, but also provide protection against financial risks of disease, regardless of their ability to pay. The HRF comprises of genetic, environmental hazards, and behavioral hazardous factors, that the last two have a direct impact on disease occurrence. Usually, in each country, a considerable proportion of the burden of disease relates to the environmental hazardous factors. Underweight, high-risk sexual behaviors, tobacco use, alcohol consumption, lack of safe water, unhealthy environment, iron deficiency, indoor air pollution (due to burning fossil fuel), high cholesterol and obesity are the top ten HRF worldwide. Most of these factors are related to the health-related extra sector, including all ministries, organizations, institutions, and sectors that their secondary goal is health and health promotion. Then, addressing HRF at this level is important and finally will lead to high-level health(2). On one hand, some root causes, such as poverty, deprivation, illiteracy, discrimination, and injustice, are named SDH. These determinants not only have an impact on health, but also, dependent on HRF, can guarantee equitable health promotion. Improving SDH simultaneously promotes all three dimensions of health while improving HRF only promotes physical dimension of health. Therefore, health is mostly determined by social and economic factors, and this social and economic foundation particularly impacts on Non-Communicable Diseases (NCDs)(2-5).

In contrast to communicable diseases, prevention and control of NCDs, their risk factors, causality network and impact are too complex and the health sector role is significantly limited. Because of the long delay between exposure to risk factors and disease incidence, motivating the society to change unhealthy lifestyle is a big challenge. While the globalization of NCD's risk factors is accelerating, progress toward prevention and

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treatment of these diseases is slow. Therefore, since the dynamics of communicable and non-communicable diseases are considerably different, the health sector should take different strategies to address them(6-8). In 2017, NCDs were the cause of about 40 million deaths. About two third, 31 million, of these deaths were in low and middle-income countries, which 60 percent of them occurred in individuals younger than 70 years old. Cardiovascular diseases, cancers, respiratory diseases and diabetes by 17.7, 8.8, 3.9 and 1.6 million annual deaths, respectively, were the leading cause of death, more than 80 percent of deaths around the world(9). Currently, NCDs account for more than 53 percent of the global burden of diseases and by 2020 it will reach 60 percent and more than 73 percent of all deaths. 80 percent of these will occur in developing countries. Among these, NCDs will account for above 76 percent of the burden of diseases in Iran (8).

With regard to the importance of the issue, Iran developed the National Document of Control and Prevention of NCDs, which is confirmed by the World Health Organization (WHO). In addition to covering nine targets of the WHO to combat NCDs, it also comprises of local targets. Explaining the role of SDH and health-related extra sector and their proportionate levels in the stewardship of the NCDs is a critical prerequisite in managing such diseases, which not covered appropriately in scientific literature(8). A set of challenges that were mentioned before accompanied by the importance of these two sectors, guided the researchers of this study to the goal of accurately identifying stewardship prerequisites for NCDs in the health-related extra sector and the social and economic spheres of the Islamic Republic of Iran. As well, the current study is a part of a wider research project, which will be published in the future. As well, it received ethical code from Tehran University of Medical Sciences (IR.TUMS.VCR.REC.).

Method

Study design and data collection

The current qualitative study used content analysis and, to have better information exchange and deep understanding, in-depth, semi-structured interviews held under appropriate conditions. The average duration of interviews was 75 minutes. To consider ethical codes, in each interview, interviewer(TN) introduced himself and study goals. As well, interviewees consent was necessary to record the interview. For each interviewee, a special form was developed. Based on the interview protocol, interviews were begun with open and general questions and were continuing with more specialized questions. During the interview, based on the interviewee's answers a series of open and deep following up

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questions were asked to achieve more information (10)Questions were developed based on reviewing the literature on stewardship. As well, some questions were intended to have an appropriate understanding of stewardship functions in the arena of NCDs, both health-related extra sector and social and economic levels(11(Saltman, 2000 #11, 12-20). During the interviews, interviewees were receiving feedback and reflection. At the end of each interview, a time was allocated to remove interviewers' ambiguities (10)

Sampling and data collection

Health systems pundits were the study population. Research environment was the Islamic Republic of Iran arena of NCDs and its related problems. Interviewees were selected among policy-makers, health system decision makers, those who are aware of ongoing plans of the health sector, and those who are aware of the stewardship of risk factors of the Iranian health system in the government, the parliament and public, private and semi-public organizations (with at least 3-years of experience) (table 1). In addition to the inclusion criteria, willingness to participate, utterance and being experienced were among other criteria. Purposive sampling was employed and interviews continued to the saturation point(21). In total, 18 interviews were conducted.

