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Devising a National Men's Health Policy Document: The Current Challenges to Men's Health in Iran

In May 2013, the Iranian Ministry of Health and Medical Education began drawing up the first national policy document for men's health, focusing on a number of issues, including the increase in the burden of disease for men and their lower uptake of health services, than women. While Iranian national health policy already emphasized gender-specific health care delivery, experts believed that intervention plans for men's health were not adequate and that there was an over-riding need to address this. The present study describes the background, methodology and process of developing a national men's health policy document in Iran.

Keywords: national health policy document, men's health, Iran

Despite the attention paid to men's health by managers and stakeholders in Iran's health system in recent years, both explicit policy commitment and dedicated resources are forthcoming. Nevertheless, for a number of reasons, men's health issues became a high priority on the agendas of Iranian policy makers preparing the ground for the creation of a men's health national policy document. Important factors driving this development include an increase in the burden of disease for men, combined with a lower uptake of health and medical services by men than women. Plan No. 29 under policy No. 5 of the Health Transformation Plan (HTP) (Ministry of Health and Medical Education of Iran, 2012) emphasizes gender-specific service delivery. This is needed because the structure and type of

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health services delivered, especially in rural areas, focus mainly on women's health needs and the ways women access services. In the view of Iranian health system experts, there was thus a need for intervention plans appropriate to men's health.

THE NEED FOR A NATIONAL MEN'S HEALTH POLICY DOCUMENT IN IRAN

A number of obstacles hinder men from accessing health services. These include cultural obstacles, including stereotypical beliefs that men do not need health services being the stronger sex. There are also physical obstacles, including the distance of health centers from men's workplaces or homes and health services not being open after working hours, all leading to men failing to make or keep appointments.

There were also other considerations prompting the development of a national policy document for men's health. Internationally, there is a growing understanding that men's health needs to be improved through:

- the identification and elimination of biological, lifestyle and environmental risk factors;
- the provision and improvement of access to the services that men require; and
- the improvement of men's health literacy.

It is part of the wider vision for Iran to achieve objectives such as personal development, social justice, health and well-being, and the elimination of poverty, corruption and discrimination. An underlying requirement for this is to provide gender equality taking into account specific needs of men and women in all aspects of life, particularly healthcare. Systems should be designed to provide services tailored to the specific needs of each group, so that both have access to the services they need. Since almost half of the country's populations are men, identifying areas of high priority, examining them, and developing a clear set of plans in the form of a policy document, can help to achieve these aims.

In early 2012, the impetus to develop the National Men's Health Policy Document began with the Iranian Ministry of Health and Medical Education making a commitment to adopt a comprehensive approach addressing current men's health issues and future health service delivery needs. The main purpose of producing this document was to address and promote men's health by developing a set of coherent and integrated interventions that respond to the priority men's health issues.

This article presents an overview of how the issue of men's health in Iran evolved and how this led to the development of a national health policy document. It also outlines and explains the methodologies used to develop this policy document and the steps taken to take it forward.

THE CURRENT STATE OF MEN'S HEALTH IN IRAN

As a nation, Iran considers health care to be a priority issue in its strategic planning and decision making processes (Ministry of Health and Medical Education of Iran, 2010, 2012; Rostamigooran et al., 2013). Primary health care networks were established in 1984 following reports published after a partnership between the Ministry of Health and Medical Education and the World Health Organization (WHO) from 1975 to 1978 (Khayati & Saberi, 2009). In recent years, gender equity has been cited as a goal of health policy in many countries. However, there is often confusion between the declaration of commitment to gender equity and the actions taken to achieve this goal.

To achieve gender equity one first needs to identify the similarities and differences in the health needs of men and women (Doyal, 2000). Lack of attention to gender difference is reflected in many policy areas in Iran. For example, in the Health Transformation Plan (HTP) (Ministry of Health and Medical Education of Iran, 2012) and the National Scientific Plan of Health (Ministry of Health and Medical Education of Iran, 2010) sex-differences in health needs are not considered at all, despite the fact that research recognizes the role of gender differences in the health needs of the population and the use of services (Raine, Goldfrad, Rowan, & Black, 2002). The differences in health needs and patterns of service use by men and women, and the appropriate adjustment of service delivery mechanisms has been relatively neglected by policy makers and health system planners in Iran.

As in some other countries, health inequities between men and women exist in Iran. In Iran, the life expectancy of men is three years lower than that of women (Pourmalek et al., 2009). The burden of disease of men has also increased disproportionately in recent years. In addition, the epidemiological transition from communicable to non-communicable diseases disproportionately affects men. This increases the significance of social risk factors and the burden of disease (Khosravi, Taylor, Naghavi, & Lopez, 2007; Naghavi et al., 2009) and makes it necessary to promote men's health and to tailor services in a gender-specific way.

A comparison of Iran's burden of disease in 2003 with that of other countries in the WHO Eastern Mediterranean Region (EMRO) countries in 2000–2001 and with the United States of America (U.S.) in 1996, shows that communicable disease and malnutrition in Iran is less than the EMRO average. However, among non-communicable diseases, the burden of mental disorders was higher than that in other EMRO countries. Cardiovascular diseases in Iran had a similar prevalence as that in other EMRO countries. The incidence of injuries and accidents, especially among young and middle-aged men in Iran, was double the EMRO average. The total disability-adjusted life years (DALYs) lost in Iran (2003 data) was 1.7 times more than the DALY lost in the USA (in 1996). Non-communicable burden of disease in the USA contributed to 79% of the total burden of disease, but to only 58% of the burden of disease in Iran. The share of communicable diseases in Iran (14%) was 1.6 times higher and the incidence of injuries and accidents (28 %) was 2.3 times higher in Iran than in the U.S. (Michaud et al., 2006; Naghavi et al., 2009). These marked differences can be attributed to the different levels of social and economic development of the two countries, and to poor Social Determinants of Health (SDH) in Iran.

Statistics related to the burden of disease in Iran in 2003 showed that accidents (28%), psychiatric disorders (16%) and cardiovascular disease (10%) have the highest share of the burden of diseases in term of DALY. Examining the disparity in the burden of disease, by sex, stroke has been reported to be more common among young men, aged between 15–45 years (52%) than women of the same age (48%) (Hosseini, Sobhani-Rad et al., 2010). The prevalence of intentional and unintentional injuries, cancer and infectious and parasitic diseases are also more frequent among men than women (Jafari et al., 2009). The study of the burden of disease in Iran in 2003 showed that the incidence of communicable diseases was 7.2% for men, compared to 7% for women. For non-communicable diseases it was 26.7% for men, compared to 23.1% for women. For the category “disasters and accidents” men had an incidence of 6.19% compared to 3.8% for women (Jafari et al., 2009). Overall, the proportion of the total DALY in Iran in 2003 was 53% for men compared to 47% for women. Men's years of life lost (YLL) in the same year was 61%, compared to 39% for women. However, men's YLL due to disability (YLD) was less at 48%, compared to 52% for women.

