Original Article

Social Trends Affecting the Future of Iran's Health System: A Qualitative Study Using Focus Group Discussion

Abstract

Background: Social issues have short- or long-term as well as positive or negative effects on health systems. Identifying and analyzing events and trends help managers to make the vision and strategic planning. The purpose of this study is to identify the social trends and their impacts on the future of the Iranian health system. **Methods:** Focus group discussion (FGD) was used to collect the data in 2017--18. The participants were selected through purposive sampling and the snowball method. The discussions were all written and recorded with the consent of the participants. A qualitative content analysis was used to analyze the data. **Results:** The participants believed that the most important social trends affecting future of health system in Iran are increase health literacy, demographic transition, nutritional pattern, migration and urbanization, marginal settlement, rising unemployment, and increased usage of personal cars. **Conclusions:** The increase in health problems, healthcare costs, and mortality because of social behaviors and trends are considered as threats to the health system. Therefore, policymakers should reduce their negative effects by taking into account and focusing on these trends and making appropriate plans.

Keywords: *Focus groups, health, Iran, social behavior, social marketing, trends*

**Hamed Rahimi,
Alireza Kalantari¹,
Noora Rafiee,
Sajad Khosravi²**

Student Research Committee, Kerman University of Medical Sciences, Kerman, Iran, ¹School of Management and Information, Kerman University of Medical Sciences, Kerman, Iran, ²Department of Health Management, Policy and Economics, School of Public Health, Bam University of Medical Sciences, Bam, Iran

Introduction

Being provided with health is a fundamental right of communities, and it is one of the duties of governments to provide health services.[1] Health is considered as one of the important dimensions of sustainable development and international development center,[2-4] and strengthening health systems is one of the requirements of countries to achieve the goals of sustainable development.[5] The health system in any country consists of all individuals, organizations, and activities whose primary objective is to maintain and promote the health of the community.[6]

But rapid and extensive changes in today's world affect health systems.[7,8] One of the health-related factors is the social status of the community.[3] As health and disease are interdisciplinary, health system officials consider it as a social phenomenon.[9] Social issues and changes affect physical health, mental health, health behavior, and mortality risk, and create a source of inequity and inequality in health.[3,10] Therefore, improving community health is the main mission of health systems, and

health equity requires interdisciplinary measures and social participation.[3]

Studies have shown that social issues have short- or long-term as well as positive or negative effects on health systems. Thus, health systems must plan for responding to these issues and improve their own functions.[7,10] One thing that empowers managers to make perspectives and strategic planning is to identify relevant events and trends and analyze the related data.[11] A trend means the tendency and movement towards values in some time periods which decrease or increase with a constant order. Discovering and studying trends are very important for the formulation of strategies and revealing environmental components.[11,12] These types of studies are necessary to formulate appropriate strategies for planning and reforming the health system. If the existing trends and their effects are taken into account in long-term planning and reforms, health systems will be more capable of exploiting future opportunities and controlling the negative consequences of threats.[7] The most common framework for studying trends is STEEPV, whose primary dimension is social trends. Other

How to cite this article: Rahimi H, Kalantari A, Rafiee N, Khosravi S. Social trends affecting the future of Iran's health system: A qualitative study using focus group discussion. Int J Prev Med 2019;10:115.

dimensions of this framework are technology, economy, environment, policy, and values.[12,13]

In Iran vision 2025, the Islamic Republic of Iran is a country with a population of the highest levels of health and the most equitable and developed health system in the region.[9] Therefore, health planners and policymakers in the health sector need to monitor the existing trends and consider them in their plans in order to achieve this perspective. The present study aimed to help planners and decision makers of the Iranian health system to identify the social trends affecting the future of the health system and, consequently, the health of the community. Also, the results of this study will be useful to other countries.

Methods

In this qualitative study, a focus group discussion (FGD) was used to collect the data in order to identify the social trends affecting the future of Iran's health system. This study was conducted in 2017--18, and was confirmed and sponsored by University of Medical Sciences.

The participants were selected through purposive sampling, and the snowball method was used to ensure that all viewpoints had been taken. The researcher was looking for people who had rich research experience and were willing to express their point of view. The selection of the participants was based on their academic history as well as their executive and research activities related to the study subject. First, the individuals were informed about the purpose of the study in person or on the phone and were invited to attend the meetings. They were also asked to introduce someone else they knew, whose presence in the meetings might be useful. Informed consent was taken by the volunteers before participating in the study.

