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Governance of noncommunicable diseases in Afghanistan

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Abstract

Background: Noncommunicable diseases (NCDs) are the main reasons of mortality worldwide. One of every two person is dying due to NCDs in Afghanistan. International policy actors, mainly the World Health Organization (WHO), published several reports and declarations on controlling and preventing NCDs. This study aimed to provide a situation for governance of NCDs in Afghanistan and proper solutions for identified challenges.

Methods: We conducted qualitative research utilizing interpretive phenomenology. A self-developed questionnaire was developed to conduct the semi-structured interviews with 39 experts from Afghanistan. The results were analyzed using a deductive framework analysis. Six building block framework of health system developed by the WHO was used as predefined framework for this study.

Results: The governance building block of health system consists of five subthemes including policy making, planning, organizing, stewardship, and control. We identified main strengths, weaknesses, opportunities, and challenges for these subthemes. The experts also provided key recommendations to address the challenges.

Conclusions: Management of NCDs is a neglected part of the health system in Afghanistan. Strengthening evidence-based policy making with technical and indigenous planning, establishing responsive units with adequate financial and human resources within different ministries to address "health in all policies" concept, passing and implementing national laws and regulations to support national strategies for prevention and control of NCDs, and establishing decentralized monitoring systems to control the implementation of these strategies are the main recommendations of this study. Local government and international policy actors should invest and support the development of a multisectoral coordination system at national level for Afghanistan.

KEYWORDS

governance, health in all policies, health system, multisectoral coordination, noncommunicable diseases

Highlights

- Noncommunicable diseases (NCDs) are the main reasons for mortality worldwide. One of every two persons is dying due to NCDs in Afghanistan.
- Management of NCDs is a neglected part of the healthcare system in Afghanistan.
- Strengthening evidence-based policy making with technical and indigenous planning, establishing responsive units with adequate financial and

human resources within different ministries to address "health in all policies" concept, passing and implementing national laws and regulations to support national strategies for prevention and control of NCDs, and establishing a decentralized monitoring system to control the implementation of these strategies are strongly recommended.

1 | INTRODUCTION

Noncommunicable diseases (NCDs) contribute to nearly 74% of the global death. In Afghanistan, more than 50% of deaths are attributed to NCDs.[1] Four main diseases including cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases are the main cause. In recent decades, NCDs have appeared as a priority for governance and policy decision in global health.[2] Unlike Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) include a specific target for NCDs and several NCDs-related targets which mainly focus on reduction of premature mortality due to NCDs, improvement of tobacco control, reducing the harmful use of alcohol, supporting research and development on vaccines and medicines for NCDs, reducing the hazardous chemicals in air, water, and soil including pollution and contamination, physical inactivity, excessive consumption of sugary products, and smoking.[3] Several other SDGs also focus on social determinant of healthcare including quality education, poverty, clean water and sanitation, sustainable cities and communities, climate action which mainly leads to NCDs.[4] The World Health Organization (WHO) Global Strategy for the Prevention and Control of NCDs adopted in 2000 was the first effort to find a governmental solution for responding to NCDs epidemic in many countries.[5] Since that time, many political declarations, strategies, and action plans have emerged, and many progress reports have been released on shared global management of NCDs and their risk factors.[2]

According to the WHO, the formal healthcare system is not the only provider of care to the entire population but there are other programs which aim to promote the objective of the system. Figure 1 shows how the healthcare system functions, as well as its outcomes. Governance is the oversight of the other functions of the health system, and it is the one that is almost done by governments. The WHO defined governance as "ensuring that strategic policymaking is combined with effective oversight, coalition building, regulation, attention to system design, and accountability."[6] However, lack of data, managerial capacity, and unorganized health systems of many low-middle-income countries (LMICs) led to neglect of this function by many governments. While the focus of many of the mentioned healthcare systems was on service delivery with the budget expended particularly on staff salaries. Governments should oversight the performance of the system regarding the other functions and plan for certain reforms and monitor the impacts of healthcare reforms.[7]