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Table 1: expert's characteristics

18	**17**	**16**	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	1	Experience (both scientific and administrative)	
*					*		*	*	*	*						*	*	P: Planning	National policy-maker
	*			*							*			*	*			I: Implementation	
		*											*					E: Evaluations	
			*							*								Planning	Local policy-maker
																		Implementation	
																		Evaluation	
*	*	*	*	*	*	*	*	*	*	*	*		*			*	*	Faculty members	
												*						IR: Independent Research	

Data analysis

A deductive approach was employed and thematic content analysis was used to analyze interview transcriptions, by MAXQDA version 10. Analyzing qualitative contents is mainly focused on the subject and context, and differences and similarities between codes and categories. Data coding was open, and by simultaneous and continuous comparison of codes similarities and differences between categories were identified. Finally, by inter and intra category comparison, themes were extracted. To achieve a reliable level of consistency, the process was iterated. To increase credibility, researchers were continuously familiarizing themselves with the context and collected data. As well, an appropriate relation was established with interviewees. To ensure that extracted themes are compatible with what interviewee was meant, transcriptions were sent to interviewees. Next, to have an in-depth understanding, all transcriptions were reviewed. Again, to

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increase credibility, data analysis and interpretation were conducted by four researchers (AT, SY, LS, and TN). Also, to increase conformability, an external reviewer was employed. All activities, including how to do interviews, were exactly recorded and reported. To observe transferability, the findings were discussed with a team comprised of the authors and policy-makers. Comparing findings of the current study with others, showed its consistency (22).

Findings

Implementing interventions to reduce or eliminate NCDs risk factors is more dependent on the basic measures in the health-related extra sector, and social and economic levels than health sector measures. Interviewees noted that to have a better performance in the health-related extra sector the following issues are required:

a) **Promoting exposure level with NCDs**: This occurs through responsibility, environmental scanning, responsiveness, and accountability. "*Exposure to these diseases occurs through three levels. The first level is responsibility for NCDs, so that the burden of the diseases should be monitored through environmental scanning because of its importance at operational level. Second level, responsiveness, if something has occurred in the environment and it is monitored, a proportionate measure should be performed. Third, and higher level is accountability. That is, we are responsible for increasing the burden of diseases in the country and we are stewards. Then, we should be accountable (PNF1)".*

b) **Comprehensive planning at higher levels of decision-making**: controlling hazardous factors can be achieved by creating inter-sectoral committees and developing memoranda of understandings as well as providing required solutions to the High Health Council (HHC), defining the problem, and introducing it in the Council and supporting the policies. *"Similar to air pollution that is not a serious public demand (PNF5) ", "inter-sectoral committees and memoranda of understanding should be developed, those that are not affiliated to the minister. A person who supports and advocates policies and plans to control and prevent NCDs is a necessity (NFE) ".* As well, the MoHME should explain expectations from other sectors, So that *"the ministries should accept responsibility in intra-sectoral activities. For example, in the case of the quality of wheat, the Ministry of Agricultural Affairs forces bakers to add salt, which has impacted on NCDs. Using pesticides, which can result in cancers is another example. Social demand is also necessary. Automobile is another example, in the way that people should demand for high-quality cars (PNF6)."* Also,

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regionalization of intra-sectoral institutions in making decisions in the area of NCDs and allocating more financial resources to the ministries to address NCDs are necessary.

"There are some (intra-sectoral institutions) health-related extra sectors and decisions are made through councils in different levels. Some of their capacities are used and some not. Because of decision making regionalization across the country, laws and regulations that are not consistent with overall policies should be revised by the Expediency Discernment Council, and based on this rule decision-making level of intra-sectoral institutions in the area of NCDs should be determined (PNF4). Meanwhile, Allocating financial resources to other ministries to address HRFs is another way. If the MoHME can supervise the financial allocation process, it can be important for other ministries (IR). "

Promoting individual abilities to promote health and changing the lifestyle by other sectors, and improving scientific abilities to advocate higher level officials are other factors that should be considered.

