



Internationalization of medical education in Iran: A way towards implementation of the plans of development and innovation in medical education

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Abstract

Introduction: Academic institutions are the most important organizations for implementation of internationalization policies and practices for integrating an international, intercultural and global dimension in higher education system. Also, a globally increasing demand for higher education has been seen in the past two decades so that the number of students enrolled in higher education institutions in the worldwide nation-states has increased dramatically. The National Plan of International Development of Medical Education was designed with the aim of identifying available potentials in all the universities of medical sciences, encouraging the development of international standards of medical education, and planning for the utilization of the existing capacity in Islamic republic of Iran.

Methods: Authors have tried to review the several aspects of international activities in higher education in the world and describe national experiences and main policies in globalization of medical education in Iran within implementation of the National Plan for Development and Innovation in Medical Education.

Results: The findings of some global experiences provide the policy makers with clear directions in order to develop internationalization of higher education.

Conclusion: The Program for International Development of Medical Education was designed by the Deputy of Education in the Ministry of Health and the effective implementation of this Program was so important for promotion of Iranian medical education. But there were some challenges in this regard; addressing them through inter-sectoral collaboration is one of the most important strategies for the development of internationalization of education in the field of medical sciences.

Keywords: Medical education, Higher education, Innovation

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Introduction

Today, in response to globalization, the world has felt the need to further mutual understanding of cultures and for this reason mutual understanding and scientific and cultural exchanges in the field of international relation have become more pronounced (1).

Academic institutions are the most important organization for implementation of internationalization policies and practices for integrating an international, intercultural and global dimension in higher education system.

On the other hand, a globally increasing demand for higher education is seen over the past two decades so that the number of students enrolled in higher education institutions in the worldwide nation-states increased from 97 million to 263 million (2000-2015) (2).

On the same basis, increasing birth rates, growing importance of pre-university and university education in various career opportunities in later life can be outlined as the most notable reasons behind this increase. Some transversal policies have been employed by Asian countries in order to meet the growing educational needs among which establishment of the universities, recruitment and deployment of faculty members and encouraging private sector participation in higher education through the establishment of private universities can be highlighted (3).

In addition, long term policies have been taken into account in order to meet the growing demand for expert faculty members for these newly established institutions and recently defined disciplines. Moreover, definition and offering of postgraduate courses (MSc and PhD) have been taken into consideration to train future faculty members (2).

Students' admission at different levels in other countries is considered as one of the major issues affecting higher education system and the cultural, social, economic and political sectors of various countries, which have grown substantially over the past 20 years (2).

The number of overseas students who intend to study in other countries has increased from 1.3 million in 1990 to 4.3 million students in 2011. The above figures represent the global capacity of higher education to become a new competitive marketing opportunity (2).

Attracting overseas students: A macroeconomic policy in the field of science diplomacy

In general, it can be said that strengthening the policy of international students' acceptance has recently become one of the main priorities of

universities and institutions of higher education. In addition, the number of international students attending a particular university is an important factor in the ranking of the world universities (4).

In a survey conducted by the "International Association of Universities" among different universities and higher education institutions, student mobility and overseas students' admission have been prioritized as a top priority in internationalization of higher education (5).

On the other hand, those universities enjoying a favorable level of education and research are able to resolve their challenges. One way through which the universities in developed and developing countries can improve the quality of their functioning is promoting international communication. The internationalization of higher education is believed to be a reform mechanism (6).

In economic terms, it is argued that the internationalization of higher education can save the national economy through several streamlines. Firstly, it increases the speed of scientific development of worldwide nation-states, secondly it brings a wealth of experience and economic ties, and thirdly it promotes industry, science and gross national income as one of the economic resources (7).

Culturally, the most important function of internationalization of higher education is the expansion and emission of values, principles and meanings of the national culture in the international arena. The use of academic exchanges for the development of national culture is a priority activity of special importance and benefit. This notion is often denoted in the diplomatic memorandum of understanding between the governments (8).

Sharma and Mulka (1993) revealed that cross-cultural experiences through international students result in deep understanding of indigenous students about their culture (9). Keith (1992) suggested that faculty members and administrators should develop programs to enhance interaction and contribution of international students with local students to maximize mutual intellectual interests (10).

Internationalization of higher education and expansion of academic exchanges are followed by academic and social growth mainly because it entails an increase in the domain of social experience and cultural knowledge of students and academics from different nations and cultures. This leads to a sort of "jump" in the process of development in terms of learning, creativity and innovation. Kallen, through an experimental study on the impact of studying

abroad, claimed that confronting with different cultures provide the opportunity for individuals to be faced with new learning and educational experiences that will allow for their individual development. Such a unique chance paves the way for breaking the stereotypes, modifying absurd prejudices, and rises a larger vision of the society for the individual overseas student (7).

The educational impact of the international students' admission in the educational systems of countries has been highly taken into consideration more than cultural and social impacts. As a matter of fact, the international students bring a unique and diverse perspective to their learning community. Zimmermann scored the admission of overseas students as being very useful in terms of enriching the experiences of local students and their preparation for future careers in the larger world community (10).