Afghanistan is a low-income country suffering from a chronic 40-year wars and conflicts, high level of poverty, food insecurity, natural disasters such as earthquakes and droughts, and limited access to drinking water and sanitation facilities, which especially have worsened the situation for vulnerable groups including women.[8] The country is facing a double burden of diseases where one
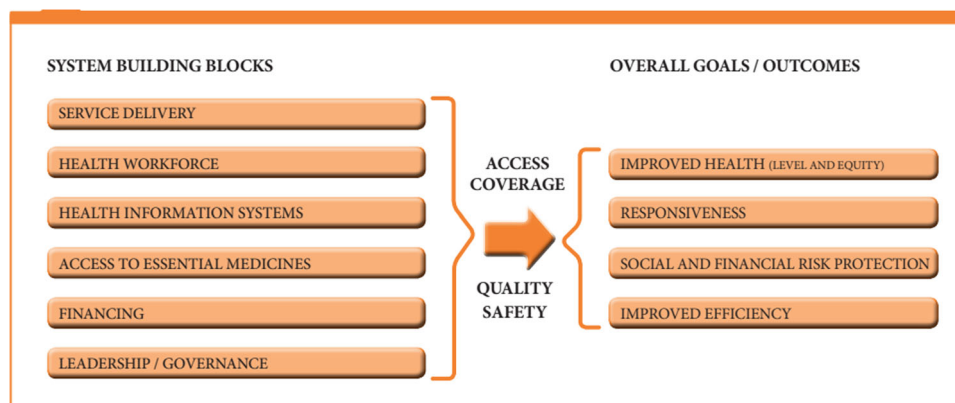

FIGURE 1 The six building blocks of health system: aims and desirable attributes. *Source*: the World Health Organization, monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies, 2010.

of every two person dies due to NCDs.[9] However, NCDs-related health service provision is limited throughout the country, and the private sector is the prominent provider of tertiary care for these diseases.[10] High systolic blood pressure, high body mass index, high blood glucose, high low-density lipoprotein (LDL) cholesterol, and smoking are the most prominent contributors to NCDs mortality in this country, and an increase in NCDs mortality and premature death is predicted to be nearly 60% in 2030.[11] The Ministry of Public Health (MoPH) had developed a national strategy for control and prevention of NCDs during 2015–2020 considering the global roadmap. However, there is no updated strategy and enough funds to be allocated to NCDs-related programs, as many donors focus on maternal and child health or communicable diseases in the current emergency context of Afghanistan.

The MoPH in Afghanistan focuses on overseeing implementation of healthcare laws, policies, and regulations both in public and the private sector and has delegated a great proportion of health services to NGOs and private healthcare providers. So, the MoPH mainly is expected to be a ministry focusing on policy making, regulation, coordination, and financing, as well as monitoring and evaluation. Provincial Public Health Departments in each 34 provinces are also governing the health systems at the provincial level. There are different task groups and committees for coordination between key stakeholders such as executive board, Management and Technical Advisory Group (MTAG), Health Inter-Sectoral Collaboration Group (HICG), Provincial Health Coordination Committee (PHCC), and Health Shuras.[12] Health Shuras are critical aspects of community-based health care. They consist of community representatives to support the healthcare system and provide counseling to healthcare providers.

In the current study, we aimed to analyze the status of management of NCDs in Afghanistan and find out about the strengths, weaknesses, opportunities, and threats to the management of NCDs in Afghanistan, especially in current emergency and humanitarian situation, and provide appropriate solutions to address the challenges.

2 | METHODS

A qualitative research design was used in this study. This qualitative research was conducted using interpretive phenomenology method, which includes three stages of fore-understanding, interrogation, and reflection.[13] Interviewing is the most common method of data collection in qualitative studies.[14] Semi-structured interviews were used to gain a full and deep understanding of situation of the strengths, weaknesses, opportunities, and challenges existing in the management of NCDs

currently in Afghanistan. We used a deductive framework analysis method to interpret the findings. The predefined themes used in this study are the six-building block framework for health system developed by the WHO in 2010, from which we only report the findings of SWOT analysis for managing the building block framework in this article.