"It should be clarified that how health is shown by other organization's perspective. This issue requires strengthening (INF). The individual's ability to promote health and changing their lifestyle by other sectors should be changed and promoted. Then, required solutions should be developed by HHC (PNF3)"

c) **Revision and enactment of laws**: finally, revision and enactment of laws took place through regulations, memoranda of understandings and health attaches. So that "*due to conflict of interest some of these memoranda of understandings do not reach their goals. Providing contents through regulations can be useful and its use may be helpful in development plans (IN2). Laws and regulations at a different level which are not consistent with overall policies should be revised (PNF4) and, if ministries accept responsibility and make revisions, health attaches could be helpful (PNF6)".*

Health is widely influenced by social and economic factors and this social and economic infrastructure at the country level are particularly influencing health. Based on interviewees, the following issues should be considered:

a) **Promoting decision-making level in NCDs arena**: in addition to carrying out responsibilities, being accountable and accountability, such as those in the health-related extra sector, HHC meetings, monitoring ministries and proportionate devolution of responsibilities in the arena of NCDs and HRFs of the NCDs, research and educational needs assessment, and weighting factors that affect NCDs are essential. *"After explaining the factor's role in the primary plan, actions such as bread consumption and etc. should*

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be monitored and delegate responsibilities to ministries appropriate to their responsibility area. For example, the ministry of industrial affairs responsibility is to reduce food salt to less than 5 percent. Furthermore, in development, restructuring and designing a stewardship path of NCDs it is expected to consider research and educational concerns of the MoHME from health-related extra sectors (IN1). Also, other factor's role in emerging NCDs should be weighted. To see how and in what direction, for example, poverty, hunger, prostitution, affect NCDs burden. (IN1)."

b) **Evaluation of market and environment development**: market and environment development and its role to guide system should be assessed, because of its impact on the system. *"The market should be considered as a barrier to implement measures. Because the market has an evolutionary concept. It also guides the system. The ecology has impacts on everything. Both market and environment development should be considered (NFE)".*

c) **Strengthening health in related ministries**: this should be followed through developing and announcing memoranda of understanding, establishment and orienting health secretariats in guiding SDH, developing a value-based approach by the MoHME for other ministries, appointment of high managers for NCDs in related ministries, explaining responsibilities appropriate to strategies, operational planning with regard to the resources and its mission by high managers, and finally developing laws and plans after acquiring required evidences . Interviewees acknowledged *that "everything should be in line with the society's welfare. The memoranda should be signed with other ministries and secretariat of health should be established in other ministries, to move toward health appendixes. These secretariats works to address SDH. Whilst the Islam's value framework also emphasized on health, and if ministries explain this framework, there will be no need to memoranda (INF)", "as well, each ministry should have a general manager for NCDs concerning two main tasks: first, culture building for his employees. Second, performing operational plans regard to the resources and missions. Meanwhile, HHC meetings should be held at least seasonally (PNF2)". As well, there should be a specified plan for health and responsibilities should be clarified so that accountability can be achieved. For instance, in Finland, if a child has a decayed tooth, his parents should pay 200£. Responsibilities should be cleared. We neither have evidence nor a plan. After developing, regulations and plans are needed for the implementation phase (5PNF*)." Establishment of SDH sub-committees, as a part of NCDs committee, which comprises of representatives from other subcommittees NCDs, is an essential step. *" SDH is an important issue in*

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NCDs. Studies show that smoking in lower percentiles is significantly higher because of poor knowledge, cultural issues and so on. These people are continuously working and use fast foods to satisfy their hunger. This defective cycle in deprived populations (in terms of education, prostitution, poverty and so on) cause stress, diabetes, smoking and so on. Therefore, it is useful to establish an SDH sub-committee in NCDs committee. And each committee should have representatives in the other committee. As well, culture building and intra-sectoral collaborations should be clear to address SDH (PNF2)."

