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Title

Analysis for policy related to salt reduction in Iran and the presentation of policy
option

By

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Abstract

Introduction and objectives: Non-communicable diseases have become the biggest and fastest threat to human health not only in developed countries, but also in developing and low-income countries, causing more than 40 million deaths, equivalent to 70% of deaths in the worldwide. The burden of non-communicable diseases such as cardiovascular diseases, diabetes, obesity and cancer has increased. High blood pressure is one of the most important risk factors for cardiovascular disease, which is the third leading cause of death in the world. one important and preventable nutritional factor that increases blood pressure is consuming and receiving more than the daily allowable amount of salt. If observed, it can potentially reduce 17% of cardiovascular diseases. Therefore, the aim of this study is to identify mechanisms and policies of salt control in the world in order to control and provide solutions to reduce its consumption in Iran.

Method: The present study is a mixed-method(quantitative-qualitative) study type of consecutive studies, which deals with the recognition, correction, design, development and selection of policies using policy-making approaches. The policy analysis framework of the present study is the Bardach framework, and the study was conducted in eight parts (problem definition, collection of available evidence, design of varois policy solutions and options, selection of criteria, prediction of consequences, trade-offs, decision making and repor presentation).In this research, systematic review methods, quantitative survey, documents and review articles, deep and semi-structured interviews were used to answer the research questions and hypotheses. To analyze the current situation regarding salt consumption, a systematic review study was conducted on the general

population of Iran, categorized by gender and provinces. In the next stage, which included a comprehensive review of salt reduction policies in Iran and the world, relevant policies, laws and documents were searched in electronic sources and international websites. Additionally, a bottom-up approach was used to estimate the economic costs of heart diseases associated with high blood pressure. A qualitative study was conducted to analyze salt reduction policies in the country, and 23 influential in this field were interviewed using purposive sampling. The MAXQDA software was used to analyze the data and provide policy options. finally, the policy options were prioritized using the Delphi method to present them to the relevant stakeholders.

Result: according to a systematic review and meta-analysis of studies conducted, the average salt consumption in the community is approximately 9.674 grams/day, which is almost twice the recommended amount by the World Health Organization, among the provinces of the country, Lorestan had the highest amount with 13.05 grams per day and Bushehr province had the lowest amount with 8.16 grams per day. diseases associated with high salt intake in the population impose a significant economic burden on Iran's economy in the range of (130,170,000-177,176,000 million Rials). Although reducing salt intake in the population is difficult in the direction of improving public health, according to the results of this study, multidimensional programs are needed to reduce consumption, including industry participation in reformulating products, low sodium diet and monitoring the sodium content of foods, awareness campaigns (media and communication strategy), labeling and developing low-salt product identification symbols, imposing taxes on salty foods and increasing the price of unhealthy foods, and intervening in government institutions reduce salt

consumption. one the most important finding in the discussion section is the cultural, economic, international, and structural challenges, the most important of which are the impact of low nutritional and media literacy and the western pattern that have an effective role in increasing salt consumption in the country. The problem in this field is the trend towards increasing non-communicable diseases and risk factors. The political trend that started in the country for a long time and coincided with the in the latest changes with the issuance of top-down documents and the political trend change with the of government and opened the window of opportunity for salt reduction policy-making. the use of national and international evidence moved towards down-top documents, attracted the attention and support of senior political leaders and officials, spent time and time to carry out the necessary studies and finalize proposed programs, formed relevant working groups, hold regular meetings, prepared and sent executive instructins, and the use of top-down approach in planning, ignoring some stakeholders and neglecting the need for coordination posed a challenge in the policy-making process. Two groups of external and internal structures were among the relevant actors in this policy. However, these actors did not enter the field of action in such a way as to implement the program, which led to their insufficient commitment and, consequently, resistance from them. Although policymakers paid attention to the importance of producing evidence, there were still deficiencies in this area. Also, among the political options presented, increasing nutritional literacy to promote healthy eating habits, increasing media literacy to reduce risky eating behaviors, effective and structured education on the amount of salt consumed and its sources, holding healthy food festivals and promoting the use of low-salt foods and substitutes (herbal spices), improving consumer knowledge to interpret labeling and increased monitoring of the process, habituating children's and

parents' taste to low-salt foods, providing a model for directing people's habits towards buying healthy (low-salt) products and giving more points to the industry from the perspective of stakeholders.

Discussion and conclusion: The findings of the study in the first part showed that the salt consumption rate in the Iranian population is close to twice the recommendation of the World Health Organization. Fortunately, serious attention has been paid to this issue since 2009 and with the necessary measures, support for all relevant sectors (governmental and private) has been put on the agenda. Currently, reducing salt consumption is one of the main priorities of planners, policymakers, and health system experts in Iran. Although policies and strategies have been implemented to reduce salt consumption in the country, it seems that we are facing challenges to achieve the World Health Organization's goal of a 30% reduction in salt consumption by 2025. Attention to the shortcomings in reducing salt consumption in the country is important from a policy-making perspective and can be used in the development of the desired reforms in this program in the country. On the other hand, the costs of heart and vascular diseases associated with salt consumption in the country are significantly high. Therefore, more actions are needed, especially structural interventions to regulate food, taxation, and marketing. There are also some problems in the implementation areas, especially in tax and economic policies, as well as issues related to other sectors such as industry. Therefore, given the importance of healthy and low-salt nutrition in preventing non-communicable diseases, the government must pay special attention to this issue. Also, many resources are needed to treat

these diseases, and all relevant stakeholders' capacity should be used in planning and implementing the desired policies to achieve the desired salt consumption level.

Key word: Policy, Salt intake, Policy for analysis, Iran , Policy options