According to the latest mortality statistics, in Iran in 2013, although the mortality rate between 15–60 years of age (per 1000 population) for both men (153) and women (83) is less than the average global mortality rate (182 for men and 121 for women), the Iranian rate is still higher for men than for women (WHO World Health Statistics, 2013).

As the differences between the genders in the burden of disease and the mortality rate, the causes of deaths vary among different age groups for men and women. YLL for men was mainly seen in the 5- to 69-year age group, with the greatest number of deaths occurring between 5 and 44 years due to accidents and injuries, while above age 44, deaths were mainly due to non-communicable diseases (particularly mental disorders, cardiovascular, cerebrovascular, musculoskeletal and urogenital diseases) (Jafari et al., 2009). Because of the higher workplace participation of men (66.1%) compared to that of women (18.3%) in the 15+ year age segment (Iran's Statistics Centre, 2012), men are more susceptible to environmental and occupational risk factors (Nouri, 2010). For instance, men experienced accidental falls three times more often than women (Ramezani, Tehrani, Amiri, Simbor, Rostami & Azizi, 2011) and, in general, occupational diseases including back pain and asthma are more common among men (Bakhtiyari et al., 2012) due to their higher exposure to noise, heat, radiation, chemicals, dust, and so on (Nouri, 2010). Health damaging behaviors, such as smoking, excessive consumption of alcohol and drug addiction are also more common among men (Ghasemi, Delavar, Karimi & Zarchi, 2013; Ramezani, Tehrani, Amiri, Simbor, Rostami & Azizi, 2011); (Nouri, 2010).

Iranian men were five times more susceptible to accidental injuries than women in 2006 (Nouri, 2010). The WHO reported that, in terms of the number of deaths caused by traffic accidents, Iranian roads are the most dangerous in the world. Based on traffic police reports, more than three people died in traffic accidents every hour in 2013. In 2014 around 10,914 people died in accidents, of whom 8,410 were men and 2,504 were women (Iranian Legal Medicine Organization, 2014). Furthermore, the study of the burden of disease in 2003 indicated that road accidents are the greatest risk in the age group of 5–44 years (Naghavi et al., 2009). The World Bank has estimated that the annual cost of road accidents in Iran is about two percent of the national GDP (Rostam & Ismail, 2011).

Diseases linked to unhealthy behaviors and sexual diseases are more prevalent among men. These diseases can be subsumed under three headings:

1. men's behavioral health;
2. men's sexual and reproductive health; and
3. chronic diseases such as different kinds of cancers in men.

Behaviors such as drug use (about 10 times more common among men than woman), smoking, excessive consumption of alcoholic and sexually transmitted diseases such as hepatitis and AIDS (UNAIDS, 2012), and sexual dysfunction (with 30% prevalence among men) and stomach, lung, blood and liver cancers are more widespread among men than women. As regards men's mental health, three times more men than women are admitted to hospital for inpatient psychiatric care (Nouri, 2010).

Iranian men, particularly those aged 25 to 50 years, face difficulties in addressing their health problems because of challenges such as economic, social, cultural and family issues, together with environmental factors such as lack of social provision, and public health interventions (Ramezani, Tehrani, Amiri, Simbor, Rostami, Azizi, 2011). Because of these challenges, the expectation of men to provide for their families is considered to have a higher priority than caring for their own health. This often restricts their ability to take such

preventative actions as participating in regular physical activity, attending annual check-ups, and maintaining a healthy diet (Jin, Shah, & Svoboda, 1995; Thomas, 2009). Therefore, because of the epidemiological transition in Iran, the shift from communicable to non-communicable diseases, and the impact of social factors, it is necessary to improve men's access to health services. Increasing access to health care for men could be achieved through reinforcing supportive environments for men's health and encouraging the central role of a healthy lifestyle.

In conclusion, many issues led Iran's health system policy makers to develop a policy document which focuses on enhancing men's health through a specific national policy document outlining goals, objectives, policies, and plans in four key areas of high priority. The following section reviews the underlying factors which led to the formulation of the National Men's Health Policy Document (NMHPD).

LAYING THE FOUNDATION FOR A MEN'S HEALTH POLICY DOCUMENT IN IRAN

Two major trends have resulted in the evolution of men's health policy in Iran. The first, and most important, is related to international developments, initiatives and approaches to men's health in recent years. The World Health Organization has taken some critical measures in the field of gender mainstreaming in relation to health. Gender-specific programs and a wide range of practical initiatives in men's health (Rostamigooran et al., 2013) have been developed in different countries e.g., Ireland, Australia, Brazil, Canada, the UK, and the United States. In addition, men's health conferences are being held worldwide. Other international developments include the establishment of the International Society for Men's Health (ISMH) in 2001; the establishment of International Men's Health Week in June since 2003; and the publication of men's health journals. These have all contributed to laying the foundation for developing a NMHPD in Iran.

Second, since 2006, numerous initiatives have been established and implemented in the field of men's health in Iran in response to growing concerns about men's health. In order to promote men's health among the broader Iranian population and the media, the first week of the last month in the Iranian calendar has been designated Men's Health Week. Furthermore, the Ministry of Health and Education adopted a fundamental policy measure by developing the inaugural Men's Health National Plan. This was done with the intention of assessing the health status of men, with a particular focus on prevention and early detection of health problems affecting men, especially those related to the reproductive system. Adopting a gender-specific approach has been explicitly emphasized in reviewing the health service delivery structure of the country in the Health Transformation Plan (HTP), No. 29 under policy No. 5 (Esmailzadeh et al., 2013).

During the past decade, studies and work by experts, academics and some NGOs have shown the significant results of policy makers' consideration of health. Some significant policy documents include the National Plan for the Maintenance and Enhancement of Iranian Youth's Mental and Physical Health, the Comprehensive National Plan for Youth Affairs, and the Policy Document for Adolescent and Youth Reproductive Health. As a result, a national commitment was made to develop a NMHPD to promote the health status of men in Iran (Ministry of Health and Medical Education of Iran, 2012).

Steps Taken to Develop the Men's Health Policy Document

It is recognized that responses to men's health issues and their management in the health sector need to be systematic, comprehensive, and responsive to the risks men take. To this end,

the men's health policy document defines men's health in the context of promoting their physical, psychological and social health (Ministry of Health and Medical Education, 2010). We were inspired by Ireland's policy statement, in which *men's health policy* is defined as "a formal statement that defines men's health as an area of priority that identifies targeted actions and provides a specific plan or framework for the actions" (Richardson & Carroll, 2009, p. 107).

