Designing the competency-based training model of Iranian medical tourism

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Abstract:
BACKGROUND: Despite the great comparative advantage of Iran in terms of infrastructure, technology, and human resources as well as the significance of medical tourism in the tourist industry, in practice, the quality of human resources has received less attention. Consequently, this study was conducted to design a model of competency-based training for Iranian medical tourism.

MATERIALS AND METHODS: This study was an exploratory mix, and the Delphi method and semi-structured interviews were used for the qualitative part of this study. In the second part, the analytical method was utilized for the quantitative part of this study.

RESULTS: The results indicated the main components of medical tourism to be public interactions and private interactions and seven subcomponents. Medical Tourism’s Competency includes three main components and seven subcomponents.

CONCLUSION: Although some training separated and scattered is present in Iran’s medical tourism. However, Iran requires a comprehensive training model of which its design was explained in this paper.

Keywords: Competency-based training, educational model, human resource, Iran, medical tourism

Introduction

Nowadays, players’ and politicians’ health have seriously considered medical tourism and attracted foreign patients. Many private part investors wish to expand their capital in this way, of course, the essential situations should be provided. Finding the solutions to enhance the medical tourism industry in Iran can have many benefits on the development of Iran’s economic, social, and cultural conditions. One of the most important infrastructures to be considered is human resources training for medical tourism.

In recent years, medical tourism has exponentially grown as a branch of health tourism, which is known as a new form of market in the tourism industry.¹ In medical tourism, patients leave their country to receive the effective medical services (with high quality and low price). However, medical tourism is not a new issue, and people are traveling to foreign countries for 1000 years to treat the disease. However, today, this travel has a different pattern compared to the last century. Furthermore, at the present time, patients travel from less developed countries to developing countries for using medical services.² Medical tourism had rapid growth by the improved medical standards in developing countries, globalization, and free trade in health care services.³ and internet development, which created the medical tourism companies as intermediaries between international patients and the hospitals, by easy access to information,
as costs by the patient, and the advanced technologies created by new care services.\textsuperscript{[4]}

If employees' knowledge and skills fitted more with scientific advances and new technological, the degree of confidence in success will be higher. Personal growth, motivation, expertise, and avoidance of uniformity and stagnation sometimes are considered as the main factors in the acquisition of knowledge.

If organizations want to develop the human resources, they must create the correct conditions for the knowledge acquisition, new skills, and healthy patterns of behavior improvement through education. In this regard, education is a very important factor in the development of human resources and is also known as a chance for the investment and the mechanism for the distribution of resources in strategic planning, and a tool to link the interests of employees and the organization.\textsuperscript{[5,6]}

Competency-based training ensures the integration of individual capabilities and core organizational competencies. Accordingly, such a framework creates an effective link between the human resources and organizational strategies.\textsuperscript{[7]}

Notably, it is impossible to provide quality services and develop medical and tourism processes without the participation of all human resources. The first subject that organizations need to get better is that the employees must be professional and moral. Moreover, service providers play an important role in many aspects of medical tourism. In addition, they can suggest international treatment options; optimize tourist travel; or coordinate for return, guidance, and consultation. Of course, first, the providers' abilities must be evaluated, and then, they must receive the necessary training.\textsuperscript{[8]}

Iran, as one of the developing countries, has many relative advantages in terms of the infrastructure, technology, human resources, and cost-effectiveness in the field of medicine. Today, the main factors are known to be in the travel of medical tourists to Iran that are related to the quality of medical services and the low costs of medicine and treatment compared to other countries in the region, as well as the access to medical services and new and advanced equipment, the presence of the specialists and skilled personnel in healthcare in Iran, and cultural and linguistic similarities in most of the countries of region.\textsuperscript{[9,10]}

Of course, Iran, according to its abilities, still had not reached its true position in achieving standards for attracting medical tourism. Hence, this study aims to explore the components of a competency-based training model for Iranian medical tourism and to extract a conceptual model with an approach affected by the climatic, cultural, social, and economic conditions of the Iranian society by applying the latest scientific advances in the world. Accordingly, this can demonstrate how medical tourism education can be planned based on the individual competencies.