The research team developed a questionnaire based on literature review and healthcare system building blocks for this study. Three pilot interviews were conducted to improve the interview questions and increase the interviewer's skills in communicating with interviewees and increase the validity of the research. We did a total of 29 in-depth interviews from 2019 to 2020. In August 2021, Taliban took over the government in Afghanistan, following this radical change in the country, many experts left the country, and donors froze their developmental programs and focused on emergency programs for health care only. In addition, they channeled their financial support through the UNICEF and WHO to the outsourced NGOs that provide service delivery at facility level. Following the political change in Afghanistan and to portray the recent changes into the healtcareh system, especially the management of NCDs, we did an additional 10 in-depth interviews during 2021. So, in total, we had 39 in-depth interviews. The purposive snowball sampling method with maximum variation among experts (policy makers, service providers from implementing NGOs and government-based hospitals, researchers, program managers, practitioners) was used. We did not have a sample frame of those experts who have worked or have enough knowledge about NCDs management in Afghanistan, so we used the snowball sampling method, which led to one expert referring us to another with relevant knowledge or work experience. Research data was collected via conducting individual interviews. A summary of the interview guide was sent to participants for their consideration in advance of the interview. The interviews were conducted in the interviewee's workplace or by virtual meetings through the telephone/Skype/WhatsApp conversation. The average time of interviews was 18 min (minimum was 10 min and the maximum time was 43 min). We continued to interview the experts until we reached information saturation, where we did not obtain new information on research subject from experts. Interviews were audio-taped and transcribed for increased accuracy after each interview. The interviews were in local language, and they were translated to English. We did back translation to ensure the quality of transcriptions.

As it is shown in Table 1, most of the interviewees were male (92.6%), with master's degree (85.2%), between 30 and 40 years old (51.9%) and with 5 to 10 years of experience (59.3%) and most of them worked as policy makers (40.7%) and service providers (37.0%).

TABLE 1 Demographic characteristics of the participants ($n = 38$).

Variables	Number	Percent	Variables	Number	Percent
Age (years)			**Work experience**		
Less than 30	3	7.9	Less than 5 years	4	10.5
30–40	17	44.7	5–10 years	18	47.4
41–50	9	23.7	11–15 years	8	21.1
More than 50	9	23.7	16–20 years	2	5.3
			21–30 years	6	15.8
Sex			**Job category**		
Male	36	94.7	Policy maker	15	39.5
Female	2	5.3	Service provider	13	34.2
Level of education			Researcher	5	13.2
Master	31	81.6	Other stakeholder	5	13.2
MD	3	7.9			
Specialist	4	10.5			

The framework method includes transcription, familiarization with interview, coding, developing a working analytical framework, applying the analytical framework, charting data into the framework matrix, and interpreting the data.[15] All recorded interviews were transcribed verbatim in full. The interview transcripts were read several times, and initial codes were generated. Similar codes were grouped into subthemes and then into themes. At the end, considering the research objective, the narrative was reported in terms of a purposive story. All the quotes are presented by 'p' in the result section.

Participants' participation was voluntary, and they could withdraw support at any point. We obtained the consent of participants regarding inclusion and audio taping too. Also, all the gathered data were confidential, and the personal perspectives of researchers were not involved in the phases of data collection, data analysis, and reporting.

3 | RESULTS

Governance/leadership is one of six building blocks of healthcare systems with five subthemes. The subthemes are policy making, planning, organizing, stewardship, and control. We presented the view of experts about each subthemes in this section (Table 2).

3.1 | Policy making

The strength points in this area are the existing policies and technical staff within each department. An advocating

manager from MoPH said, "we have national strategy for behavior change in health promotion department in which the fifth pillar is related to NCDs" (p. 9). In addition, there are policies and strategies in which the NCD were generally considered too, such as strategy for road safety or national policy for medicine (p. 12, 15).