d) **Appropriate training for NCDs**: appropriate trainings for Friday prayer leaders, teachers and in general the whole population about NCDs, health promotion and lifestyle as well as using managerial trainings in the economic and cultural areas, and addressing stress and negative news at household level can be helpful. "*Training Friday prayer leaders and teachers about NCD's and methods to address it to transfer their knowledge to the society and students is a necessity (PNF2)". In the long-term, we should work on culture and society's training (ILF). "The individual's ability to promote health and changing the lifestyle should be increased. Then, solutions should be established (PNF3). Also, there should be a plan to address social problems such as poverty, economic deprivation and cultural issues. At household level, a plan should be developed to address stress management and negative news, and necessary trainings should be provided (LPNF)".*

e) **Promoting intra-sectoral collaborations**: through expansion of intra-sectoral relations, and determining the share and path of producing evidence on NCDs, intra-sectoral collaborations can be promoted. "*For example, how these sectors can* increase or reduce NCDs incidence? (IN1)". Explaining the MoHME's leadership role, so that*" it can be the main steward and involve others. Like sensitization, evidence production, warning and notifying. Therefore, the MoHME should identify other sector's role and inform them (ILF)".* Finally, effective and technical support from related councils by the minister can be significantly helpful.

f) **Designing an appropriate social system**: a system that contains welfare and social services for unemployed, basic-complementary insurance system, a tax system which focuses on cross-subsidies to the poor, using donations, technical supports, building houses and filling the social class gap at social and economic levels can be very helpful. "*In many countries, there are systematic ways to address the problems, they allocate financial resources and donations to the social sector. Job means that you can at least satisfy the basic needs of your life, otherwise you will be poor. Unemployment insurances are*

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progressive, and trying to find jobs and participating in training workshops increases the job opportunities. After a while, it stops. The social network provides health insurance, a house and a minimum wage, for an unemployed person. Housing problems and social gap should be addressed (IR)." Insurances and funds should increase their activities in this arena. Social security networks should be more active. Cross-subsidies are necessary. But different social classes have similar usage pattern. Currently, 58 percent of the population are in the coverage of free insurance. There are three solutions: income tax (taxing rich people and subsiding the poor), donors or complementary insurance (PNF6).

Appropriate welfare and wealth distribution policies: these policies can significantly reduce the negative effects of socioeconomic arena. As one of the interviewees noted "*evidence-based policy-making that emphasize on cash transfers and welfare policies, such as housing, household, protecting the household, can be useful in promoting equity (PNF1)".*

g) **Using health friendly budgets**: these budgets can be helpful. According to one of the interviewees "*many countries allocate health friendly budgets to ministries in order to address NCDs risk factors (PNF1)".*

Discussion:

The current study aims to identify the requirements of the NCDs stewardship in Iran at two levels: (23) influencing health transition (i.e. health-related extra sector); and (23) social and economic levels. In terms of health-related extra sector, main findings of the current study comprise of promoting exposure level with NCDs, organized planning at high decision-making level for health, revision and enactment of regulations at health-related extra sector; and assessment of market and environment evolution, strengthening health in related ministries, appropriate training and promoting intra-sectoral collaboration, designing appropriate social system, well developed welfare policies and wealth distribution, and using health friendly budgets. To prevent NCDs, Turkey emphasized on intra-sectoral collaborations and developed policies to promote SDH, with emphasize on SDH in all policies. Even an agency has been established to increase coordination, PHIT agency. In contrast to the findings of the current study, that expanded support of the HHC to the MoHME, in Iran there is no defined task for SDH and intra-sectoral support. Other studies show that many countries have promoted SDH exposure and its prevention to higher levels (i.e. prime minister). In contrast to Turkey that merged all committees in one committee, called as prevention and control of NCDs risk factors, many countries, as