In this study, considering the approach of design competency-based educational model for medical tourism, it seems necessary to notice the principal components and subcomponents of medical tourism and competence. In order to assign the competence components in medical tourism, studies were navigated in the literature and studies related to the medical tourism and document research using the International Database [Table 1].

In addition, the phases were as follows: Determining the purpose, surveying the research literature, selecting the appropriate articles, achieving data from the articles, analyzing the findings of qualitative studies, and presenting the findings. In addition, the Keywords used were the following: medical tourism, health tourism, competence, and customer attraction. The 825 articles were arrived in the study by searching on the databases Elsevier, Scopus, PubMed, ScienceDirect, and Google Scholar from 2007 to 2019.

Then, the 250 articles were left because of the title. Then, the 65 articles were determined by survey the abstract and further relevance. Finally, 46 articles were identified by review rating the experts. In addition, the categories and concepts of competencies were identified in the articles and then coded [Table 2]. According to data analysis, the competencies of medical tourism were divided into three main categories as follows: Organizational, interpersonal, and individual.

The results of the survey of evidence in the scope of medical tourism, as the analysis of the results of interviews with experts, along with the analysis of documents, created an initial list of competencies expected by the managers in the medical tourism field. Then, several filtrations were done at different stages, and the competencies of the medical tourism sector were collected as follows.

Materials and Methods

Study design and setting
This study accomplished the purpose applied and the mixed exploratory method in two parts, qualitative and quantitative, to design a model of competency-based training in Iranian medical tourism at Allameh Tabataba’i University in 2019.
Table 1: Summary of medical tourism history based on the main components

| Row | The main component                  | Sub-component                                                                 | Expert                                                                 |
|-----|------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 1   | Medical tourism facilitators       | Marketing: environmental factors (economic, international business management, cultural, political, technology) | Carrera P, Lunt N (2010), Gyu Ko (2011), Connell (2013), Savasan et al. (2016), Cohen et al. (2017), Aydin and Karamehmet (2017), Wang (2017), Tan (2019) |
| 2   | Hospitals and medical centers      | Licenses and standards of medical centers                                     | Nasiripour and Salmani (2011), Gyu Ko (2011), Lee et al. (2012), Lunt and Jin (2013), Morovati et al. (2013), Khodayani et al. (2013), Mahmoudifar et al. (2017), Ganguli and Ebrahim (2017), Savasan et al. (2016), Khan et al. (2017), Verula and Jorbenadze (2018) |
| 3   | Ministry of health                 | Medical tourism rules and regulations                                         | Carrera and Lunt (2010), Lunt and Jin (2013), Hadizadeh Moghadam et al. (2013), Savasan et al. (2016), Maboodi and Hakimi (2016), Aydin and Karamehmet (2017) |
| 4   | Insurance companies                | International insurance rules and regulations                                 | Lee et al. (2012), Nguyen (2016), Mogaka et al. (2017), Gan and Frederick (2011) |
| 5   | Accommodation and cooking centers  | Posttreatment care                                                            | Crooks et al. (2011), Gyu Ko (2011), Lunt and Jin (2013), Savasan et al. (2016), Aydin and Karamehmet (2017), Abadi et al. (2018) |
| 6   | Shipping fleet                     | Technical skills                                                              | Gyu Ko T. (2011), Savasan et al. (2016), Ganguli and Ebrahim (2017), Aydin and Karamehmet (2017) |