A set of criteria was used to design the methodology of the present policy document. Developing such national documents in Iran requires prior consideration in selecting the methods appropriate to the underlying characteristics and environmental circumstances. First, limits on resources must be taken into account. Second, there is a need to take advantage of the window of opportunity provided through mainstreaming, highlighting and regulating key strategies. Third, there is a need to make the most of the expertise available by promoting the contribution of experts and other related organizational stakeholders. Moreover, acceptability of the methodology design to health sector policy makers was a critical criterion for the project team (Esmailzadeh et al., 2013).

Methods used in the development of previous national policy documents were also applied, specifically those at the same policy level having a similar strategic direction. These policy documents include the Health Transformation Plan (HTP), the National Master Plan for Science and Education, and the National Scientific Plan of Health. The model for developing the policy document consisted of three main phases which are illustrated in Figure 1. The timeframe for the development of the policy document is outlined in Table 1.

Preliminary Phase

I. Forming a steering committee. To lead the process of drafting the NMHPD and monitoring its progress, a steering committee was formed. This included experts and key schol-

Table1
Timeframe for the Development of the Policy Document

| | |
|---|------------------------------|
| <i>Preliminary Phase</i> | <i>3 months</i> |
| Forming a steering committee | August 2012 |
| Stakeholder analysis | September – October 2012 |
| Team building | |
| <i>Evolution Phase: Policy definition</i> | <i>5 months in</i> |
| Defining and analyzing the issue | November 2012 |
| Drawing the conceptual framework of the issue | |
| Environmental analysis through focus group discussion | December 2012 |
| <i>Policy Recommendation</i> | <i>5 months in</i> |
| Benchmarking studies | December 2012 – January 2013 |
| Designing the structural framework of the document | January – February 2013 |
| Formulation of the document | February – March 2013 |
| <i>Policy Legitimization</i> | <i>2 months</i> |
| Advocacy | April – May 2013 |
| Informing and legitimization | |
| <i>Maintenance</i> | <i>1 month</i> |
| Implementation, Monitoring and Assessment | May 2013 |

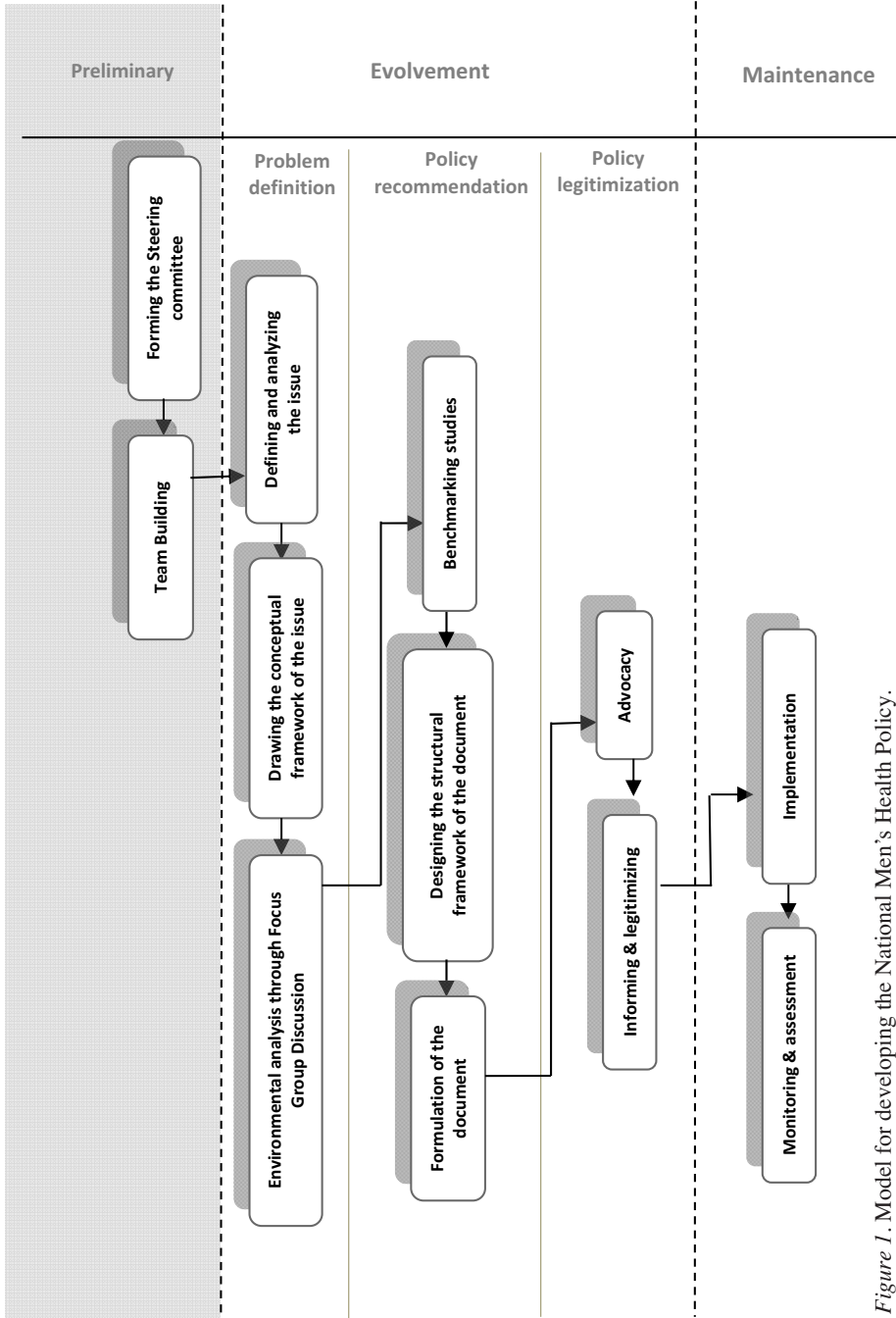


Figure 1. Model for developing the National Men's Health Policy.

ars from the public and private sectors, from different organizational levels from within and outside the health system.

II. Stakeholder analysis. To ensure the development of appropriate policies and also to guarantee the acceptance and implementation of the document by interested organizations and stakeholders in the health system, the committee needed to identify and map stakeholders involved or interested in men's health. In order to identify key stakeholders, the four stages of the business network of Business for Social Responsibility (BSR) were used. A team of four health system experts were assigned by the Steering Committee to complete this analysis in less than a month. In the first stage a list of 60 individuals from different stakeholder organizations related to different sectors of health system was provided. Second, each person's status was evaluated by five main criteria: contribution (value), legitimacy, willingness to engage, influence, and the need for involvement. Next, a stakeholder's map was prepared using the two dimensions of level of expertise and willingness to contribute. The level of influence of each person was shown by circles with different diameters on a chart. The larger circles represent the most influential and the smaller circles represent the least. Finally, based on their position on the map, those stakeholders who had a high level of knowledge and expertise plus high willingness to cooperate were selected.