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proposed in the current study, have multiplied intra-sectoral committees to address NCDs(24). In line with the current study, policy-making council, which monitors the planning in Turkey was also useful. Studies also have shown that these efforts can be more useful through intra-sectoral collaboration (between the health sector and other related sectors), coordinating different advocates and health system managers, and developing better accountability indicators in the arena of the NCDs. There are some differences, for example, Turkey has a coordinated plan for preventing NCDs through PHIT. The main way to coordinate such services is the Family Physician Program (FFP), which is implemented in Turkey(24). However, in Iran, for a long time, adequate attention has not been paid to the FPP, and only is piloted in two provinces (Fars and Mazandaran). Studies on FPP implementation in Iran mentioned the following issues as the main implementation barriers: weak management and planning in human resources, physical resources, service provision process, referral system, electronic health records, payment mechanism, purchasers, inter-sectoral coordination, controlling and monitoring system(25). For strength timely diagnosis and treatment of NCDs, PHC approach is an effective strategy. It acts like a great economic investment, because, if provided timely, can avoid high-cost interventions. While, Iran is a pioneer country in implementing PHC, but despite efforts such as Health reform plan in 2014, in merging NCDs risk factor prevention in the healthcare network has not been successful. One of the main reasons is the curative approach that ignores the prevention(8). Reviews show that those countries that are acting as fast track in the arena of NCDs, such as Brazil, Costa Rica, Barbados, Oman, and Singapore, emphasized on inter-sectoral collaboration. For example, Oman emphasized on promoting an advocacy level to the prime minister, and Iran to the president. In the arena of SDH, recently a new deputy has been added to the MoHME's managerial structure, which due to the inadequacy of the MoHME control over other health-related sector doesn't have an efficient power. Brazil and Barbados also emphasized on supporting NCD-related policies. As well, countries such as Costa Rica, Oman, Jamaica, Brazil, and Iran are following strategies to develop preventive policies. On one hand, expansion of a referral system and PHC are among the strategies of Cuba, Singapore, Costa Rica, Brazil, Oman and United Kingdom(8, 26-34).

NCDs are the result of unhealthy lifestyle; therefore, focusing on the root causes, that is lifestyle and behaviors such as unhealthy diets, physical inactivity and so on, is important. A healthy lifestyle as a multicausal, multidimensional and multidisciplinary relates to

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collective behavior patterns that can be a barrier in health-related problems and ensures individual health(35). The main problem of physicians in Kyrgyzstan to treat diabetic patients is inadequate knowledge of patients about healthy lifestyle recommendations(36). Shams and et al. believed that defining a reference framework for health system based on the social characteristics of the country is important to make an informed decision for the health sector(37). Countries such as Brazil, Barbados, Jamaica, and Singapore, have clear strategies for lifestyle and healthy lifestyle. In addition, countries such as Iran, Costa Rica, Oman, Britain, and Cuba also have stratified and operational plans to increase health literacy, which reduce NCDs risk factors and consequent diseases. Operational plans to reduce risk factors in Iran and Britain are comprehensive. In contrast, in Jamaica, it is weaker than others. Meanwhile, Iran and Singapore have paid more attention to self-care educations(8, 9, 26-32, 34, 38). Therefore, as Samb mentioned, changing the society's culture about private and social lifestyle requires preventive interventions to strategically orient the NCD arena. Self-care training and health promotion as well as developing a value-based framework for the health system, such as the findings of the current study, can be useful in orienting NCDs arena (39)that despite previous efforts still there is a large room for improvement. Meanwhile, despite previous studies still, Iranian health system has not a value framework to be used as a decision-making framework at the policy-making level. Some studies, such as the current one in HRES , emphasized on establishing inter-sectoral mechanisms to achieve local, regional and national NCD-related targets (e.g. Brazil, Barbados, Oman, Jamaica, Singapore, and Iran), establishing governance mechanisms to support health system (e.g. Barbados, Jamaica and Brazil and in the following training through media (e.g. Iran, Barbados and Oman) as well as using regulatory and pricing of unhealthy products mechanisms (e.g. Barbados, Costa Rica, Oman, and Iran) either in explaining the institution's role (e.g. Brazil) or PHC's role (e.g. Iran, Cuba, Singapore, Costa Rica, Brazil, Oman, Britain) (8, 23, 26-34, 40-43). In Oman, consistent with the findings of the current study, using clergies in training the society has gained a special attention. Yet, it is not implemented in Iran. Other studies emphasized on behavior change, and motivating punishment policies(43) (e.g. Oman and Iran), and creating beliefs and culture for implementing policies (40) (e.g. Barbados) and monitoring(36) (8, 28). Countries assessments show that Barbados, Singapore, and Iran has an acceptable performance in the arena of monitoring and supervision to achieving nine global NCD targets (30, 33). Since behavior change is crucial for NCDs prevention, a study