Table 2: Some research evidence related to the main competencies and sub-competencies

| Concepts                                                                 | The main component | Articles                                                                 |
|-------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------|
| Ethical, legal and medical issues, advertising, medical tourism recognition, marketing, competitive market, innovation, and creativity skills, recognition of international service development factors, entrepreneurship to seek opportunities investments, information mechanisms, resource management, customer orientation, problem-solving, understanding medical tourism concepts, information management, decision making, monitoring, social competence, accreditation, strategic thinking, analysis and solving business problems, business skills, change management, leadership, technical competence | Organizational competence | Ferrer and Medhekar (2012), Savasan et al. (2016), Sharma (2017), Wang (2017), Shum et al. (2018), Podmetina et al. (2018), Ayoub (2018) |
| Linguistic and cultural awareness, adaptability, customer relationship, flexibility, adaptability, support for change and innovation, negotiation, counseling                                                                 | Interpersonal competence | Gan and Frederick (2011), Rahman et al. (2017), Verula and Jorbenadze (2018), Tham (2018) |
| Psychological skills, self-confidence, and self-efficacy, critical thinking, personal competence, commitment, moral action, diversity of values, tolerance of failure, entrepreneurship, trust, flexibility, risk management, cultural language skills, flexibility                                                                 | Individual competence | Pijl-Zieber et al. (2014), Shariff et al. (2015), Wong and Lee (2017), Shum et al. (2018) |

Study participants and sampling

In qualitative section achieved the components of competency medical tourism of two methods library study and the Delphi method. In the quantitative stage was done the descriptive statistics method. Library reviews identified the factors affecting medical competence and tourism and its dimensions and bases on the basic concepts by reviewing the literature and background related to competency and medical tourism. The components of medical tourism competency were arrayed classification at different levels after consultation with experts in 195 codes.

Data collection tool and technique

In the first step, the research was identified 18 people from experts in medical tourism by Delphi technique with purposeful sampling and snowball, and they were received the questionnaire researcher-made. After
collecting return questionnaires (16 questionnaires) were classified answers, were combined and grouped similar comments, were omitted repeated subjected, and were shortened responses as much as possible. In the second step, a structured questionnaire was applied and was asked of the experts to rate each title using the Likert scale or quantify it. In the 3rd step, the questionnaire was reviewed, analyzed, and modified to obtain the best and most appropriate information. Then, the questionnaire was distributed between the members’ panel. The components of medical tourism competence identified were categorized and assort after achieving theoretical adequacy (saturation).

Then competency-based training model of medical tourism was designed and proposed in two main components and seven subcomponents of medical tourism and three main components and 51 subcomponents of competency. The validity’s qualitative stage was distinctive by methods peer debriefing, data source triangulation, member checking, and the reliability’s qualitative stage by the methods re-test reliability (more than 92%) and inter-coder reliability (more than 90%) method.

In the quantitative part, to confirm the validity model was used convergent validity methods included average variance extracted (AVE index), discriminant validity (factor load’s questions in each structure or component), and to confirm the reliability of the model, the composite reliability (CR), and the validity content’s questioner was determined by experts, and the reliability’s quantitative section was confirmed by a small sample of 30 people from the statistical population as a pilot. Friedman test was applied to prioritize competencies and to determine the validity of the questionnaire the structural equation model method. The statistical population that the Ministry of Cultural Heritage, Tourism and Handicrafts, and Ministry of Health introduced included managers of medical tourism companies and agencies and officials of the International Patient Department of hospitals and medical centers. Final questionnaire (189 items) sent to members (163) of the target community. Finally, after follow-up in 3 stages, 86 questionnaires were completed and were returned for analysis. Descriptive statistics had applied to determine the mean, standard deviation, frequency, percentage, tables, and graphs. The final model and the validity structure were certified by the method of confirmatory factor analysis. SPSS software version 21 (SPSS Inc., Chicago, Il., USA) to prepare descriptive tables and SmartPLS software version 2.0.M3 (2005) applied for confirmatory factor analysis in the conceptual model of the research and modeling of its structural equations.

**Ethical consideration**
Data’s people and different sectors were preserved, according to the importance of confidentiality in the research.

**Findings research**

*Determining the components of medical tourism*

The main components of Iran’s medical tourism were identified by categorizing the concepts from the summary of the interview with the experts and literature review. By analyzing the interviews, coding and classification of the concepts were identified as two main components, including the followings:
1. Public sector interactions with 4 subcomponents of the Ministry of Health, Cultural Heritage and Tourism Organization, and Ministry of Foreign Affairs and Municipality
2. Private sector interactions with 3 subcomponents of the Medical Council, Insurance organizations, and facilitators of medical tourism and agencies were identified.