Rogers highlighted the importance of overseas students' presence in universities spotlighting their contribution to enriching the curriculum and extra-curricular activities. He also pinpointed that the internationalization of the curricula is put into effect through the motivation of faculty members and administrators as a result of the admission of overseas students (11).

Politically, it is said that in today's world "education is the fourth dimension of foreign policy". Educational cooperation is a positive aspect of the relations between countries considered as an investment for the future diplomatic relations. Since most political figures are selected from elite academics, development of international scholarship and admission of overseas students is appraised as an all-encompassing introduction of the local culture and society to future world political leaders and senior managers (7).

University relations could also strengthen the political and economic relations among nations. Especially as the diplomatic and political relations are not very strong promptly, university relations may sustain and maintain the relationships and modify hostilities among different nations. In this regard, "Public Diplomacy Advisory Committee" of the US government in its report on "Public policy for the twenty-first century" notes: "academic and educational exchanges have multiple direct linkages on diplomacy. Hence, they are valuable tools for US foreign policy" (7). Part of the political logic of internationalization of higher education is related to the north and south dialogues. In recent decades, "educational assistance" and "technical assistance" have been attempted by industrialized countries as a part of international assistance to Africa, Asia and

Latin America.

One important dimension of internationalization is the promotion of national identity. Knight and Witt through their study on the Asia-Pacific region countries demonstrated that academic exchanges play a role as a tool for the introduction of national languages and cultures in the international arena, and these countries have reduced their mere dependence on the US and a few other Western countries through expanding their higher education into the world arena (12). The results also show that political leaders who have had the experience of studying in a foreign country have strong ethnic and cultural ties and periods of studying abroad as found to strengthen their sense of nationhood and patriotism.

In order to understand the importance of this issue, many countries, especially developed countries, have founded their macro-policies upon strengthening the industry of attracting international students. For example, countries such as America, Britain and Australia have cleverly managed over the years to attract top academic talents from around the world, which marks their accurate foresights and monitoring the opportunities that paves the way for the subsequent policy making.

Effective strategies for internationalization of higher education

The findings of some global experiences provide the policy makers with clear directions in order to develop internationalization of higher education. Among the themes that have been stressed by researchers in various fields at international conferences on higher education are:

- Revising university curricula and designing courses concerned with the international community and international issues;
- Utilizing human resources effectively to meet the newly emerged needs of information and communication technologies with respect to the social, economic and cultural considerations;
- Promoting cultural and scientific cooperation, especially through student unions and faculty members;
- Utilizing the methods of comparative studies to provide curriculum content;
- Designing part of the new academic courses using an integrated approach with an emphasis on cross-cultural skills;
- Developing programs that provide students with the ability and skills in the field of international activities, especially in business, communication, management;

- Providing opportunities for a double degree program which allows the students to get multiple degrees from different national, regional, and international universities;
- Improving the administrative, financial, managerial and executive structures for national and international teaching and research activities of higher education institutions accepted by standards beyond the national scope;
- Designing pre- and in-service training programs tailored to the needs of the era in collaboration with regional and international universities;
- Cooperating effectively in the design, implementation and evaluation of international research projects;
- Practicing international scientific cooperation through academic cooperation at national and regional levels;
- Taking the necessary measures to deal with the obstacles and barriers of internationalization of higher education such as financial issues, education and research quality, policies at the national, social, regional levels as well as fluctuating markets related to higher education;
- Expanding regional and international cooperation in the field of evaluating various educational and training programs as an effective approach to improve the quality of higher education;
- Building up the necessary preparations at various levels to promote the internationalization of higher education achieving a shift from the university management levels to the teaching - learning processes in the classroom settings;
- Admitting a greater number of overseas students in different fields of study and enhancing the intra-country exchange of students of higher education (1).

International development of Medical Education in the Islamic Republic of Iran

The medical education system in Iran is based on the integration of education in the delivery of services. This means that medical universities in Iran, in addition to having a human resource training mission, are also responsible for providing health services to the community (13).

The integrated system of education and provision of health services in Iran has impressed some other countries and has been identified as highly effective in improving the quality of health services and health indicators provided by international institutions (14). This feature can be one of the most important attractive forces for foreign students to study in Iran by increasing the students' access to service delivery fields and

helping students improve their ability.

Over the past few decades, Islamic Republic of Iran has taken different policies into account along with the rest of the world for the development of higher education and also attraction of international students (15).

The 20-Year National Vision of the Islamic Republic of Iran is as follows: "Iran is a developed country in the first place in the region in the realms of economy, knowledge, technology; with an Islamic and revolutionary identity, an inspiration for the world; and with productive and influential interaction in international relations (15).

In this regard, different policies have been adopted over the past few decades in the fields of higher education in the country and a great capacity has been created in the country for overseas students. According to the country's policies, Ministry of Health and Medical Education has the obligation of Medical Education, and Ministry of Science, Research and Technology has executive responsibility for tertiary education in other fields of study (16). Considering the fact that graduates of medical field play a vital role providing health and saving the lives of the people, medical education is of crucial importance in Iran. Hence, special policies are needed in this area.

