

Plan to design policies for science, technology and innovation in the field of obesity prevention and control measures in 20 years national vision

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Abstract: Problem Statement and Research Objectives: Obesity is an epidemic in a century, and developed and developing countries as a major problem in health care is a serious concern. Prevalence of overweight and obesity between the ages of 50 to 70 percent over twenty years In Tehran, 50% were overweight and 15 to 20 percent are obese. Obesity is directly or indirectly more than 10 percent of the cost of a country it covers. Obesity is also directly both through the development of diabetes, heart disease and various cancers are caused by damage to healthy humans. The increasing prevalence of this disease in children and adolescents countries is a serious concern. In most developed countries and some developing countries, the national program for prevention and control of obesity are defined in which to develop strategies and action plans and the role of all governmental agencies and non-governmental organizations also play a role (NGO) families and society are discussed. Of these countries can the U.S. and other countries like Canada, Australia, Europe and the Association of Southeast Asian Nations, cited. In the industrialized world and developing countries like the United States of America, several states, including Ohio, New Jersey, New York, a program designed to prevent obesity and its implementation are being. Survey accomplished only by acting within the scope of national policies and programs to prevent and control obesity, Obesity Disease Control and Prevention's National Center for Disease Control of the Ministry of Health was developed in 1384, but unfortunately has not been applied.

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Method:

This study is a comparative analysis which documents the study and analysis of upstream science and technology policy, and national policy documents in ten countries, the World Health Organization, Centers for Disease Control and Prevention and the National Institutes of Health in the area of obesity

This study is a comparative analysis which documents the study and analysis of upstream science and technology policy, and national policy documents in ten countries World Health Organization, Centers for Disease Control and Prevention and the National Institutes of Health in the field of obesity, including twenty-six of the original model's Plan And questionnaire design, content validity and reliability of the model obtained by ten experts in the field of science and technology were reviewed.

Research objectives

The main purpose

The National Plan of mining policy, science, technology and innovation in the field of obesity prevention and control in 1404

Secondary objectives of the study

Secondary objectives of the study are:

A - Mining index compilation national document

B - Mining macroeconomic indices of national documents such as vision and mission

C - Derived indicators to measure national document

D -Extracting performance indicators, monitoring and evaluation of national documents

Assumptions

A -General of the national document includes general topics such as members of the policy committee, risk maps, and definitions are used in the document.

B -The national instrument of macroeconomic indicators, including vision and mission and goals are.

C -Direction indicator of the direction of national policy and strategy documents is implementation.

D -The index of implementation, monitoring and evaluation of national document contains index performance, how to monitor and evaluate the national document.

Review of literature:

Obesity is a disorder of the body's physical composition, which increases the relative or absolute amount of body fat is defined, is very common. The prevalence of obesity in all age groups and in most developing countries is increasing. So that the current

epidemic of obesity can be as comprehensive in the world, the growth rate is high, that is. At present, the prevalence of obesity in adults in different countries, between 10 to 40 percent. Prevalence of overweight and obesity in Iranian adults, 23% and 40% respectively have been reported Obesity is a risk of various diseases, including some types of cancer, type 2 diabetes mellitus and cardiovascular disease and increase life expectancy is reduced. (3, 4, 5 and 9)

According to the Center for Disease Control and Prevention (CDC), obesity in adults by body mass index (BMI) is calculated

Overweight: A person who has a BMI equal to or greater than 25 and less than 30 is overweight.

Obesity is defined as a person who has a BMI equal to or higher than 30.

Another definition of overweight and obesity in children and adolescents are either overweight or at risk for overweight is defined. Also, the amount of body fat in boys and girls at different ages. In children and adolescents 2 to 19 years old, overweight and obesity based on BMI for age than is stated. Overweight: a BMI above the 85th percentile and below the 95th percentile, I am Obesity: BMI equal to or above the 95 th percentile.

Complications of Obesity

Statistics show that every year 6/2 million people worldwide lose their lives due to weight gain or obesity. Obese individuals are at risk for high blood pressure, elevated lipid diseases, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, respiratory disorders, stroke (CVA), heart disorders, stroke (MI), gout and arthritis it caused, osteoarthritis, sleep apnea, certain types of cancer and courier syndrome (with symptoms of obesity, red face and bloodshot, drowsiness and poor breathing) are. Also, diseases that obese patients are suffering more than ordinary people, including hypertension, type 2 diabetes, angina, cardiac arrest and increased costs resulting from the treatment of osteoarthritis is.

Complications of obesity in children and adolescents

We all know that obesity is a complex, multifaceted health outcomes by genetic, metabolic efficiency, level of physical activity, dietary intake, and psychosocial and environmental factors are affected. Kids in the short and long term complications of the disease Overweight adolescents compared with their peers who have a good weight At higher risk of developing hyperlipidemia, hypertension, insulin resistance and type 2 diabetes are This group of adolescents should be screened for secondary level to include information on family history Blood pressure, cholesterol levels and changes in BMI and weight changes may be referred concerns.