(1) Teambuilding

Following the stakeholder mapping process, twenty-seven experts from relevant sectors were selected with the approval of the committee. Table 2 indicates the final list of stakeholders.

(2) Development Phase (Problem Definition)

I. Defining and analysing the issue. Identifying, defining and prioritising the key issues of men's health entails measuring the gap between the ideal state, as set out in the national vision of Iran for 2025, and the present status of men's health. The ideal state was set out in national policy documents associated with men's health (including the Constitution Law, Iran's Vision Policy Document for 2025, the 5th Social and Economic Development Plan, the Health Transformation Plan [HTP], the National Scientific Plan of Health) as well as experts' points of view (policy makers, researchers and health system technical experts). The results of a qualitative analysis of National Policy Documents (NPDs) and the experts' opinions are shown in Tables 3 and 4. NPDs are the country's highest policy documents guiding the overall strategic direction of the country in diverse areas of policymaking.

The status quo was determined by statistics and epidemiological evidence (bearing in mind the availability and accessibility of the required data) and comments gathered from health system experts (where data was not available). A list of issues and challenges has been identified on the basis of available evidence and comments which are compiled in Table 3.

According to the results, shown in Table 4, there are two main underlying themes:

- Development of supporting environments; and
- Development of supporting services.

Each theme includes several conceptual categories and each category contains numerous instances.

Table 2
Summary of Participants

| Groups | Number |
|--|--------|
| Mental, physical and social health care service providers' representatives: | 10 |
| • Iran Drug Control Headquarters | |
| • Iranian Endourology and Urolaparascopy Society | |
| • Tehran Municipality | |
| • Rehabilitation Centre of Tehran | |
| • Other representatives from inside and outside the health sector | |
| Academia representatives: | 3 |
| • Social Medicine department, Tehran University of Medical Sciences | |
| • Department of Urology, Shahid Beheshti University of Medical Sciences | |
| • Research Centre for Social Determinants of Health | |
| Researcher representatives: | 5 |
| • Head of the Research Centre for Non-Communicable Diseases | |
| • National Research Centre for Addiction | |
| • Trauma Research Centre, Tehran University of Medical Sciences | |
| Reproduction and Infertility Research Centre | |
| • Nutrition and Food Science Research Institute | |
| Workplace representatives: | 2 |
| • Work, Environment and Health Centre of Ministry of Health and Medical Education | |
| • Labour Relations Department of Ministry of Corporative, Labour and Social Welfare | |
| Health and nutrition representatives: | 2 |
| • Food and Drug Administration | |
| • Community Nutrition Development Centre of Ministry of Health and Medical Education | |
| Government department: | 2 |
| • An expert introduced from Transportation Safety Bureau of the Deputy for transport planning and economy in ministry of Roads & Urban Development | |
| • Traffic Police, police forces | |
| • Ministry of Sport and Youth | |
| Other | 3 |
| • Anti-Drug Headquarter | |
| • Health Policy Council of I.R Iran Broadcasting | |
| • Tehran Municipality | |
| Total | 27 |

Finally, four high-priority areas were discussed and agreed on by the project members through a comparison of results from two identified ideal and present situations. The following were considered to be the main criteria:

- the executive capacities of responsible organizations and organizations involved in men's health;
- the tools and implemental capabilities available;
- how effective the interventions were judged to be; and
- their impact on men's overall health.

These agreed areas included "Service delivery structure", "country's road transport system", "men's lifestyle", and "reproductive and sexual health of men".

I. Drawing up the conceptual framework. In order to determine the scope of men's health in a manner consistent with all of the identified priority areas, the Steering Committee and

Table 3
Key Themes in Relation to Men's Health in High Order National Policy Documents

| Theme | Supportive environment | | | |
|----------|--------------------------|--|-----------------------------------|---|
| Category | Work place | Social spaces | Family and home environment | Education environment |
| Codes | Enjoying full employment | Enjoying welfare services Enjoying social ethics Designing a supportive hierarchical support system for empowering different social groups | Enjoying strong family foundation | Enjoying public education as a public right at different social level Enjoying health literacy |

Table 4
Key Themes in Relation to Men's Health in High Order National Policy Documents

| Theme | Supportive services | | |
|----------|---|---|--|
| Category | Educational services | Social services | Health and care services |
| Codes | Providing free education for everyone at different level Providing equal access to educational opportunity for all Providing new educational opportunities for young people | Facilitating family formation Providing social security Providing new occupational opportunities Improving the Human Development Index Providing universal and compulsory basic insurance for every one | Providing free physical activity facilities for every one Establishing a comprehensive health system based on Primary Health Services Providing unconditional and immediate treatment for victims of road accidents Developing the health system based on different age and gender groups |

the expert team provided a comprehensive definition of men's health. The definition was:

a state in which a man has a level of ability that can freely [with no help] perform his physical, mental and social activities, and considers health as a resource for continuing his life, it is worth bearing in mind that men's health goes beyond biological and psychological functional interactions, i.e., social, cultural and environmental factors have a vast and profound effect on determining the general status of men's health.

Table 5
Summarized Results of Current Challenges for Men's Health in Iran

| Challenges | |
|---|--|
| Road transport systems in the country | <ul style="list-style-type: none"> • Lack of a comprehensive plan to eliminate structural risks of roads, their lighting and traffic signs • Incomplete use of modern safety technologies • Lack of institutional demand for road reconstruction • Inadequate ratio of traffic observers to traffic volume • Conflict of interest between traffic stakeholders • Lack of advocacy plans specifically for the safety of road transportation • Inadequate promotion and education • Inefficient and ineffective existing laws • Lack of social and nonfinancial penalties |
| Lifestyle based on self-care | <ul style="list-style-type: none"> • Lack of standardized educational content in the field of healthy lifestyle education for men • No formal physical activity program in the workplace for men • Lack of original data on men's lifestyle at national, provincial and towns level • Inadequate data and evidence on the level of men's life skills • Failure in adopting a proper insurance approach for improving men's life-style • Lack of consultation services about healthy lifestyles • Absence of criteria and indicators of a healthy lifestyle for an Iranian man • Inability of the judicial body and police forces to pursue legal cases which are not compatible with a healthy lifestyle • Inconsistencies between organizations in pursuing occupational health and safety issues related to men's workplaces • Lack of standardized educational content about life skills for men • Lack of a specific program to refine men's life skills • Lack of joined-up working between organizations which deliver educational services to men |
| Sexual and reproductive health of men | <ul style="list-style-type: none"> • Ineffective relationship education programs • No specific plan for men's sexual health • Inadequate data and evidence on men's sexual health • Low number of licensed counselling and treatment centres for men's physical and behavioural sexual disorders • Cultural barriers to sexual health education • Inadequate information on men's sexual health literacy • Lack of academic training in sexual health • High prevalence of HIV among men in comparison with women |
| Service delivery system based on family environment, education, employment and social community | <ul style="list-style-type: none"> • Unsuitable hours of service delivery for men • Service delivery structure is not based on specific needs of the men • The current service delivery system is not treatment-oriented • Lack of specific plans designed for men • Service delivery in workplace is unlawful and not criteria-based • Fragmented referral system • Inadequate and ineffective insurance coverage for men (inappropriate for those suffering from mental illness or drug addiction) |