The focus discussion panels consisted of one discussion leader, one commentator, and 12 specialists in social medicine, epidemiology, public health, health policy-making, health services management, and sociology. The participants included two people from the Deputy of Social Affairs of the university, the head of social determinants of health research center, and 9 professors and researchers active in the health system related to social issues. The selection of researchers was based on the fact that they published at least three relevant articles.

According to the FGDs methodology, a semistructured guide containing open questions as well as introductory questions was prepared. The guide was used to familiarize, direct, and focus the participants on the purpose of the study. Four sessions of 3 h FGDs were held to introduce social trends, the incidents caused by them, and the effects of each of them on the future of the health system in Iran. The meetings were held at the University of Medical Sciences. The discussions were all written and recorded with the consent of the participants. After the sessions were completed, the contents of the recorded files were

transcribed in Persian language. In order to verify the accuracy of the data, the transcribed texts were shared with the participants and their feedback was received.

A qualitative content analysis was used to analyze the data. In the first step, all transcripts and notes were read line by line for identifying units of meaning (codes) using the inductive approach. Then, codes grouped into categories. To avoid biasness and to be reliable, the data analysis was done independently by two of the researchers. The results were compared with each other, and the social trends affecting the future of Iran's health system as well as their primary and secondary effects were extracted. The extracted data was sent to participants for confirmation or correction. Finally, given their feedback, the results were modified and finalized. The data were encoded using MAXQDA-11.

Results

In this study, 12 people participated with different expertise. Out of these, 10 were men and 2 women. The average age of the participants was 48.54 ± 5.3 (Mean ± SD) years. The participants consisted of three social medicine, two epidemiologist, two public health, two health policy-maker, one health services management, and two sociologist.

The focus of this study was to identify key social trends and their effects on the health system of Iran. Figure 1 shows the social trends, the incidence caused by them, and their effects on the future of the health system of Iran and the community health. The participants believed that one of the current and growing trends was the increase in the level of health literacy in the Iranian community. According to them, an increase in the level of health literacy in the community would increase the awareness of the community. This would ultimately lead to a reduction in the information gap between the providers and receivers of the services, which would have a positive effect on the health system.

"In recent years, a good thing that has happened is to raise awareness and health literacy of the community. This was mostly due to increased levels of education and the spread of media and social networks."(P4) "With improved health literacy, we will see a reduction in illness and medical expenses."(P2)

The results of this study indicate that one of the most important social trends affecting the health system is the change in the nutritional pattern of the people. Experts believe that preferring fast foods to traditional foods will increase the burden of metabolic diseases and obesity, which will be one of the challenges of the health sector in the future.

"Nutrition pattern is the cause of many diseases, including diabetes, hypertension, heart and brain stroke, cancers, and so on."(P7) "Now the consumption of salt, sugar and sweets, fast food and soft drinks in society are abnormal."(P8)
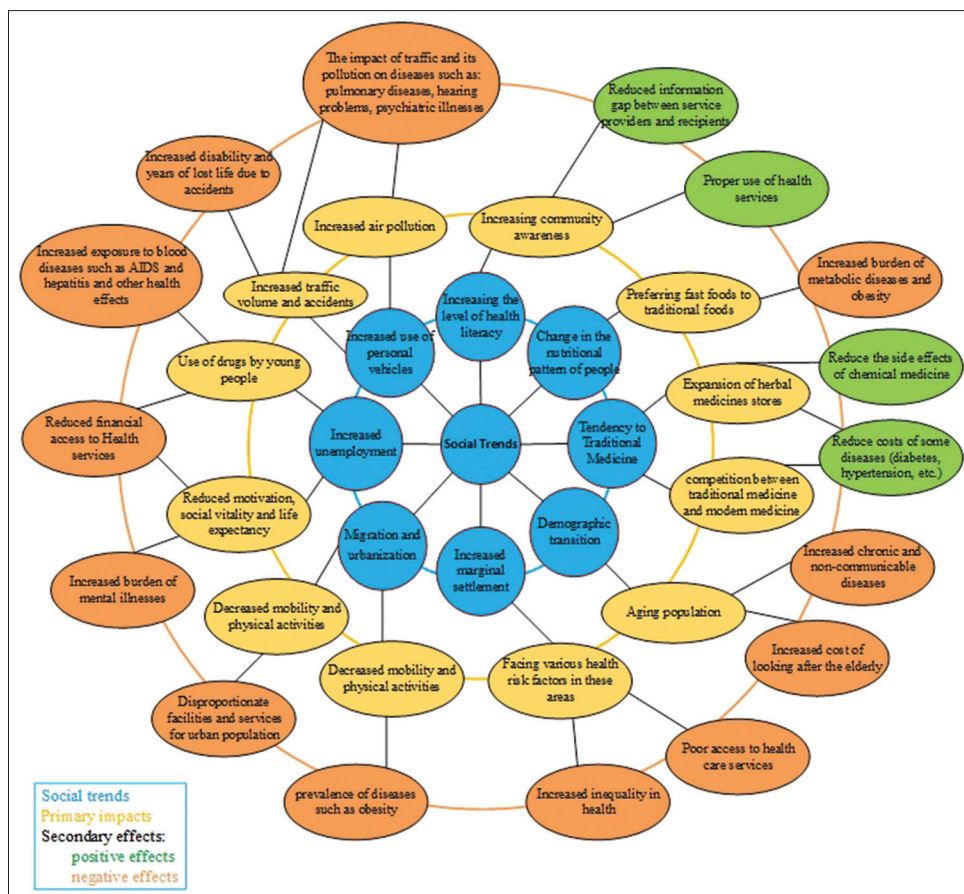
Figure 1: Social Trends Affecting and impacts of them on the Future of Iran's Health System