The weakness point is the defective and noncontext-based policy process in the NCD management system. Development of policies with short vision, lack of separate strategy to address four main NCDs and three important risk factors "salt, sugar and oil," weak implementation of NCD strategy, insufficient budget for implementation of developed policies, no cost-benefit analysis for NCDs interventions are the most mentioned examples. A senior manager from National Medicine and Health Regulation Agency (NMHRA) said, "high amount of tax on the importing medicine also increase the motivation of investors for smuggling" (p. 15), which shows the negative impact of making policy on taxation of imported medicine in Afghanistan. A senior public health specialist from an international organization said, "during the past 20 years, the NGOs were good partners of government, and they were involved in the policy making, but the private sector were not involved. The directorate of coordination for the private sector was not active, they cannot be representative of the private sector, and this led to not being involved in policy making. NGOs work in primary health care and private sector work in secondary and tertiary health care" (p. 33). Another expert from the WHO said, "there is no political will toward combating with NCDs in Afghanistan, no sufficient staff and office requirement were allocated to this department. Moreover, the donors have other priorities like

TABLE 2 Subthemes and codes for situation of governance of the NCD management system in Afghanistan.

	Strengths	Weaknesses	Opportunities	Threats	Recommendation for improvement
Policy making	Good policies developed in which NCDs are considered generally	Defective policy making cycle for NCDs	Inclusion of NCDs in the top agenda of the health programs	Lack of political will; political transformation; leadership changes; job leaving of expertise	Inclusion of NCDs is top priority of the country and health system, independent revenue generation for health sector, considering the social determinants of health addressing the NCDs, making the health sector nonpolitical, integration of NCDs into BPHS and EPHS
Planning	Introduction and development of strategic plan at directorate level in MoPH	Low motive and budget to implement the plans	Introduction of new packages and increased need of communities	Donor's focus on communicable diseases	Establishment of NCD department in each hospital; establishment of medical court; Expand the NHMRA/FDA offices to five zones of Afghanistan
Organizing	Establishment of some technical and administration units toward control and prevention of NCDs	High turnover among top management staff, overloaded key staff, and lack of comprehensive dissemination of strategies and guidelines among public and private networks	available good NGOs, studies on NCDs; good capacity building programs; extended security after government change	Lack of updated designed health system; long and complex bureaucratic process.	Upgrading NCD unit to directorate; establishment of quality assurance board at leadership level of MOPH
Stewardship	Existing some law toward controlling the NCDs risk factors and strengthening health system and capable leaders in the health sector	Lack of health managers in leadership position; lack of interest in health promotion from donors and health leaders; low inter-sectoral coordination; and lack of evidence and analysis and research capacity in the health sector	Existing of quality control committees; increased awareness level; new government leadership style and existing of lots of social media and TV channels	Donor dependency; unstable political situation; extensive corruption and extreme people expectation from health sector	Establishment of national board for preventing and controlling NCDs, increase the GDP allocation to health sector, use of reliable data for advocacy, increase the level of people health literacy and approval of supportive law and regulation by parliament
Control	Existing certification process for medicine and health products	Long bureaucratic process; lack of quality control facilities and lack of regular monitoring of private sector			Improvement of regulation system on drug stores

communicable diseases. They talk about the importance of NCDs in every meeting, but no action was seen in practice" (p. 36).

Most of the experts interviewed in this study believed that NCDs are now included in the top agenda of the health program, and it is the biggest opportunity for policy makers; however, political change at high levels and losing experts in recent years are the main threats to policy making for NCDs.

