

## Promotion of Physical Activity to Prevent Non-communicable Diseases: An Advocacy Paper

### Abstract

**Background:** Recent studies show that Iranians, especially women, do not have enough physical activity and if serious measures are not taken to resolve this problem, the consequences will be harmful to the society. The purpose of this advocacy paper was to determine and explain the responsibilities of all organizations and institutions responsible for promoting physical activity to root out the problem. **Methods:** After a thorough library search we conducted nine in-depth interviews with the relevant policymakers and government officials, managers, and practitioners in promoting physical activity. All interviews were recorded. To analyze, all of voice files were typed, saved as Word files, and exported to MAXQDA10 software by the research team. To find the main themes, all the files were read carefully several times. Then they were coded, categorized, and organized based on the main objectives of the study. In this way, themes and subthemes were emerged. **Results:** According to the participants in the study current state of physical activity in the country, especially among women, is not promising. The participants explained about the main obstacles for promotion of physical activity in the country and recommended practical strategies for its promotion. The strategies were suggested in three areas: Promoting culture, social protection, and adjusting current policies to overcome the existing barriers. **Conclusion:** Regarding the unfavorable state of physical activity in the country presentation of this advocacy document can be an effective step in promoting physical activity, thus reducing chronic diseases and improving general health in the country.

**Keywords:** Advocacy, Iran, non-communicable diseases, physical activity, women

### Introduction

Non-communicable diseases (NCDs) are among the main causes of death in Iran and the world.<sup>[1,2]</sup> According to World Health Organization (WHO), 9.1 million deaths in the world are linked to physical inactivity.<sup>[3]</sup> Low physical activity and inappropriate diets are the main causes of overweight and obesity, causing deaths of at least 2.6 million people annually.<sup>[3,4]</sup> On the other hand, scientific research has shown that adequate and appropriate physical activity can control body weight, reduce the risk of chronic diseases such as cardiovascular diseases, diabetes, metabolic syndrome, and some cancers, as well as strengthen muscles and bones and promote mental health and moods. Continuous physical movements will also increase the ability to do daily activities and prevent falling, as well as increase longevity.<sup>[5]</sup>

According to recent reports, 60% of the world population do not even

consider the recommended 30 minutes of moderate physical activity per day, despite the knowledge available on the disadvantages.<sup>[6,7]</sup> Studies in Iran have also shown that 40% of adults have low physical activity and 15% have no physical activity at all.<sup>[8]</sup> The average time spent daily on different types of physical activity in the Iranian society is 51 minutes, and for sedentary activities 240 minutes.<sup>[9]</sup> It is noteworthy that, apart from doing sedentary activities, in all cases, women spend less time on physical activities, and women's share of inadequate physical activity (48.6%) is higher than that of men (31.6%).<sup>[8,10]</sup> However, as recommended by the WHO, adults need to undergo 150 minutes of aerobic exercise of moderate to severe intensity, or 75 minutes of high-intensity aerobic exercise, which, of course, should be increased to 300 and 150 minutes, respectively.<sup>[11]</sup>

Therefore, it can be concluded that the Iranian society, especially women, do not have enough physical mobility, and if

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no action is taken to overcome this problem, it will lead to adverse consequences. For this reason, in the current advocacy paper, the current state of physical activity in the country has been shown, especially in women, and recommended practical solutions for solving the problem and promoting physical activity.

## Methods

To prepare this advocacy paper, after a thorough library search and determining the status of physical activity in the country, we decided to determine and explain the responsibilities of all organizations and institutions responsible for promoting physical activity to root out the problem.

## Participants

Since we did not receive citable information, we decided to find the answers to our questions by interviewing the experts in the relevant areas. The main audience of this advocacy paper was policymakers and government officials, managers, and practitioners in promoting physical activity. The interviewees included faculty members of universities of medical sciences; members of the Parliament Health Commission; members of Training of Sports Medicine Federation; employees in the Office of Health, Population, Family, and Schools of the Ministry of Health and Medical Education; Director of Physical Education in the Deputy Health Minister's Office of Student and Cultural Affairs, Ministry of Health and Medical Education; nutritionists; expert in sports nutrition; research leaders in several national projects on the status and promotion of physical activity in the community.