After clarifying the scope and definition of men's health, the main and subordinate components of the conceptual framework was identified and mapped as shown in Figure 2. As well as the factors affecting men's health, factors relating to men's relationships with each other were used to determine effective interventions. Therefore, several factors, for instance lifestyle, the socio-economic status of men and their living environment have a part in in-

creasing the risks of shaping unfavourable health consequences or in improving them. On the one hand, to identify the effect of each risk factor on the incidence of diseases, the attributed burden of disease was used with the hypothesis that by eliminating the risk factor prevalence of disease will be reduced. On the other hand, the burden of disease could be investigated in two categories:

- 1) different age groups of population; and
- 2) high risk populations.

The burden of disease might be different in some age groups and among certain high risk populations. In this context, health interventions to improve and promote men's health should be implemented across three levels; (1) primary (preventive), (2) secondary (screening), and (3) tertiary (treatment and rehabilitation). Interventions on each of the three levels are based on determinants of health, burden of disease and associated risk factors, and by considering age groups and high risk groups.

II. Environmental analysis through focus group discussion. In order to gather information on important trends and events affecting health systems and consequently men's health, the Strategic Trend Analysis method was used in six power components areas, namely social, technological, economic, security, political and cultural values. These factors can significantly improve the ability of policy makers and health system planners to predict the future course of events. The required information is collected from secondary data from existing documents. Where data was unavailable the experts' points of view were considered. The results of this method are shown in Table 6. The main purpose of applying this method was to identify and analyze macro-environmental factors affecting health system performance regarding men's health. Having a clear awareness of the status quo in the health system and events which will affect the future can have a positive impact on formulating policies, strategies and plans, consistent with the external environment of the health system. In addition, incorporating the results of the trend analysis provides a means to formulate policies with a more realistic and flexible approach.

Policy Recommendations

I. Benchmarking studies. In order to identify health interventions in policy documents of other countries, the research team collected a set of reports and national archives relating to men's health for each of four priority areas. The first step involved collecting available policy documents. Those that were considered significant were examined more closely, using a framework analysis method. This included policies from the United States of America (Porche 2012; Sonenstein, 1997; Williams 2009), Australia (Fletcher, 2001; Smith & Robertson, 2008), Ireland (Irish Department of Health and Children, 2008; Richardson, 2004), Brazil (Leal et al., 2012), and Europe (White & Cash, 2003; White et al., 2011).

Finally, a set of effective interventions, strategies and recommendations, which were included in the policy documentation of other countries were studied in relation to their objectives, strategies, plans and measures against each dimension of the conceptual framework. This analysis has led to the following areas of interest in men's health being identified:

- 1) Investment in specialist health services designed specifically for men across all levels of service delivery and with regard to all aspects of men's health, especially

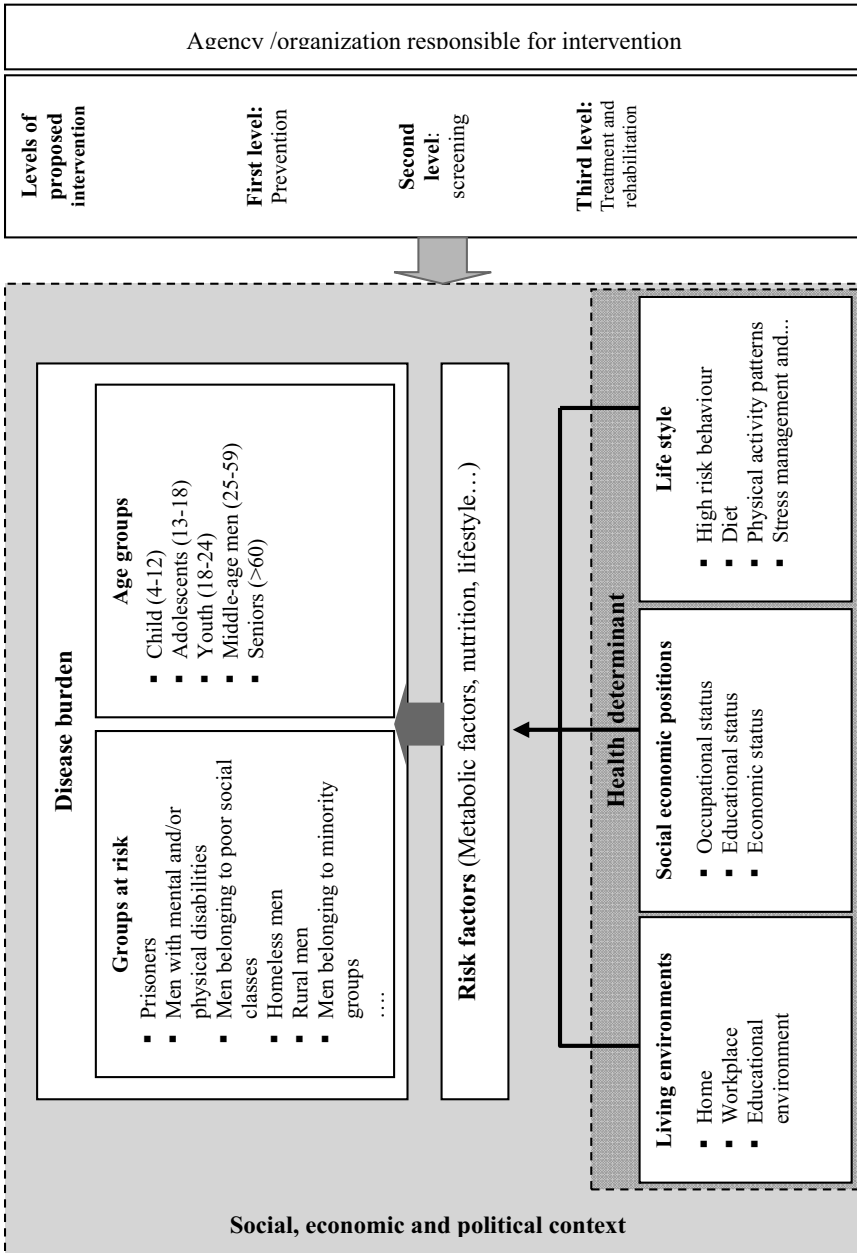


Figure 2. Conceptual framework for men's health.