The main solutions suggested by experts in this section are that the NCD unit within the MoPH structure should be strengthened and upgraded to a directorate and a 5-year strategic plan should be developed based on international good practices for this department. A senior manager from an international organization said, "the health sector should become a nonpolitical sector and all recruitment should be based on capability and specialty, unfortunately despite of many efforts in this regard, still we witness that the work is not left to the right person, and if this continues, we will not have a better situation in health sector especially for NCDs" (p. 11). The senior manager from NMHRA also suggested that "a multi sectoral strategy between Ministry of Finance, Ministry of internal affairs, costume department and Directorate of National security should be developed to decrease the smuggling of medicine into the country" (p. 15). Preparing the national health policy for 10 years and national health strategy for 5 years; giving permission to healthcare sector to generate its own revenue, procurement, and some other activities are other suggestions by experts interviewed in this study. A senior official from policy and planning general directorate said, "NCDs should be mentioned as a fundamental problem in the national policy of the government and more attention should be paid to social determinant of health such as education, water and sanitation, proper housing and better economic and income for people" (p. 28). A senior public health specialist from an international organization suggested, "a political will is needed to include the private sector into policy making, I suggest that MoPH could establish a national accreditation system for public and private hospitals and introduce the model hospital for others, also the government should reconsider its priorities" (p. 32).

3.2 | Planning

The strength point is introduction and development of strategic plan at the directorate level in the healthcare system including some directorates working toward NCDs such as National Environmental Protection Organization, Cancer Control Center, Secondary and Tertiary Hospitals Directorate. The head of oncology department at Jumhoriat hospital said, "we are working on strategic plan for national cancer control center, and it will be finished within few months" (p. 6). The director for secondary and tertiary service hospitals said, "in general, Ministry of Public Health has the National

Health Policy (NHP) for 2016–2020 which has been developed based on six building blocks of health system, and every directorate developed its strategy in line with the NHP, we also have 5 years strategic plan" (p. 24).

The weak point is low motivation and insufficient budget to implement the plans. A former senior official from Kabul Public Health Department (PHD) said, "there is a low motive to follow the progress towards achieving the targets as a result of recent changes in the political situation of the country" (p. 38).

The opportunities include introduction of new packages and the increased need of communities. An M&E senior advisor said, "the Disease Control Priorities 3 (DCP3) is a good opportunity in which the NCDs can be added. The studies show that most of the costs are spent on NCDs, and we can use this opportunity to consider the donor's attention on NCDs too" (p. 8).

The threat is donors' focus on communicable diseases. A researcher from an international NGO in Kabul said, "donors are interested in Communicable Diseases, because the NCDs need huge investment and there is less return from the investment on NCDs" (p. 1).

Establishment of NCD department in each hospital, expansion of the NHMRA offices to five zones of Afghanistan, and establishment of medical court are some of the solutions suggested in this section.

3.3 | Organizing

The strength point is establishment of some technical and administration units toward control and prevention of NCDs such as establishment of NCD unit within the MoPH; establishment of multisectoral coordination committee including all stakeholders inside the MoPH by the NCD department; establishment of radiotherapy center for cancerous patients which is in progress; establishment of heart diseases center in Indra Gandhi hospital; and establishment of National Health Products and Medicine Regulatory Agency (NHMRA).

The weak points are the high turnover among top management staff, overloaded key staff, and lack of comprehensive dissemination of strategies and guidelines among the public and private networks. A senior official from NCD department at MoPH believes, "rapid turnover of management team at MoPH is the main weak point which prevent us to use the available opportunities" (p. 2), on the other hand, a health promotion officer from MoPH said, "over loaded departments and lack of capacity of staff lead to not having good capacity in this area" (p. 18).

However, many experts believe that available NGOs with good research and surveillance capacity; available studies and evidence on NCDs; existing capacity-building programs in management areas; and extended security after change of government are the opportunities which can be used to make the NCDs better organized.

The threats are the lack of a health system designed based on the current need and a long and complex bureaucratic process. A researcher from international NGO in Kabul said, "Afghanistan health system was designed in 2002 for the need of that time which were the communicable diseases such as tuberculosis (TB), maternal and child diseases, but now we are facing with double burden of diseases. If we see only 30 percent of mortality is related to maternal mortality, and the remaining is related to other diseases, the system needs a reform" (p. 1).

The proposed solutions are upgrading of NCD unit to directorate and establishment of quality assurance board at leadership level of MoPH.