Another trend that will affect the Iranian health system in the near future is the increasing attention to traditional medicine in Iran. According to experts, this will expand herbal medicine stores and promote the use of medicinal herbs. The consequence of this trend for the health system is the cheap treatment of some diseases, such as diabetes, hypertension, etc., However, some experts believe that this will lead to conflict and competition between modern and traditional medicine that should be paid attention to by policymakers.

"One of the reasons people tend to use traditional medicine services is the fear of individuals from the side effects of drugs. Many people believe that medications prescribed by physicians may cure pain, but they cause other pain."(P6) "Of course, another reason for the acceptance of traditional medicine is it is less costly than modern treatments."(P9)

Another important social trend that will affect Iran's health system is the demographic transition, the population of which is aging. Population aging will increase chronic and noncommunicable diseases and the cost of looking after the elderly.

"The country's aging will cause the health system to face a crisis."(P1) "As people's health decreases in their old age, they will face many problems, such as cardiovascular,

respiratory, hypertension, cancers, loss of eyesight and hearing, urinary incontinence, and so on."(P1) "So it can be said that due to frequent needs and uses, their treatment costs will be higher."(P2)

The growing trend of immigration and marginal settlement is another challenge that will affect Iran's health system. The participants in this study believed that migrating from villages to cities and from small towns to major cities would reduce mobility and physical activities, which would result in disproportionate health services to the population and the incidence of diseases such as obesity. They also believed that marginal settlement would affect access to services and would lead to inequality in enjoying health services.

"Marginalized populations is a growing threat to public health."(P10) "Because these areas are informal, they are less likely to benefit from citizenship services."(P11) "These communities are facing a low level of health with problems such as increased disease, infectious diseases, mental disorders, poor nutrition, and high maternal mortality due to pregnancy or childbirth."(P3)

The participants stated that unemployment would reduce income levels and households' access to health services. On the other hand, it was believed that the consequences

of unemployment, such as decreased life expectancy, decreased motivation and vitality in society, and use of drugs and psychedelics by young people would increase the burden of mental illnesses, which would impose a lot of costs to the health system.

"The phenomenon of unemployment is the source of much psychological depression and mental illness. Because the unemployed person feels like a surplus for society."(P7) "Youth unemployment has become a powerful motivator for turning youth into addiction."(P5)

The results of this study suggest that the culture of using personal vehicles instead of public transportation will have a negative impact on the health system and well-being of the community. The increasing use of personal vehicles will increase traffic volumes, the number of accidents, and air and noise pollution. Experts believe that traffic accidents will increase disabilities and years of life lost, and will also lead to an increase in the air and noise pollution, pulmonary diseases, hearing problems, and psychiatric illnesses.

"Unfortunately, using a personal car has become a norm of social status."(P9) "We should not forget the cities, especially big cities, are faced with a tsunami dependence on personal vehicles is leading to increased air pollution."(P12) "In this way, traffic-induced pollution has exacerbated cardiovascular, pulmonary, and cancers."(P2)

Discussion

In the present study, the researchers tried to identify the most important social trends and their effects on the health system of Iran with the help of health system experts. One of the issues that should be considered in health planning is the study of trends.[7] The results of this study also showed that Iran's health system is affected by several social factors.