The impact of obesity on stress and mental health problems in children and adolescents

In 1381 a study by Hashemi M, et al (1384) on the phenomenon of anxiety in students of 12 to 18 years were overweight or obese. The study shows.

Between parental employment status and student anxiety score is associated. So that students have a mother or father of the employee or of cultural anxiety levels have lower education levels are more favorable Although many studies have been conducted in Western societies show higher anxiety in obese adolescents The lack of significant of anxiety in the present study may be because In our society, yet obesity is regarded as a measure of health anxiety and therefore teenagers are overweight Obesity is linked to anxiety, depression and weight gain, but the relationship is not seen. The findings also show that there is a direct relationship between obesity and fear of society.

Obesity is associated with cardiovascular disease in children and adolescents

Studies in Iran (Tehran Lipid and Glucose Study) shows that in obese adolescents, the mean systolic and diastolic blood pressure, BMI and TG and increases with age Levels of HDL - C and LDL - C and serum cholesterol in individuals older than 12 years increased and then decreased with increasing age. Obese girls at greater risk of increased TG, LDL - C, total cholesterol, systolic and diastolic blood pressure and lower HDL - C compared to the other girls are. Thus we can say that the prevalence of cardiovascular disease risk factors in obese girls increased in Tehran (1, 2, 3 and 4)

The cost of obesity

The latest Ministry of Health research in the field of measuring the burden of disease in 1382, has been published Indirect costs such as the number of days that a person due to illness or disease relapse or even obesity and heart problems, loses his job. Problems as well as deaths due to obesity is estimated to cost £ 4 billion in one year alone can lead to (5).

In a project entitled LIPGENE, the prevalence of obesity in Europe of 15 member states were examined, the results of this project show, in 2002, in both men and women at least half of the 15 member states of Europe, the prevalence of obesity was higher than 20%. Also this year, the total direct and indirect costs of obesity in the state is estimated at EUR 32800106 (5)

Range in 2007 and the results of the economic impact of obesity as an investigation were conducted. The study examined the costs of obesity. One of the complications of obesity, diabetes. Based on this study, 6% incidence of diabetes is directly

related to overweight and obesity. Currently, about 1 billion people worldwide are overweight with 850 million people around the world suffer from weight loss. Estimates based on the survey, 175 million people with diabetes worldwide in 2000 will reach 353 million in 2030 to over 24% in India and China by 2050 this figure will have.

Overweight fees are 3 levels:

1. Individual level, obesity causes a person is restricted in many ways, some of these can be measured.

2. At work, many people look fatter because the cost of insurance, low levels of functional and ... The total cost is high, they are not hiring.

3. Obesity costs the state and national programs and ... Increases, because the personal cost of illness and unemployment cover individuals (5). Studies by the World Health Organization, the economic costs of obesity are extracted are shown in the table below (25):

Table 1 - Estimated economic costs of obesity in the country, according to World Health Organization

Table 3.1. Estimated economic costs of obesity according to available studies

Country (study)	Year of estimate	BMI criterion (kg/m ²)	Cost			
			Type	Per capita (in US\$ at PPP ^a)	Share of total current expenditure on health (%)	Share of GDP ^b (%)
In the WHO European Region						
Belgium (1)	1999	≥30	Direct	69	3	-
France (range) (2)	1992	≥30	Direct	71-148	0.6-1.3	-
France (3)	1992	≥27	Direct	202	1.8	0.9
Germany (range) (4)	2001	≥30	Direct	17-35	1.2-2.6	0.1-0.3
			Indirect	17-38	-	
Netherlands (5,6)	1993	≥30	Direct	32	1.7	
Sweden (7)	2003	≥30	Direct	45	1.8	0.7
			Indirect	157	-	
Switzerland (4)	2001	≥25	Direct + indirect	186	-	0.6
United Kingdom (England, range) (8)	2002	≥30	Direct	NA ^c	2.3-2.6	
EU (15 countries) (9)	2002	≥30	Direct + indirect	NA	NA	0.3
Outside the WHO European Region						
Australia (range) (10)	1995-1996	≥30	Direct	28-51	1.7-3.2	-
Canada (11)	1997	≥27	Direct	49	2.4	-
Canada (12)	2001	≥30	Direct	41	1.6	0.4
			Indirect	70	-	
Japan (13)	1995-1998	≥30	Direct	55	0.2	-
New Zealand (14)	1991	≥30	Direct	26	NA	-
United States (15)	1994	≥30	Direct	92	2.7	-
United States (16)	1995	≥30	Direct	263	7.3	-
United States (17)	1995	≥29	Direct	194	5.4	-
			Direct + indirect	371	-	1.4
United States (18)	1998	≥25	Direct	285	7.1	-
United States (19)	2000	≥30	Direct	199	4.8	1.2
			Indirect	183	-	