3.4 | Stewardship

The strength points are introducing laws for controlling the NCDs risk factors and strengthening healthcare systems. The experts believe that approving and passing the law on anti-tobacco; existing law passed in 2008 on the production and import of medicine; and the revising the list of essential medicine are the strength points in the management of NCDs. A public health expert from UNICEF said, "the MoPH leadership's commitment to regularly update the National Health Policy and strategies is a strength point in comparison to other ministries" (p. 14).

The weak points are lack of healthcare managers in leadership positions and recruiting the physicians with clinical knowledge about communicable diseases, lack of interest on health promotion from donors and health leaders, low intersectoral coordination and lack of evidence and capacity in analysis and research in the health sector. The M&E senior advisor in MoPH said, "we have less research on NCDs, so we have much less evidence on these diseases to advocate for them among donors" (p. 8). An advocating manager from the health promotion department also emphasized that, "we don't have enough data on NCDs, currently we use from Afghanistan Mortality Survey (AMS) and Demographic Health Survey (DHS) for planning our program, but we need in depth analysis (qualitative data) for our programs" (p. 9). A senior official from health economics and financing department also emphasized, "the NCD department don't work enough for NCDs at national level, they don't have enough evidence to convince the donors and they don't have the capacity of research and data analysis" (p. 26).

The opportunities are existing of quality control committees at hospital level; availability of few studies and evidence on NCDs; increased awareness level of public; and leadership style of the new government. A former senior official from Kabul PHD said, "an oppressive leadership style by the new government may lead to effective and efficient implementation of the services by the implementers" (p. 38). In addition, a senior official from a national research institute said, "there are lots of social media and TV channels that can be used to increase the level of awareness of public" (p. 5).

The threats are donor dependency, weak intersectoral coordination; unstable political situation; open border with neighboring countries; extensive corruption in NHMRA, and high expectation from healthcare sector.

The proposed solutions are establishment of national board for preventing and controlling NCDs, increase the GDP allocation to health sector, use of reliable data for advocacy, iimprove the health literacy of people, and approval of supportive laws and regulations. A manager from healthcare promotion department in MoPH suggested, that "we should have a national health promotion board for which the president should be at the top level of this board and lead all the involved organizations in this board with specific responsibilities" (p. 4). A senior advisor from HEFD suggested, "the donors should allocate more fund to the directorate of coordination for private sector and other directorates who have the stewardship role to regulate the not-for-profit organizations. Unfortunately, by the return of Islamic Emarat, this stewardship role has been weakened and most of the regime consideration is on the financing of the system" (p. 29).

3.5 | Control

The strength point is existence of certification process for medicine and health products for control of NCDs in Afghanistan.

The weak points are the long bureaucratic process, insufficient quality control facilities, and inappropriate regular monitoring of the private sector. A marketing manager in a private medicine company said, "there is a long and hard bureaucracy system in place for quality control of medicine which takes 1 month time to receive the response from, in addition, there are lots of importing companies for medicine and we just have one laboratory for quality control of samples" (p. 13). A senior manager in NHMRA also emphasized that, "the process of registration of importing companies for medicine is very time-consuming, nearly 2 years and it increase the motivation of companies for smuggling" (p. 15).

Most of the interviewees suggested establishing a regulation system on drug storage.

4 | DISCUSSION

This study aimed to analyze the situation of the management system of NCDs management in Afghanistan. We highlighted important strengths, weaknesses, opportunities, threats, and the recommendations presented by Afghan experts.