In addition, the Ministry of Health has 3 subcomponents of medical universities, hospitals, and medical centers, and physicians; the Cultural Heritage Organization has 3 subcomponents of hotels and accommodation centers, Restaurants and cooking centers, and shopping malls; and the municipality has two subcomponents of Deputy of Culture and Social and transport fleet.

The significance of the coefficients of the path of medical tourism transactions was examined using convergent validity with the help of AVE > 0.5 index and CR > 0.7 (compound reliability coefficient). The path coefficients are between the components also significant and confirmed. Therefore, its final structure is based on Figure 1.

*Identifying the components of medical tourism competence*

The components of Iran’s medical tourism competency was identified using a semi-constructed interview with experts

Three main competency components included the followings:
1. Organizational competencies
2. Interpersonal competencies
3. Individual competencies.

Concepts had been identified and then classified, and also according to the codes, the most important of these concepts are shown in Tables 3 and 4. As shown in Table 3,
the results obtained from the Friedman test in the public sector, the priority of organizational and interpersonal competencies is more than the individual’s competency.

As shown in Table 4, the results obtained from the Friedman test in the public sector, the priority of organizational and interpersonal competencies is more than the individual’s competency.

It is notable that, in both sectors, the highest-ranking competency was marketing, the ability to apply medical tourism standards, knowledge of medical tourism, the ability to manage resources, knowledge of the rules and regulations of medical tourism, and public relations.

**Review and evaluate the model based on competency**
To evaluate the model, first, the scores of 7 subcomponents of medical tourism competence in two sectors medical tourism (public and private) were evaluated, and then, the scores of the main components and their subcomponents were examined.

**Medical tourism competence components in public sector’s medical tourism**
The significant difference between the median acceptable score and the mean obtained from the sample, so it can be concluded that, all the sub-components of education-based competence of medical tourism in the heritage organization, the Ministry of Foreign Affairs, the Municipality, and the Ministry of Health are better than the expected mean.

**Medical tourism competence components in private sector’s medical tourism**
The a significant difference between the median acceptable score and the mean obtained from the sample, so it can be concluded that all the subcomponents of education-based competence of medical tourism in the private sector interactions are better than the expected mean.

**Determining the tasks and training each job**
Competency-based tasks and training for each job were determined after identifying the components (the primary and secondary) of medical tourism and competency and its sub-components.

Then, in the next step, the course plan form can be defined for each training course as follows: Learners, hours, general-purpose, behavioral purpose, learning topics, teaching–learning methods, method learning evaluation, method of evaluating the effectiveness of behavior, equipment, and proposed resources. As a result, the overall goal of each training course was determined based on the competency or competencies expected to be appropriate for each job. Expected behavioral goals were also defined according to the behavioral indicators associated with each job competency. Teaching–learning methods were also proposed according to the educational strategies of medical tourism and their effectiveness in achieving the expected competencies. The evaluation of learning has been proposed according to measuring the effectiveness of educational programs of medical universities.

The final Iranian medical tourism education model was designed in terms of the competency [Figure 2].

**Discussion**
Research findings showed that determining the components of medical tourism competencies could be mentioned to increase the opportunities for job creation, increase foreign currency foreign exchange income, and help in the ability to communicate between medical tourism sectors, improving living standards, developing infrastructure, and a quality education system. The association and participation of the components can lead to the development of medical tourism, such as the interaction between private sections and medical organizations. In the future of tourism, it is necessary to pay attention to the infrastructures such as creating the cultural competencies. Competence in tourism is a topic that many models include the followings: 1-Hotelinging leadership model including business leadership: Effective planning and organization, analysis and solution of business problems, business information, excellence, diversity Values, the Effective Communication, Conflict Management, Leading Effective Teams, Coaching, Supporting Change and Innovation, Service Quality Entrepreneurship, Leadership, Teamwork, Problem Solving, Virtual Cooperation, Internal and External Cooperation, Trust,
### Table 3: Results of the qualification obtained from the questionnaire in the public sector interactions