On the other hand, significant progress has been made in recent decades in medical sciences in Iran which has created suitable capacities in higher education of health sciences. There are currently about 190 thousand students studying at 65 state-run universities and colleges of medical sciences and about 60 thousand students in 90 private institutions in the field of medical science. Also, more than 17 thousand faculty members at public centers and about 2 thousand faculty members at private centers are offering training in the field of health sciences (2).

Such a capacity has significant implications for admission of overseas students in the field of medical sciences in Iran. Furthermore, specific conditions of medical fields and the increasing demand for health services are big players spurring the blooming increase of request for studying health related fields at international levels so that in the 2014-2015 school year, about 1,200 international students from 41 different nationalities were reported to study in Iran, among whom about 60% were enrolled in postgraduate degree programs. It is worth mentioning that 34 Universities of Medical Sciences in Iran are training international students (2).

Despite all these advances, <As per the Iran 1404 Outlook Document, it was necessary to outline a road map for moving

the country towards the internationalization of medical education. In this regard, the Plan of International Development of Medical Education was drafted in 2015. The Plan of International Development of Medical Education was designed with the aim of identifying available potentials in all the universities of medical sciences, encouraging the development of international standards of medical education, and planning for the utilization of the existing capacity. This plan was rendered as a common mission to 10 spatial regions for implementation, and several measures in collaboration with universities and colleges of medical sciences located in these areas were taken (17). 10 regions of spatial planning shows the geographical breakdown of medical universities in Iran which is approved in form of a resolution by the Council of the Cultural Revolution as a macro-policy maker of Science and Technology in Iran (18).

Ministry of Health and Medical Education has designed and launched a national system named *Education Iran* with the aim of identifying the existing capacities of the universities of medical sciences education in Iran to admit international students. In this system, all eligible medical universities have offered their courses of study to help Iranian higher education institutes attract overseas students. After one year, over hundreds of educational programs have been presented in this system from different Iranian universities (19).

International planning map: The experience of mission orientation in international interaction programs

Conforming to the existing capacities in medical universities and giving them mission-oriented responsibilities to engage in international academic activities can result in the development of international activities in the country. For this purpose, International Planning Map of medical universities has been developed with the objective of engaging international activities of universities to achieve the macro-objectives of higher education (20). According to the Map, each planning region and, thus, medical universities and colleges in that area, will be connected to one of the regions in the world to pursue international activities and expand the scientific interactions.

The move towards international accreditation of universities

According to the plan of Ministry of Health and Medical Education for expanding international medical education in medical universities, it is necessary to provide a mechanism to align the universities with the international standards. In this

regard, the international accreditation of medical universities is followed as one of the initiatives of medical education. In this plan, 17 medical universities were eligible to participate in this program targeted for international accreditation in the first phase (2). With proper implementation of the first phase, other medical universities will be subsequently involved in this process (15).

Expansion of international interactions

So far, several measures and consultations with authorities of medical education in different countries have taken place in order to develop academic exchanges and joint training programs with well-know prestigious universities. In the meantime, several memoranda have been mutually agreed have been mutually agreed for joint cooperation in the field of medical education. Also, more than 200 curricula in different fields have been translated into English which will be launched at the website of Ministry of Health in the near future (20). Undoubtedly, implementation and follow-up of strategies for international development of medical education provides the opportunities for the medical universities and colleges to operate in the international arena according to their capacity, and promote the standards of medical education in the country.

Conclusion

The upstream document of the Islamic Republic of Iran has outlined a bright vision for Iran to become a scientific power, and this principle has been taken into account as the basis for policymaking in different areas. The field of medical education, as the responsible body for training human resources in health care system has developed Medical Education Roadmap in the form of the Plans of Development and Innovation to achieve this goal. International Development of Medical Education is one of the basic cornerstones of this initiative.

The Program for International Development of Medical Education designed by Deputy of Education of Ministry of Health is being implemented as a collaborative effort of Ministry of health, 10 spatial regions, universities and colleges of medical sciences, and other relevant institutions located in these regions. Despite the short time that has passed since the implementation of the program, suitable substrates for the development of international cooperation in the field of medical education have been prepared as detailed earlier.

Undoubtedly, the implementation of this program as similar to other major policies requires intersectoral collaboration, and it is imperative

that relevant institutions at different levels of the Ministry of Health assist the Ministry as the responsible body for medical education. The effective implementation of the International Development of Medical Education Program can make all universities and colleges ready to be engaged in international activities.

However, Iran has encountered barriers in the process of the internationalization of medical education. Among these limitations are cultural considerations, the Persian language, bank and economic sanctions imposed on Iran, and some constitutional restrictions. Addressing these challenges through interactions and intersectoral collaboration is one of the most important strategies for the development of internationalization of education in the field of medical science.

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