Afghanistan is among the least developed low-income countries. Continued conflict and war for more than

40 years in this country also caused huge brain drain of experts from different disciplines.[16] In this study, many experts pointed out that the policy-making cycle for NCDs is defective the main reason being the lack of leaders with policy-making knowledge at the governmental level. In fact, the underinvestment healthcare system and migration of health professionals are the main reasons which is mutual and interconnected.[17] Consequently, the healthcare system will not have good strategies appropriate for Afghanistan health system, its epidemiology, and demographic pattern. Lack of experts among the policy-makers led to development of donor-oriented policies and strategies. As pointed out by experts in this study, many donors focus on communicable or mother and child diseases, for which there is a short duration for return on investment. So, there is less indigenous planning at the national level. To stop a defective policy making cycle especially for NCDs and enhance indigenous planning, we strongly recommend appointing technical experts with high managerial and policymaking knowledge. As mentioned by experts, the healthcare sector should not be politically influenced, and the technical expert should be appointed irrespective of the political situation of the country.

Since the High-Level Meeting of the United Nations (UN) General Assembly on the Prevention and Control of NCDs in 2011,[18] some initial actions were taken within Afghanistan healthcare systems. As experts mentioned, a small unit for control and prevention of NCDs was established which is experiencing high turnover among its few personnel and insufficient budget to implement advanced strategies for control and prevention of NCDs at national level. As pointed out, this department is not responsive to the needs of the country in the current context. Our recommendation is also similar as those of the experts; this department should be promoted to become a directorate with allocation of additional budget and staff who are responsive to the current needs of people in terms of these diseases.

Although there is some laws toward controlling the NCDs risk factors, however, low inter-sectoral coordination, long bureaucratic procedures within government units, and insufficient evidence and research in the health sector, especially regarding NCDs, cause low advocacy for policy making and planning for these diseases at top level of government. The MoPH should advocate health in all policies at top level of government, a special committee should be established consisting of the president, vice presidents and sectoral ministers, and this committee should regularly monitor the implementation of health in all policies within Afghanistan. In addition, to create a multisectoral coordination and government-wide response between sectoral ministries, many literatures recommend involving high-level leadership including president, prime ministers, and senior cabinet members personally in the process of prevention and controlling NCDs, as these diseases are obstacles to national economic and social development.[19–24] So, it

seems the potential intervention with maximum outcome is to train the policy makers or their senior advisors on the concept of health in all policies keeping the development of the country in mind.

The main global policy actors in the area of NCDs are the United Nations, the World Bank, The WHO, The World Trade Organization (WTO), and The Food and Agriculture Organization (FAO). To strengthen the policy-making process at national level for NCDs, the main determinants including political, social, environment, and individual "lifestyle," and behaviors, as well as the design and functioning of national healthcare system should be targeted.[25] The mentioned global policy actors should support establishing a coordinating mechanism which is needed to facilitate the intersectoral coordination between finance and taxation, agriculture, education, recreation and sports, transportation, media and communication, urban planning, and health. In fact, the term "health in all policies" creates an intersectional approach to policymaking and is recommended to address social determinants of health.[26] So, the global policy actors should support not only the ministry of public health but other ministries that work directly or indirectly toward many SDGs linked to health care especially within less developing countries like Afghanistan. Periodical webinars at national and international levels by global policy actors are recommended especially for senior policy makers in key ministries in less developed countries.

In conclusion, management of NCDs is a neglected part of the healthcare system in Afghanistan. strengthening evidence-based policy making with technical and indigenous planning, establishing responsive units with adequate financial and human resources within different ministries to address "health in all policies" concept, passing and implementing national laws and regulations to support strategies for prevention and control of NCDs, and establishing decentralized monitoring systems to control the implementation of these strategies are the main recommendations of this study. Local government and international policy actors should invest and support the development of a multisectoral coordination system at national level for Afghanistan. In addition, all international and national policy actors should consider the sustainability of policies and programs developed for NCDs in Afghanistan. With an overlook to instability of economic, political, and social situations and considering the long-term approaches of fighting NCDs, programs' sustainability is mandatory. Developing follow-up committees including the community leaders and religious scholars can ensure the successful implementation of advanced programs.

AUTHOR CONTRIBUTIONS

Narges Neyazi, Ali M. Mosadeghrad, and Maryam Tajvar designed the research. Narges Neyazi, Ali M. Mosadeghrad conducted it. Narges Neyazi extracted

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