Table 6
Environmental Analysis Result

| Dimension | Description of trends |
|-------------|---|
| Economy | <ul style="list-style-type: none"> • Increase in inflation • Decline in employment rate • Reduced economic access to health services • Change from a thriving industrial economy to a knowledge based economy • Increase in per capita expenditure for health • People are less able to use standard public transport • Reduce in leisure activities share of expenses among households |
| Politics | <ul style="list-style-type: none"> • Taking political approach toward men's health issues • Continuation of lack of commitment by health system managers in full implementation of NPDs due to failure to provide the required tools • Decrease in public participation in political life • Lack of cooperation between administrative ministries and organizations |
| Environment | <ul style="list-style-type: none"> • Increased air pollution and prevalence of non-communicable diseases • Reduced ratio of safe road to the total population • Increased aviation crashes • Increased environmental pollution due to the unit-citizenship behaviours (littering, ...) • Reduction in buildings safety and increase in household accidents |
| Value | <ul style="list-style-type: none"> • Degradation of life value in men's point of view • Less value put on a healthy life style • Health system managers' disregard for men's health issues • Decline in moral values and religious beliefs • Devaluation of marriage and starting a family • Increased political interventions in health oriented issues • Health issues are a low priority for the higher education system |
| Technology | <ul style="list-style-type: none"> • Increased diversity of drugs and addictive substances • Increased use of information technology • Increased use of mobile and parasites • Increased use of social technologies • Increased use of communicational technologies • Increased gap between technology and its utilization culture |
| Social | <ul style="list-style-type: none"> • Reduced interpersonal relationships • Increased social crime • Increase in high risk sexual behaviours • Increased number of people below poverty line • Continued unawareness of men about health • Inadequate coverage of social insurance for sick or disabled men • Lack of proper support for infertile families • Increased burden of non-communicable diseases • A decline in the percentage of young people within the population • Increase in the economically active population |

- men’s sexual and reproductive health;
- 2) Provision of quick and easy access to services for all age groups;
- 3) Identification and elimination of common biological and social risk factors for men;
- 4) Enhancement of marketing mechanisms in the men’s health field; and
- 5) Improvement of supportive environments that enable and encourage men to take care of themselves and to promote their health.

II. Designing the structural framework of the document. At this point, the steering Committee designed the structural framework of the document. As shown in Figure 3, this structure was designed such that all components, including goals, objectives, policies, plans and focus areas were organized separately under each strategic package. Strategic packages were defined for each priority area, which consisted of all the components under each plan. The framework was developed using a combination of approaches that aimed to resolve current problems and future issues, in a way that dovetailed with the Iranian vision 2025. The Steering Committee achieved this by determining which organizations were accountable for the execution of key priority areas and also by identifying higher-level authorities with supervisory roles. This categorization was conducted for each of strategic packages.

III. Formulation of the document. In order to draw up the document, the Steering Committee organized five successive focus group discussions, with a particular focus on the priority areas and the results gained from benchmarking studies and environmental analysis. In the first session, the participants were asked to decide on a vision statement including vision, mission and values. During the next four focus group discussions, the content of the rest of strategy packages, including goals, objectives, strategies, plans and areas of focus were developed.

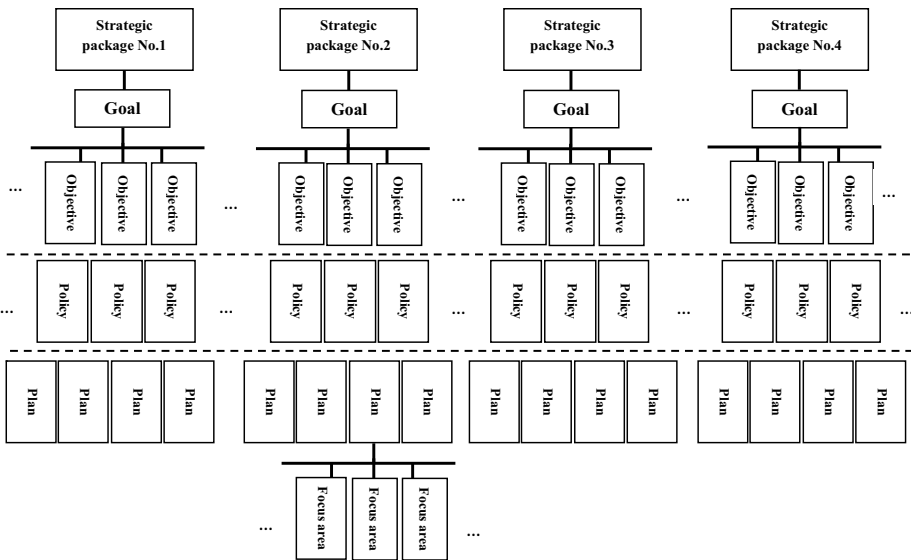


Figure 3. Men’s health document structural framework.

Policy Legitimization

I. Advocacy. A series of meetings were held with the aim of gaining approval and commitment for the implementation of the plans and strategies from the delivery organizations and stakeholders, such as governmental organizations. Prior to the meeting, a copy of the draft document was prepared and sent to the delegates for commentary. This provided an opportunity to develop a common understanding and to clarify any ambiguity.

II. Informing and legitimizing. After seeking and acquiring the commitment of the implementing organizations, measures were undertaken to inform the media of the launch of the men's health policy document in Men's Health Week, which starts on the first Thursday in the last month of the Iranian calendar. Afterwards, it was sent to the Policy Council of the Ministry of Health and Medical Education for further approval and communication.

Maintenance

Implementation, monitoring and assessment. Following the adoption of the document by the Policy Council of the Ministry of Health and Medical Education, the document will enter into an implementation phase. The supervising organisation will have a multi-sectoral approach bearing three responsibilities of continuous monitoring, evaluation and assessment during this phase.

Table 7 indicates the level of contribution agreed for the stakeholder organizations and for those involved in the implementation of identified interventions under each of the four priority areas of the document. For each intervention, the responsible organization and the collaborative one were determined, along with its implementation time frame. This time frame was divided into three periods; 1-3 years, 3-4 years and 5-10 years. The responsible organization was assigned to actively cooperate with the collaborative organization, to prepare their operational/action plan in due time, and to deliver it to one of relevant policy making authorities in the health sector for their approval. The High Council of Food and Drug Security is the highest authority for inter-sectorial policy-making in the country. Funds to implement the interventions were allocated in the annual budget of the related organization, subject to the approval of their operational/action plan.