Increase health literacy

The study results indicated that increased level of health literacy was one of the trends affecting the health system. The results of the study by Tehrani-Banihashemi *et al*. in five provinces of Iran in 2006 showed that about 72% of the people had limited and inadequate health literacy. But in a national study in 2016, Tavoosi *et al*. showed that about 44% of the people had a low level of health literacy.[14,15] Although evidence suggests that this trend is on the rise, improving the level of health literacy in the community requires more planning. Given that health literacy influences health behaviors and how health services are used, and thus, may affect health outcomes and health system costs,[16] policymakers should take this into account in their policies and plans. Efforts to improve the level of community health literacy can also affect other social trends that have a negative impact on the health system.

Demographic transition

One of the social trends identified in this study is the demographic transition in Iran, which is confirmed by scientific evidence.[7,17] Evidence shows that Iran's population is aging, and by 2050, the elderly will account for about 20% of the population of this country.[18] As the elderly population increases, their health problems become more important.[19] Also, medical expenses of the elderly will cost a lot to the health system, compared with other age groups because of consecutive use of health services, longer time of using the services, and costly drugs and treatments they require.[20] Hence, one of the main challenges of Iran in future years will be the population's aging, and planning to improve their health and quality of life seems essential.

Nutritional pattern

The results of this study showed that Iranians' nutritional pattern was changing into the pattern of Western foods, and this is consistent with the results of other studies in this field. Scientific evidence suggests that the nutritional patterns of people are shifting toward a Western diet, especially the consumption of sweet beverages and fast foods.[21] Several clinical and epidemiological studies have reported that high consumption of fast foods is associated with weight gain, insulin resistance, and other metabolic disorders.[22]

Migration and urbanization (Immigration from villages to cities and from small towns to major cities)

Increased urbanization rate has been recognized as another trend affecting the health system in Iran. The proportion of the urban population in Iran was 46.7% in 1976, 66% in 2001, 72% in 2013, and 73% in 2015.[23-25] One of the problems of urbanization is the decline in physical activities, which will have a negative impact on people's health. Evidence suggests that 20% of adults are inactive, and about 3.2 million deaths occur annually because of inadequate physical activities. Physical activity has been estimated as the main factor for 21--30% of the burden of breast and colon cancers, diabetes, and ischemic heart diseases.[26] According to a report by the World Health Organization in 2010, 35.7% of the Iranian population is physically inactive.[27]

Marginal settlement

Marginal settlement is one of the consequences of migration and excessive growth of urbanization, which has become one of the social problems of countries so that marginal settlement areas have been directly considered as one of the objectives of sustainable development. The health status of residents in these areas is a concern of most countries. Because of overcrowding and poor access to drinking water and sanitation, the health of marginalized populations is at stake.[25] Since there is little information

on the severity of the distribution of risk factors of various diseases in these areas,[28] the health system should pay more attention to these areas in order to achieve its goal, that is, health equity.

Rising unemployment

Unemployment will have many effects on the health of unemployed people and the community. Evidence shows that unemployed people suffer from more health problems and behave in a way that their health is at more risks. Unemployed people are usually affected by sleep disorders, depression, nerve disorders, alcohol abuse, smoking, and suicide. These factors may increase the use of medical and psychotherapeutic services by unemployed people.[29-31]

Increased using personal cars

According to the participants, the prevalence of the culture of using personal cars might increase air pollution, traffic, and road accidents. These events might also have many effects on the health system and well-being of the community, including increased disability and years of lost life, reduced quality of life, and increased respiratory diseases caused by pollution. Statistics show that deaths and injuries from accidents in Iran are respectively two times and five times as much as global standards so that every 20--25 min a person dies in road accidents. The annual rate of accidents will cost about $4 billion to the country's economy, causing 4 million years of lost life.[32] Hassanzadeh *et al*. expressed the high tendency to use personal cars as one of the factors increasing the deaths from accidents.[33] Mohammad Beigi *et al*. also expressed an increased use of personal cars as one of the threats to use the bus rapid transportation (BRT) system in Tehran.[34] Therefore, the use of personal cars is one of the important behaviors affecting the traffic volume in Iran, and road accidents are the third most common causes of death in this country,[24,35] which can be reduced in part by focusing on improving the culture of using personal cars, and teaching and promoting the culture of using public transportation.