| Mean | Title                                                                 | Rank |
|------|-----------------------------------------------------------------------|------|
|      | **Restaurants and cooking centers**                                   |      |
|      | Ability to apply medical tourism standards                           | 1    |
| 21.44| Knowledge of health preliminary principles                            | 2    |
| 5.54 | Recognition of medical tourism                                       | 3    |
| 5.53 | The quality of service                                               | 4    |
| 4.72 | Knowledge of the rules and regulations of medical tourism             | 5    |
| 4.68 | Public relations                                                     | 6    |
| 4.65 | Respect for people                                                   | 7    |
| 4.60 | Organizational commitment                                            | 8    |
| 4.45 | Good morals                                                          | 9    |
|      | **Shopping center**                                                  |      |
| 14.78| Knowledge of health preliminary principles                            | 1    |
| 11.40| Public relations                                                     | 2    |
| 10.05| Marketing                                                            | 3    |
| 5.50 | Recognition of medical tourism                                       | 4    |
| 5.29 | Customer orientation                                                 | 5    |
| 4.95 | Branding                                                             | 6    |
|      | **Municipal social and cultural deputy**                             |      |
| 10.35| Recognition of medical tourism                                       | 1    |
| 5.15 | Ability to apply medical tourism standards                           | 2    |
| 5.15 | Knowledge of the rules and regulations of medical tourism             | 3    |
| 5.11 | Public relations                                                     | 4    |
| 4.98 | Decision making and problem solving                                  | 5    |
|      | **Physicians**                                                       |      |
| 30.44| Ability to apply medical tourism standards                           | 1    |
| 12.31| Ability to manage resources                                           | 2    |
| 12.26| Public relations                                                     | 3    |
| 12.10| Knowledge of the rules and regulations of medical tourism             | 4    |
| 6.38 | Marketing                                                            | 5    |
| 6.22 | Recognition of medical tourism                                       | 6    |
| 6.19 | The quality of service                                               | 7    |
| 6.15 | Team work                                                            | 8    |
| 6.15 | Ethic                                                                | 9    |
| 6.07 | Proper perspective                                                   | 10   |
| 6.07 | Information and technology management                                 | 11   |
| 5.99 | Improve processes                                                    | 12   |
|      | **Ministry of foreign affairs**                                       |      |
| 18.08| Knowledge of the rules and regulations of medical tourism             | 1    |
| 12.02| Recognition of medical tourism                                       | 2    |
| 6.11 | Public relations                                                     | 3    |
| 6.02 | Improving process                                                    | 4    |
| 6.00 | Decision making and problem solving                                  | 5    |
| 5.84 | Proper perspective                                                   | 6    |
|      | **Hotel and resort**                                                 |      |
| 5.92 | Ability to apply medical tourism standards                           | 1    |
| 5.90 | Knowledge of health preliminary principles                            | 2    |
| 5.85 | Knowledge of the rules and regulations of medical tourism             | 3    |
| 5.55 | Recognition of medical tourism                                       | 4    |
| 5.48 | Marketing                                                            | 5    |
| 5.31 | Ability to manage resources                                           | 6    |
| 5.27 | Public relations                                                     | 7    |
| 5.24 | Analytical thinking                                                  | 8    |
| 5.21 | Criticism                                                           | 9    |
| 5.20 | Flexibility                                                          | 10   |