We conducted 9 in-depth interviews with the experts. Then, their recorded voices were typed and saved as Word files. The files were exported to and coded by, MAXQDA10. The final analyses were carried out qualitatively by the research team.

To find the main themes, all the notes were read carefully several times. Then they were coded, categorized, and organized based on the main objectives of the study. In this way, themes and subthemes were extracted.

## Results

All findings are presented in different categories, themes, and subthemes, which are summarized in Table 1.

### The current state of physical activity in Iran

Based on the interviews with the experts, it was revealed that some positive steps had already been taken to promote physical activity in the entire population, and particularly in women. As an example, one can mention that in some cities municipalities have taken action to organize and subsidize women's sports classes. In addition, the successful Project of Police Collaborators by the Traffic Police can be used as a model to promote physical activity. Furthermore, the Deputy Health Minister's Office of Student and Cultural Affairs, Ministry of Health and Medical Education has developed 10 sport courses for university students, requiring very little time and equipment, while being vivacious and engaging in world competitions. All the 62 schools of medical universities across the country have participated in this project. Despite the success achieved in the interviewees' opinions, there are still gaps with regard to physical activity in the population, especially among women, which are discussed below:

### Roots of the problem and suggestions for solutions

#### *Authorities for promoting physical activity in the country and their responsibilities*

According to the experts, the Ministry of Sports and Youth and Ministry of Education is the main leaders for the promotion of physical activity in the population. In addition, the roles of the municipalities and the Ministry of Health are also fundamental. Other institutions responsible

**Table 1: Emerging themes extracted from interviews with stakeholders, 2014**

| Categories  | Themes   | Subthemes  |
|---|--|--|
| 1. Roots of the problem and suggestions for solutions             | Authorities for promoting physical activity in the country and their responsibilities  | NA   |
|   | Critical comments on the implementation of programs and actions related to the promotion of physical activity in the country | NA   |
| 2. Obstacles to physical activity in the country                  | Cultural barriers  | NA   |
|   | Environmental barriers   | NA   |
|   | Political and legislative barriers   | NA   |
| 3. Recommendations and practical strategies to solve the problems | Promoting General Culture to Promote Physical Activity   | Modeling popular characters<br>Modeling successful experiences<br>Social Support |
|   | Adjustment of policies and legislation related to physical activity  | NA   |
|   | Balancing the current approach of policymakers and legislators in the field of physical activity                             | NA   |
|   | Mass mobilization for the promotion of public sports   | NA   |

NA=Not applicable

for promoting physical activity, though indirectly, are mass media, universities, various ministries, cultural institutions, the National Youth Organization, the Sports Federation, and the Welfare organization.

#### *Critical comments on the implementation of programs and actions related to the promotion of physical activity in the country*

In the opinion of the experts, actions taken in the country about physical activity are not systematic and all-encompassing, and most have been individual cases. Moreover, the authorities have paid too much attention to championship sports, while public sports have not received sufficient attention. Furthermore, people practically have not been made aware of the necessity and importance of physical activity effectively. In most cases, recommendations for the promotion of physical activity have been stereotyped, without recommending strategies and ways to change behavior. In addition, experts believed that the quality of scientific studies in the field of physical activity has been poor and the rules and regulations regarding budgets allocated for physical activity promotion are insufficient.

#### **Obstacles to physical activity in the country**

##### *Cultural barriers*

Experts believed that cultural barriers are the biggest obstacle to promoting physical activity. In their view, the most important examples of cultural barriers included considering comfort as a value in the Iranian culture; being more fond of sports rather than being an athlete; the greater desire in becoming a champion rather than being an athlete; not believing in the importance of physical activity; misconceptions about physical activity (for example, that it needs special equipment); absence of the proper social figures/models for physical activity in the society (popular figures, such as actors, athletes, etc., who are unconsciously idols in people's views, do not actually play a role in the promotion of physical activity).