In general, the results of the present study showed that several social issues threaten the health system and well-being of the community, which require planning and attention. Since social issues and trends arise from the behaviors of individuals in a community, the most appropriate way to improve is to change behaviors. Community-based approaches are really valuable for social change.[26,36] One of the most utilized of these approaches is social marketing that focuses on changing social behaviors to enhance social welfare.[37] Among the applications of social marketing are social pathologies, solving health problems, environmental protection, and air pollution.[35] Social marketing refers to the use of marketing principles to deal with social problems and takes into account four main factors: product, price, place, and promotion.[35,38] Considering the success of the interventions

based on social marketing approach in changing health-affecting behaviors,[39] it seems that this approach can be taken by policymakers of the Iranian health system to change the behaviors in order to correct the social trends identified in this study and to reduce their negative effects on the health system and the well-being of the community.

Conclusions

The increase in health problems, healthcare costs, and mortality because of social behaviors and trends such as nutrition patterns, inadequate physical activities, excessive and inappropriate use of personal vehicles, urbanization and marginal settlement are considered as the threats to the health system. Therefore, policymakers should reduce their negative effects by taking into account and focusing on these trends and making appropriate plans. Social marketing can be useful as a suitable strategy for long-term and strategic planning to reduce the threats to the health system and promote community health. Social marketing helps to optimize general health by facilitating communications with the target group and creating a healthier life.

Acknowledgments

Financial support and sponsorship

Conflicts of interest

There are no conflicts of interest.

References

1. Rahimi SH, Masoumpour M, Kharazmi E and Kavousi Z. Designing the quality of emergency ward services in shirazs shahid faghihi hospital based on quality function deployment method (QFD) in 2011-2012. J Hospital 2013;12:9-17.

2. Bahadori M, Ravangard R. Analysis of the systematic relationships among social determinants of health (SDH) and identification of their prioritization in Iran using DEMATEL technique. Iran J Public Health 2013;42:1457-64.

3. de Andrade LOM, Pellegrini Filho A, Solar O, Rígoli F, de Salazar LM, Serrate PC, *et al*. Social determinants of health, universal health coverage, and sustainable development: Case studies from Latin American countries. Lancet 2015;385:1343-51.

4. Buse K, Hawkes S. Health in the sustainable development goals: Ready for a paradigm shift? Global Health 2015;11:13.

5. Stenberg K, Hanssen O, Edejer TT-T, Bertram M, Brindley C, Meshreky A, *et al*. Financing transformative health systems towards achievement of the health sustainable development goals: A model for projected resource needs in 67 low-income and middle-income countries. Lancet Global Health 2017;5:e875-87.

6. Shahri S, Tabibi SJ, Nasiripour AA, Ghaffari F. Effect functions on goals of health system in Iran. J Payavard Salamat 2017;11:247-58.

7. Rajabi F, Esmailzadeh H, Rostamigooran N, Majdzadeh R, Doshmangir L. Future of health care delivery in iran, opportunities and threats. Iran J Public Health 2013;42(Suppl 2):23-30.

8. Bonu S, Gutierrez LC, Borghis A, Roche FC. Transformational trends confounding the South Asian health systems. Health Policy 2009;90:230-8.

9. Barati O, Keshtkaran A, Ahmadi B, Hatam N, Khammarnia M, Siavashi E. Equity in the health system: An overview on national development plans. Sadra Med Sci J 2015;3:77-88.

10. Umberson D, Karas Montez J. Social relationships and health: A flashpoint for health policy. J Health Soc Behav 2010;51:S54-66.

11. Monzavi M, Sarchashmeh-Peama AA. Strategy environmentology based on trend analysis and model STEEP (V). Strategic Attitude 2007;85-86:9-22.

12. Saritas O, Saritas O, Proskuryakova LN, Proskuryakova LN. Water resources–an analysis of trends, weak signals and wild cards with implications for Russia. Foresight 2017;19:152-73.

13. Miles I. Background analysis: Trend extrapolation; analysis of framework; megatrend analysis. Foresight Methodologies. 1st ed. Vienna: United Nations Industrial Development Organization; 2004. p. 1-5.

14. Tehrani-banihashemi SA, Amirkhani MA, Haghdoost AA, Alavian SM, Asgharifard H, Baradaran H, *et al*. Health literacy in 5 provinces of the country and the factors affecting it. Strides Dev Med Educ 2007;3:1-9.

15. Tavousi M, Haeri MA, Rafiefar S, Solimanian A, Sarbandi F, Ardestani M, *et al*. Health literacy in Iran: Findings from a national study. Payesh 2016;1:95-102.

16. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, *et al*. Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health 2012;25:12-80.

17. Pourmalek F, Abolhassani F, Naghavi M, Mohammad K, Majdzadeh R, Holakouie Naeini K, *et al*. Direct estimation of life expectancy in the Islamic Republic of Iran in 2003. East Mediterr Health J 2009;15:76-84.

18. Roudi F, Azadi P, Mesgaran M. Iran's population dynamics and demographic window of opportunity, working paper 4, stanford iran 2040 project. Stanford University; 2017. p. 1-29.

19. Momeni K, Karimi H. Comparison of mental health between elderly admitted in sanitarium with elderly in sited in personal home. J Kermanshah Univ Med Sci 2011;14:328-35.

20. Yazdani A, Fekrazad H, Sajadi H, Salehi M. Relationship between social participation and general health among the elderly. J Kermanshah Univ Med Sci 2015;18:599-606.

21. Popkin BM, Adair LS, Ng SW. Global nutrition transition and the pandemic of obesity in developing countries. Nutr Rev 2012;70:3-21.

22. Bahadoran Z, Mirmiran P, Hosseini-Esfahani F, Azizi F. Fast food consumption and the risk of metabolic syndrome after 3-years of follow-up: Tehran lipid and glucose study. Eur J Clin Nutr 2013;67:1303-9.

23. Fanni Z. Cities and urbanization in Iran after the Islamic revolution. Cities 2006;23:407-11.

24. Organization WH. Iran (Islamic Republic of): WHO statistical profile, 2015.

25. Bakhtiari A, Takian A, Sayari AA, Bairami F, Tabrizi JS, Mohammadi A, *et al*. Design and deployment of health complexes in line with universal health coverage by focusing on the marginalized population in Tabriz, Iran. Teb va Tazkiyeh 2017;25:213-32.

26. Tabatabaei SVA, Ardabili HE, Haghdoost AA, Nakhaee N, Shams M. Promoting physical activity in Iranian women: A qualitative study using social marketing. Electron Physician 2017;9:5279-86.

27. World Health Organization X. Global Status Report on Noncommunicable Diseases 2010. Geneva: World Health Organization; 2011.

28. Barak M, Sadeghieh Ahari S, Amani F, Asadi G, Rahimi G, Khadem E. Causatives and risk factors for deaths among infants under 1 year old in ardabil slums during 2008-2009. J Ardabil Univ Med Sci 2012;12:40-7.

29. Hammarström A, Janlert U. Early unemployment can contribute to adult health problems: Results from a longitudinal study of school leavers. J Epidemiol Community Health 2002;56:624-30.

30. Kroll LE, Lampert T. Unemployment, social support and health problems: Results of the GEDA study in Germany, 2009. Deutsches Ärzteblatt Int 2011;108:47-52.

31. Schmitz H. Why are the unemployed in worse health? The causal effect of unemployment on health. Labour Economic 2011;18:71-8.

32. Sehhat S. A report base on the observation regarding to percentage of death in road accident. Neurosci J Shefaye Khatam 2015;2:e8.

33. Hasanzadeh J, Moradinazar M, Najafi F, Ahmadi-Jouybary T. Trends of mortality of road traffic accidents in Fars Province, Southern Iran, 2004-2010. Iran J Public Health 2014;43:1259-65.

34. Mohammad-Beigi H, Nouri J, Liaghati H. Strategic analysis of bus rapid transit system in improvement of public transportation: Case of Tehran, Iran. Modern Appl Sci 2015;9:169.

35. Attafar A, Kazemi A, Samimi A. Investigating the role of social marketing in reducing the use of personal cars in city traffics the case of Isfahan City. Int J Acad Res Business Soc Sci 2012;2:266.

36. Bryant CA, Forthofer MS, Brown KRM, Landis DC, McDermott RJ. Community-based prevention marketing: The next steps in disseminating behavior change. Am J Health Behav 2000;24:61-8.

37. Aras R. Social marketing in healthcare. Australas Med J 2011;4:418-24.

38. Zarchi MR, Jabbari A, Rahimi SH, Shafaghat T, Abbasi S. Preparation and designing a checklist for health care marketing mix, with medical tourism approach. Int J Travel Med Glob Health 2013;1:103-8.

39. Keller C, Vega-López S, Ainsworth B, Nagle-Williams A, Records K, Permana P, *et al*. Social marketing: Approach to cultural and contextual relevance in a community-based physical activity intervention. Health Promot Int. 2012;29:130-40.