Contd...
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Communication Skills, Networking, Business Mindset, Project Management, Adaptability and Flexibility Ray, Management of Inter-Organizational Cooperation Processes, Ability of Working in an Interdisciplinary Environment, Ability of Working in Mutual Internal Teams, Strategic Thinking, Creativity, New Media Literacy, Cultural Awareness, Ability of Working with Different Professional Societies, Ability to Share Introducing knowledge and ideas within an organization, the ability to share external knowledge and ideas, risk management, and failure tolerance are discussed. Considering the importance of competence, medical tourism has noticed it. Furthermore, nursing is one of the most important jobs in medical tourism. Therefore, the linguistic and cultural competencies of nurses have been proposed as a necessity in the work. Similar to any other industry, the medical tourism industry has several strengths such as the developed tourism infrastructure; the abundance of health care professionals and geographical location; and weaknesses such as the lack of a medical tourism proper program, poor marketing, and poor health care. In addition, the lack of access to

Table 3: Contd...

| Mean   | Title                                                      | Rank |
|--------|------------------------------------------------------------|------|
| 5.15   | Risk ability                                              | 11   |
| 4.83   | Work processes                                            | 12   |
| 4.81   | Self confidence                                           | 13   |
| 4.81   | Decision making and problem solving                       | 14   |

**Shipping fleet**

| Mean   | Title                                                      | Rank |
|--------|------------------------------------------------------------|------|
| 22.47  | Knowledge of the rules and regulations of medical tourism  | 1    |
| 17.15  | Public relations                                           | 2    |
| 5.88   | Ability to apply medical tourism standards                 | 3    |
| 5.77   | Knowledge of health preliminary principles                 | 4    |
| 5.74   | Individual competence                                     | 5    |
| 5.64   | Culture                                                    | 6    |
| 5.55   | Ethics principles                                          | 7    |
| 5.42   | Respect for people                                         | 8    |

**Hospital and medical centers**

| Mean   | Title                                                      | Rank |
|--------|------------------------------------------------------------|------|
| 36.01  | Ability to apply medical tourism standards                 | 1    |
| 24.17  | Knowledge of the rules and regulations of medical tourism  | 2    |
| 24.15  | Public relations                                           | 3    |
| 12.08  | Marketing                                                  | 4    |
| 11.55  | Ability to manage resources                                | 5    |
| 6.38   | Recognition of medical tourism                             | 6    |
| 6.37   | Proper perspective                                         | 7    |
| 6.30   | Branding                                                   | 8    |
| 6.30   | Decision making and problem solving                        | 9    |
| 6.15   | Improve processes                                          | 10   |
| 5.81   | Information and technology management                      | 11   |
| 5.36   | Team work                                                  | 12   |

**University of medical sciences**

| Mean   | Title                                                      | Rank |
|--------|------------------------------------------------------------|------|
| 45.79  | Marketing                                                  | 1    |
| 34.67  | Ability to manage resources                                | 2    |
| 29.34  | Recognition of medical tourism                             | 3    |
| 22.45  | Ability to apply medical tourism standards                 | 4    |
| 17.22  | Knowledge of the rules and regulations of medical tourism  | 5    |
| 11.59  | public relations                                           | 6    |
| 5.51   | Recognition of culture                                     | 7    |
training programs for increasing the capacity of service providers, must be prepared in various ways, including holding training courses. Subjects in the healthcare business and medical tourism business include some issues such as marketing, business recognition, medical tourism services, medical tourism processes, branding, communications, customer recognition, social media, and target market recognition. Target market segmentation is a cost-effective strategy. The expectations, satisfaction, and behavior of medical tourists must also be considered. Medical tourism service providers must pay attention to the customer’s understanding and their expectations while acquiring the skills to use new technologies. Moreover, the main drivers of medical tourism education are known to be the Internet, target market language, and religious and behavioral issues. All the medical tourism activists must work in various ways, such as using the skilled and trained staff, advertising to attract medical tourists, and exchanging information and feedback to develop marketing strategies. Of course, education types because of the variety of jobs are different, such as nursing education, which is about senior nurses training on personal growth and young nurses’ vocational development training. Therefore, the neglect of medical tourism activists in education has been identified as a barrier against the growth of medical tourism. Factors affecting the attraction of medical tourists are the development of educational programs on marketing, medical tourism management, and understanding of medical tourists. In general, the subjects who must be considered in medical tourism educational programs are certification services; knowledge of medical tourism, the international rules, and regulations of medical tourism; explaining the role and responsibility of universities and educational institutions, and increasing public awareness on medical tourism.