Lessons Learned

A number of key lessons were learned in the development of the policy that may be helpful to those who are on a similar path.

(1) The importance of seeking the views of stakeholders with an understanding of the context of men's health during the planning process at national level. Providing equal opportunities for the participation of internal and external experts in the health sector in the national planning processes can make it possible to benefit from the implicit knowledge and unwritten experiences of the planning team.

(2) The importance of identifying and increasing the contributions of stakeholders from the outset of the policy planning process. Early identification and mapping of all key stakeholders is critical. This process helps to widen their role and increase their potential contribution in the early stages of the policy-making process. This can accelerate the formation of a common understanding and shared vision among stakeholders, ultimately sup-

Table 7
Level of Stakeholder Contribution in Priority Areas of the Document

| Involved Organizations | Priority Area | Customization of service delivery structure based on family, education and work environments and society, with particular focus on characteristics and needs of men | Improving the safety of road transportation | Change men's lifestyle to a healthy one | Improving men's sexual and reproductive health |
|--|---------------|---|---|---|--|
| The Institute of Standards and Industrial Research of Iran (ISIRI) | | ✓ | ✓ | | |
| Ministry of Youth Affairs and Sport | ✓ | | | ✓ | |
| Iran Police | ✓ | ✓ | ✓ | | |
| Iran drug control headquarter | | | | ✓ | |
| National Sports Organization | | | | ✓ | |
| Iranian Department of Environment | | | | ✓ | |
| Islamic Republic of Iran Broadcasting | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ministry of Intelligence | | | | ✓ | |
| The Ministry of Petroleum | ✓ | | | | |
| Ministry of Science, Research and Technology | ✓ | | | ✓ | |
| Ministry of Communications and Information Technology | ✓ | | | ✓ | |
| Ministry of Labor and Social Affairs | ✓ | | | | |
| Ministry of Culture and Islamic Guidance | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ministry of Housing and Urban Development | | ✓ | ✓ | | |
| Ministry of Economic Affairs and Finance | ✓ | | | | |
| Ministry of Foreign Affairs | ✓ | | | ✓ | |
| Ministry of Roads and Transportation | | ✓ | | | |
| Ministry of Energy | | | ✓ | ✓ | |
| Minister of Justice | | ✓ | ✓ | ✓ | |
| Ministry of Interior | | ✓ | ✓ | ✓ | ✓ |
| Ministry of Welfare and Social Security | ✓ | | | ✓ | |
| Ministry of Industries and Business | ✓ | ✓ | ✓ | ✓ | |
| Ministry of Agriculture | ✓ | | | ✓ | |
| Ministry of Education | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ministry of Health and Medical Education | ✓ | ✓ | ✓ | ✓ | ✓ |

porting a collective approach and preventing the need for the late engagement of additional stakeholders. It will also support the implementation of the policies.

(3) The importance of selecting a high-profile planning team, based on merit. Selecting the planning team members from among the leading experts of the country in the field of planning and policy can encourage the participants and enhance the validity and authenticity of the policies developed.

(4) The importance of redesigning the structure and the health services based on specific needs of men and women. Paying attention to the specific needs of men and women, especially regarding first-level health services, is one of the most important approaches to redesigning the health structure and the health services. In other words, it is essential to reflect on how you design interventions which will reform service delivery packages and structures. It is also vital to take into account the specific needs of different age groups of both men and women and to consider the social determinants of health, risk factors and burden of disease in each age group. The correct structure can provide appropriate and equitable access to health services by men and women, as well as increasing effectiveness and efficiency in the health system.

(5) The finding that health centres in rural areas do not have the capacity to deliver services to men. There is also an urgent need to strengthen workplace health centres. Due to the special characteristics of men's health treatment needs, the planning team came to the conclusion that workers' health centres should be close to their workplace.

(6) The importance of adopting an active approach towards health service delivery with men. Given that men are perceived to be more reluctant to visit doctors and use health services than women, it is essential to take an active approach to providing health service delivery systems with a high sensitivity to men's needs.

CONCLUSION

The formulation an Iranian Men's Health NPD for the first time was a major event in the reformation of Iran's health system, as it brought about changes both in service delivery and in types of service delivered. A set of fundamental pre-conditions will also be needed if Iran is to realize success across each of the identified priority areas in the Men's Health NPD. The NPD goals and implementation should be realized in the years ahead but will face serious obstacles, if there is no coherent and committed collaboration between the organizations involved to promote men's health. Financial and strategic support of the government is vital.

However, if funds are properly allocated to the intervening and implementing organizations, and if there is enough commitment from and collaboration between organizations, a dramatic improvement in the health of men is expected in Iran. Meanwhile, the formulation of the sixth national plan for social and economic development of Iran, which reflects the determined political will of the government to adopt and implement solutions to health sector policies and towards the overall health of the population, provides an excellent opportunity to redesign and reform service delivery structures. This includes redesigning health services so that they are tailored to gender-specific needs, especially those of men.

In this context, The Ministry of Health, as the authority responsible for public health, can state its expectations from other organizations regarding men's health, along with that of

other groups in the population. The present study indicates that Iran's experience in formulating a Men's Health NPD is as significant as it is in other countries such as Australia, Ireland, Brazil, the U.S., and European countries. Furthermore, this document expands the understanding of health policy makers and planners in generating more effective strategic solutions for an enhanced health service delivery system. It has done this by observing and implementing other countries' best practice on common men's health issues (e.g., risk factors from lifestyle, sexual and reproductive health and service delivery structures), while keeping in mind the underlying characteristics of Iran.