##### *Environmental barriers*

Environmental barriers were identified as the second barrier to promoting physical activity in society, especially among women. Limited access to general and sports facilities, poor architecture, lack of social security, inappropriate walkways, inadequate access to public transportation (and, as a result, more private car usage), urbanization, and machine life were mentioned as obstacles.

##### *Political and legislative barriers*

In the interviewees' opinion, other barriers to promoting physical activity in the society were political and legislative barriers. Such barriers included:

- 2.3.1. Parallel working and lack of coordination and cooperation among the authorities;
- 2.3.2. Lack of systematic and coherent organizations to promote physical activity;

- 2.3.3. The existence of a gap between policies of previous governments (failure to implement previous government decisions in subsequent governments);
- 2.3.4. More emphasis in budget allocation in the Ministry of Sports and Youth to championships;
- 2.3.5. Not allocating sufficient funds and facilities for the Ministry of Sports and Youth;
- 2.3.6. The monopoly of some of the physical activity stakeholders;
- 2.3.7. Non-enforcement of the laws;
- 2.3.8. Lack of program and definition of health and physical activity by the Islamic Consultative Assembly (the Parliament);
- 2.3.9. Lack of a platform for policies and infrastructure;
- 2.3.10. Insufficient time for the people (for daily physical activity);
- 2.3.11. Agreement between two or more people for illegal and unofficial seizure of a part of the city for more profits
- 2.3.12. Incompetency of some of the potential authorities for the promotion of physical activity.

#### **Recommendations and practical strategies to solve the problems**

##### *Promoting General Culture to Promote Physical Activity*

One of the recommendations was to promote the general culture of society for greater acceptance of physical activity by the people, which could be considered in several areas:

##### *Modeling popular characters*

According to the interviewees' opinion, people (should) be encouraged to be more mobile in everyday activities. For example, they should be encouraged to use their private cars less frequently and use public transportation more often instead and, even, walk to their workplaces, use stairs instead of elevators, do not use controllers to turn on or off electrical appliances, carry loads, be mobile when talking on the phone, do simple activities such as cycling, and, in general, be more active. The community must come to an understanding and accept that physical activity is a part of its rights. In this regard, it was suggested:

- 3.1.1.1. People should frequently see the relevant authorities, trusted people (such as Friday imams and local socially acceptable/reliable individuals), and lovable characters (such as athletes and actors) when they are doing exercise. This will help physical exercise to become institutionalized.
- 3.1.1.2. To show positive effects of physical activity through telefilms, interludes, scientific cartoons, attractive, and purposeful videos. In this regard, more attention will be paid to the role of the family;
- 3.1.1.3. Suitable computer-games should be developed;
- 3.1.1.4. Physical activity with songs in open environments that will lead to mobility and vivacity.

### *Modeling successful experiences*

The modeling of other countries' experiences can be useful as well. For example, in many countries, physical activity is institutionalized so that people exercise at dead times (such as when waiting for a bus); physical activity is fun and people enjoy it. Another example is the Early Child Development (ECD) program in China, which has begun to promote nutrition and physical activity from nurseries and elementary schools. Another example is the *Fight Kickers* cartoon, which was made to promote football culture in Japan. In England, all neighborhoods provide sports facilities for individuals. Cycling is very common in Hungary, China, the Netherlands, France, and Italy.

### *Social support*

In the experts' opinion, one of the main strategies for promoting public physical activity is getting the support from high-level planners, decision-makers, and managers through advocacy. Suggested approaches were:

- 3.1.3.1. Getting approval of the entire system for establishing a comprehensive program to promote physical activity,
- 3.1.3.2. Coordination of activities among the different stakeholder,
- 3.1.3.3. Systematic attitude toward making sports facilities accessible to people,
- 3.1.3.4. Involving the Provincial Security Council (in physical activity promotion programs),
- 3.1.3.5. Providing infrastructures and strengthening the comprehensive civil system,
- 3.1.3.6. Establishment and activation of community associations such as associations of parents and teachers to promote physical activity,
- 3.1.3.7. Creation of a suitable social atmosphere and making physical activity a social value,
- 3.1.3.8. Organizational supervision on physical activity expenditures,
- 3.1.3.9. Collaboration of governmental and nongovernmental departments to make available sports facilities (at low cost) for the general public;
- 3.1.3.10. Advocacy through the Friday prayer podium,
- 3.1.3.11. Usage of unused spaces in governments departments, schools, etc., outside office hours for public sports for places where space is insufficient for sports,
- 3.1.3.12. Facilitating recreation and allocating hours of daily activity to physical activity in offices, schools and universities, using cigarette taxes to promote physical activity were other suggestions.
- 3.1.3.13. Considering the barriers to women's sports, and paying special attention to their sport. In this regard some specific suggestion included promoting women's physical activity by the creation of a women's park next to each public

park, and organizing sports classes for women in mosques, health centers and schools.

- 3.1.3.14. Special space and time should also be considered to promote physical activity among the elderly.

### **Adjustment of policies and legislation related to physical activity**

Adopting encouraging policies is one of the facilitators for promoting physical activity in the community. Examples include encouraging (spiritually and materialistically) fit employees in governmental departments, encouraging athlete children through interviews, and presentations in the media, donating compact discs for the promotion of physical activity as an award (on various occasions) and the use of technology to promote physical activity.

### **Balancing the current approach of policymakers and legislators in the field of physical activity**

In the interviewees' opinion some issues can be very effective for physical activity improvement in the societies:

- 3.3.1. Implementation of programs for Physical activity promotion by authorities on a regular basis;
- 3.3.2. Teamwork by experts in all fields of sport, not just one particular field;
- 3.3.3. Having a plan and a benchmark, serious management to eliminate inconsistencies;
- 3.3.4. Planning and paying sufficient attention to physical activity at the macro-level and appropriate budget allocation;
- 3.3.5. Changing attitudes of authorities and selecting authorities with the attitude and concern of promoting physical activity;
- 3.3.6. Legalizing and strengthening the supervisory system of physical activity;
- 3.3.7. Recruiting sports coaches in schools;
- 3.3.8. Training medical staff at different levels for physical activity;
- 3.3.9. Teaching physical activity from early childhood;
- 3.3.10. Having a program and timely targeting and continuous awareness raising of people about physical activity;
- 3.3.11. Implementation of interventions by planning, describing, and identifying barriers;
- 3.3.12. Describing the tasks of the organizations responsible for promoting physical activity clearly;
- 3.3.13. Improving the quality of physical activity promotion research with proper attention to the theoretical aspects,
- 3.3.14. Applying behavior change theories.

### **Mass mobilization for the promotion of public sports**

The interviewees believed that in addition to the championship sports, it is extremely important to consider physical activity as a strategy for the public's health promotion. In this regard, some recommendations can be effective: allocating a definite budget for the Ministry

of Sports to improve public sports; allocation of parts of TV programs (at appropriate times) to the public sport, allocation of part of the budget of the sports and youth organization to public sports; allocating a special page in the newspapers to public sports as a requirement for receiving licenses from the Ministry of Guidance; giving subsidies to the private sector to promote public sports.

## Discussion and Conclusions

The latest national statistics indicate an undesirable state of physical activity in Iran. On the other hand, given the growing trend of chronic diseases in the country and the role of physical activity in preventing it, any action to increase physical activity of all the social strata is vital. The promotion of physical activity requires more attention and support from authorities. The present advocacy document, while showing a picture of the state of physical activity and rooting out the obstacles in promoting physical activity in the country, offers practical solutions in three areas: promoting culture, social protection, and adjusting current policies to overcome the existing barriers. Based on the mission of the Islamic Republic of Iran Medical Sciences Academy to ensure the health of all people, the presentation of this advocacy document can be an effective step in promoting physical activity, thus reducing chronic diseases and improving general health in the country.

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## Conflicts of interest

There are no conflicts of interest.

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