Limitation and recommendation

Research limitations
- The length of the questionnaire and the time-consuming process of completing it
- Travel to different provinces and schedule appointments to interview provincial experts
- Many people who have worked in medical tourism were not familiar with the key concepts of medical tourism.

Research recommendation
- Validation of Iran’s competency-based medical tourism model
- Study of the components of medical tourism on other aspects such as job creation, revenue generation, cultural exchanges, and experiences of medical tourists
- Design the business model for medical tourism in Iran
- Design the cultural model for medical tourism in Iran
- Design the social model for medical tourism in Iran.

Conclusion

Competency-based training emphasizes the development of skills in all basic aspects and new teaching methods. In addition, in competency-based training, the goals of the curriculum are flexibility, more evaluation, supervised by the instructor, and greater involvement of the instructor and trainee in discovering abilities—not just knowledge. Competence is like an umbrella that affects employee performance directly or indirectly. However, most of the educational programs in the organizations are just theory without

Table 4: Results of the qualification obtained from the questionnaire in private sector interactions

| Mean   | Title                                                      | Rank |
|--------|------------------------------------------------------------|------|
| 69.58  | Ability to manage resources                                | 1    |
| 39.85  | Marketing                                                 | 2    |
| 34.22  | Ability to apply medical tourism standards                 | 3    |
| 23.59  | Knowledge of the rules and regulations of medical tourism  | 4    |
| 11.41  | Public relations                                          | 5    |
| 6.10   | Information and technology management                      | 6    |
| 5.67   | Improving processes                                       | 7    |
| 5.65   | Educational management                                    | 8    |
| 5.65   | Financial management                                      | 9    |
| 5.57   | Team work                                                 | 10   |
| 5.52   | Decision making and problem solving                        | 11   |

| Insurance companies                                                                 |
|--------------------------------------------------------------------------------------|
| 22.52 Knowledge of the rules and regulations of medical tourism                     | 1    |
| 11.19 Marketing                                                                     | 2    |
| 11.09 Public relations                                                               | 3    |
| 5.74 Ability to manage resources                                                    | 4    |
| 5.62 Principles of negotiation and good manners                                      | 5    |

| Medical tourism companies and agencies                                              |
|--------------------------------------------------------------------------------------|
| 52.56 Ability to manage resources                                                   | 1    |
| 41.48 Marketing                                                                     | 2    |
| 40.49 Knowledge of the rules and regulations of medical tourism                     | 3    |
| 35.80 Public relations                                                               | 4    |
| 28.91 Ability to apply medical tourism standards                                    | 5    |
| 6.16 Recognition of medical tourism                                                 | 6    |
| 6.01 Organize and coordinate                                                        | 7    |
| 6.01 Decision making and problem solving                                            | 8    |
| 6.00 Branding                                                                       | 9    |
| 5.93 Improving processes                                                            | 10   |
| 5.80 Ethics                                                                         | 11   |
| 5.78 The quality of service                                                         | 12   |
| 5.66 Respect for people                                                             | 13   |
| 5.63 Team work                                                                      | 14   |
| 5.62 Information and technology management                                          | 15   |
considering the skill needs of medical tourism activists. In designing a model-based training model for medical tourism, according to having a comprehensiveness and attention to all the components of medical tourism, it has been tried to design the programs based on the real needs of medical tourism activists. Training based on the competence of medical tourism activists should be able to create the necessary competencies, skills, and knowledge in the fields of education, research, specialized medical tourism services among the activists. As a result, by designing and implementing a competency-based education model for Iranian medical tourism, it is expected that, better and more specialized quality and specialized services will be provided in medical tourism based on the needs of medical activists and tourists.

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Ethical code
This article is taken from the doctoral dissertation in the field of educational management entitled designing the Competency-Based Training Model of Iranian Medical Tourism in 2019/10/10 at Allameh Tabataba’i University.

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Conflicts of interest
There are no conflicts of interest.

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