REFERENCES

- Bakhtiyari, M., Delpisheh, A., Riahi, S. M., Latifi, A., Zayeri, F., Salehi, M., & Soori, H. (2012). Epidemiology of occupational accidents among Iranian insured workers. *Safety Science*, *50*(7), 1480-1484.
- Doyal, L. (2000). Gender equity in health: Debates and dilemmas. *Social Science & Medicine*, *51*(6), 931-939.
- Esmailzadeh, H., Rajabi, F., Rostamigooran, N., & Majdzadeh, R. (2013). Iran health system reform plan methodology. *Iranian Journal of Public Health*, *42*(1), 13-17.
- Fletcher, R. (2001). The development of men's health in Australia. In N. Davidson & T. Llyod (Eds.), *Promoting men's health: A guide for practitioners* (pp. 67-76). London, England: Bal-liere Tindall.
- Ghasemi, S., Delavar, A., & KarimiZarchi, M. (2013). Moghayese shakhese kolle salamate ravane zanan v amardan be shiveye faratahlil [Comparison of mental health indicators for women and men through a meta-analysis approach]. *Faslname andazegiri tarbiati [Quarterly Journal of Educational Measurement]*, *10*(3), 159-175.
- Hosseini, A.A., Sobhani-Rad, D., Ghandehari, K., & Benamer, H.T. (2010). Frequency and clinical patterns of stroke in Iran: Systematic and critical review. *BMC Neurology*, *10*(1), 72.
- Iran's Statistics Centre. (2012). A selection of Iran's economic, social and cultural indices and indicators 2012. Retrieved from <http://www.ostan-hm.ir/Upload/000Amar/gozideh/92-2.pdf>
- Iranian Legal Medicine Organization. (2014). Moghayeseye amare motevafiat va masdoumine havase ranandegi teye haft mah avale sale 1392 va 1393 [Comparison of mortalities due to road accidents in 2013 and 2014]. Retrieved from http://www.lmo.ir/uploads/m_tas_7.pdf
- Irish Department of Health and Children. (2008). *National Men's Health Policy 2008-2013: Working with men in Ireland to achieve optimum health and wellbeing*. Dublin: Irish Department of Health and Children.
- Jafari, N., Abolhassani, F., Naghavi, M., Pourmalek, F., Lakeh, M.M., Kazemeini, H., & Kabir, M. (2009). National burden of disease and study in Iran. *Iranian Journal of Public Health [Tehran University of Medical Sciences]*, *38*(Suppl. 1), 71-73.
- Jin, R.L., Shah, C.P., & Svoboda, T.J. (1995). The impact of unemployment on health: A review of the evidence. *Canadian Medical Association Journal*, *153*(5), 529-540.
- Khayati, F., & Saberi, M.H. (2009). Primary Health Care (PHC) an ever strategy for health equity extension. *Journal of Health Administration*, *12*(35), 33-40.
- Khosravi, A., Taylor, R., Naghavi, M., & Lopez, A.D. (2007). Mortality in the Islamic Republic of Iran, 1964-2004. *Bulletin of the World Health Organization*, *85*(8), 607-614.
- Leal, A.F., Figueiredo, W., & Nogueira-da-Silva, G.S. (2012). Charting the Brazilian Comprehensive Healthcare Policy for Men (PNAISH), from its formulation through to its implementation in local public health services. *Ciência & Saúde Coletiva*, *17*(10), 2607-2616.
- Michaud, C.M., McKenna, M.T., Begg, S., Tomijima, N., Majmudar, M., Bulzacchelli, M.T., ... Kreiser, J.G. (2006). The burden of disease and injury in the United States 1996. *Population Health Metrics*, *4*(11), 11.

- Ministry of Health and Medical Education of Iran. (2010). *National Scientific Plan for Health* (Persian). Tehran, Iran: MOHME Press. Retrieved from http://hbi.ir/info/banner/S&T_Map-Final.pdf
- Ministry of Health and Medical Education of Iran. (2012). *Health Transformation Plan (HTP)* (Persian). Tehran, Iran: MOHME Press.
- Naghavi, M., Abolhassani, F., Pourmalek, F., Lakeh, M.M., Jafari, N., Vaseghi, S., & Kazemeini, H. (2009). The burden of disease and injury in Iran 2003. *Population Health Metrics*, 7(1), 9.
- National AIDS Committee Secretariat, Ministry of Health and Medical Education. (2012, March). Islamic Republic of Iran—AIDS Progress Report On Monitoring of the United Nations General Assembly Special Session on HIV and AIDS. Retrieved from http://www.unaids.org/sites/default/files/en/dataanalysis/knowyourresponse/countryprogressreports/2012countries/IRIran%20AIDS%20Progress%20Report%202012%20English%20final1_1.pdf
- Nouri, S. (2010). Salamate mardane Irani [Men's health Iran]. Retrieved from http://mboh.umsha.ac.ir/uploads/14_44_Salamat%20%20Mardan.pdf
- Porche, D.J (2012). A men's health national policy agenda. *American Journal of Men's Health*, 6(1), 5-5.
- Pourmalek, F., Abolhassani, F., Naghavi, M., Mohammad, K., Majdzadeh, R. ... Fotouhi, A. (2009). Direct estimation of life expectancy in the Islamic Republic of Iran in 2003. *Eastern Mediterranean Health Journal*, 15(1), 76-84.
- Ramezani Tehrani, F., Amiri, P., Simbor, M., Rostami, M., & Azizi, F. (2011). Aya mardan salamata ra yek olaviat mahsoub mikonand? Yek motale keifi [Do men consider health a priority? A qualitative study]. *Hakim Research Journal*, 13(4), 241-249.
- Raine, R., Goldfrad, C., Rowan, K., & Black, N. (2002). Influence of patient gender on admission to intensive care. *Journal of Epidemiology and Community Health*, 56(6), 418-423.
- Richardson, N. (2004). *Getting inside men's health*. Kilkenny, Ireland: Health Promotion Department, South Eastern Health Board.
- Richardson, N., & Carroll, P.C. (2009). Getting men's health onto a policy agenda—Charting the development of a national men's health policy in Ireland. *Journal of Men's Health*, 6(2), 105-113.
- Rostam, T.P., & Ismail, A. (2011). Socio-economic consequences of traffic accidents in Iran. *Journal of Applied Sciences Research*, 5(9), 897-901.
- Rostamigooran, N., Esmailzadeh, H., Rajabi, F., Majdzadeh, R., Larijani, B., & Dastgerdi, M.V. (2013). Health system vision of Iran in 2025. *Iranian Journal of Public Health*, 42, 18-22.
- Smith, J.A., & Robertson, S. (2008). Men's health promotion: A new frontier in Australia and the UK? *Health Promotion International*, 23(3), 283-289.
- Sonenstein, F.L. (Ed.). (2000). *Young men's sexual and reproductive health: Toward a national strategy. Getting started*. Washington, DC: The Urban Institute.
- Thomas, I. (2009). Issues and concerns for men contacting Mensline Australia. *Australian Institute of Family Studies*, 11, 10-14.
- UNAIDS. (2012). *Global report: UNAIDS report on the global AIDS epidemic: 2012*. Joint United Nations Programme on HIV/AIDS (UNAIDS).
- White, A., & Cash, K. (2003). A report on the state of men's health across 17 European countries. The European Men's Health Forum. Brussels: The European Men's Health Forum.
- White, A., De Sousa, B., De Visser, R., Hogston, R., Madsen, S.A., ... Zatoński, W. (2011) Men's health in Europe. *Journal of Men's Health*, 8(3), 192-201.
- Williams, S.T. (2009). Men's health in the USA. In D. Wilkins & E. Savoye (Eds.), *Men's health around the world: A review of policy and progress across 11 countries* (pp. 69-72). Brussels: European Men's Health Forum (EMHF).
- World Health Organization (WHO). (2013). Country statistics: Iran. WHO. Retrieved from <http://www.who.int/countries/irn/en/>

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