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noted that financial and insurance incentive can be essential for complementary medical training in the arena of SDH(Shubert, 2016 #129). The findings of the current study also emphasize on the appropriate legal design and employing insurance mechanisms, devolution, and clear responsibilities in making NCD-related decisions. But using financial incentives is an issue that should be considered in the social-educational context of Iran and the other question is to what degree these incentives can be efficient in the arena of the NCDs for physician and health society. An issue that requires further research. Emphasizing on social justice and access to health care and rehabilitation services (e.g. in Jamaica) are among other issues that are not mentioned in the current study(38). As samb noted, social media should be considered in developing systems for society's training, such as Iran and Oman. In this line, also Iran has formed these media, but still, it has a long journey to achieve universal training and appropriate culture-building in the arena of NCDS(8, 28). A study mentioned providing family-related services, child care services, supporting those families that still have not owned a house, establishing telemedicine services for remote areas, primary interventions for households, such as healthy families and providing incentives to employ physicians at middle levels of the system, as intra-sectoral requirements of the NCDs arena(44). In Costa Rica insurers have an important role in managing NCDs; Iran and Singapore also emphasize on insurance coverage strategies for such diseases. Oman and Costa Rica have considered financial resources for these types of diseases. Samb also believed that using public subsidies, local and regional financial resources, using private sector and donor's resources are effective mechanisms, although only 2/3 percent of health resources are allocated to the NCDs. Magenson and Peterson also believed that using the pay-for-performance mechanism to incent clinics to move toward community-based treatment can be useful for resource allocation(8, 26, 28, 29, 39, 45). Except for pay-for-performance, other mentioned issues emphasize on evidence-based policy-making in the arena of wealth distribution and welfare policies and designing a comprehensive social service with appropriate insurance coverage. The findings of the current study show that supporting from capacity-building and providing required trainings should be on the agenda, so that managers and personnel from different institutions can acquire necessary supports and scientific abilities to have a better performance, as Brazil, Costa Rica, Oman, Barbados, and Cuba. Barbados, Jamaica and Cuba have declared clear programs for advocacy. According to some studies, for a better capacity-building, providing scientific training by companies and professional associations, and social

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participation efforts should be coordinated, such as programs in Iran, Barbados, Oman, Jamaica and Cuba that considered these issues in capacity-building(8, 27-29, 31-34, 38, 39, 46).

Studies also emphasized on national policies to cover all health-related sectors and implement health-in-all-policies approach (e.g. Cuba) as well as complying an ideological framework and having a comprehensive national health plan(8, 34, 39). In Iran, we called it "health appendix". Since development plans can have indirect effects on society's health, legal instruments are needed to control it. Paragraph B of the article 32 of the fifth national development plan provided this legal instrument for the MoHME. That, according to this article all large-scale development plans should have a health appendix, which should be developed by the MoHME, and confirmed by the deputy for planning and strategic surveillance of the presidential office. In most of the time these policies only have an intra-ministerial perspective of the health sector, and don't consider social and economic perspectives, such as addressing poverty and expanding the education(47). Consistent with the findings of the current study, Costa Rica, also has a special budget for NCDs, yet is not an earmarked-budget(29, 34). As well, Gostin, Magnusson, Collin, and Rani, Samb emphasized on employing global strategies to control and prevent NCDS, as a requirement of evidence-based policy-making (39-42, 45)

Conclusion

Iran has developed its national plan on NCDs prevention and control. As well, good measures are also conducted. But, despite these efforts, much has to be done. Therefore, to reduce the impact of HRF on individuals and the society as well as achieving the national goals, alongside with using the experiences of other countries, a special attention should be paid to the following areas that previously have been ignored or received inadequate attention. These areas are including strengthening comprehensive policy-making approach for NCDs in all sectors, promoting individuals responsibility, environmental monitoring, accountability, accountability to health, increased attention to the health-related extra sector and social and economic levels, merging prevention and health promotion in PHC-networks as well as expansion of the FPP and EHRs, changing the life-style, developing wealth redistribution policies and focusing on equity-oriented policies, appropriate structure of social security system, and allocating enough financial resources to the NCDs arena, for example through healthy budgets, establishing SDH sub-committee, evaluating market and environment evolution, creating administrative positions for NCDs in related

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ministries, appropriate weighting of factors that influence NCD's emergence, reducing social gradient, developing reference value framework. These policies that are relied on the community along with proper stewards can help health policymakers in achieving defined goals related to NCDs.

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