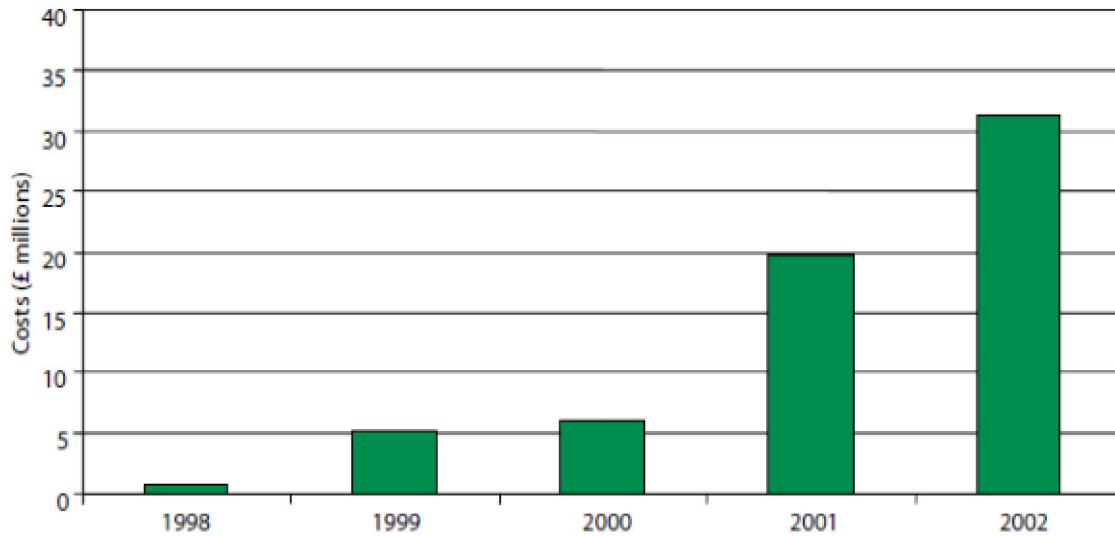
^a PPP = purchasing power parity. PPP controls for differences in purchasing power, which means that a dollar may have more value in terms of consumption in one country than in another.

^b When both direct and indirect costs have been calculated in the same study, the total cost as percentage of gross domestic product (GDP) is the sum of both direct and indirect costs.

^c NA = not available.

Table 1 - Estimated economic costs of obesity in the country, according to World Health Organization (25) The following chart spending in Britain for against obesity drugs have been shown (25):

Fig 3.1. Costs of prescriptions for anti-obesity drugs in England, 1998–2002



Source: adapted from House of Commons Health Committee (8).

Figure 1 - The cost to purchase the anti-obesity drugs in Britain

Variables

Twenty-six variables in this study are:

Code1-Introduction to obesity prevention and control of science and technology policy committee

Code2-Definitions of terms used in the policy document, the National Science, Technology and Innovation in 1404 to prevent and control obesity.

Code3-The need for the formulation of national policy document Science, Technology and Innovation in 1404 to prevent and control obesity.

Code4- A looks at the current status of overweight and obesity in the country.

Code5- A looks at the science, technology and innovation in the field of obesity prevention and control

Code 6 - the formulation of a national policy document Science, Technology and Innovation in 1404 to prevent and control obesity.

Code 7 - Audience of the document

Code 8 - A national perspective on science, technology and innovation in the field of obesity prevention and control in 1404

Code 9 - The mission of the National System of Science, Technology and Innovation in the area of prevention and control of obesity in 1404

Code 10 - implications for national development of science, technology and innovation in the field of obesity prevention and control in 1404

Code 11 - the fundamental values of science, technology and innovation in the field of obesity prevention and control in 1404

Code 12 - the major goals of science, technology and innovation in the field of obesity prevention and control in 1404

Code 13 - Development of science and technology innovation system in the constitution to prevent and control obesity.

Code 14 - for policy-making, management and legislation

Code 15 - For making the allocation of financial resources, facilitating increased investment

Code 16 - for the production of knowledge

Code 17 - for the dissemination and sharing of knowledge produced

Code 18 - HR Orientation

Code 19 - directed by facilitating increased production of goods and services

Code 20 - entrepreneurial orientation

Code 21 - To promote the norms and culture

Code 22 - for making connections

Code 23 - the custodian of the document

Code 24 - the duties of National Committee of Science and Technology Policy to prevent and control obesity Code

25 - System of Evaluation Code

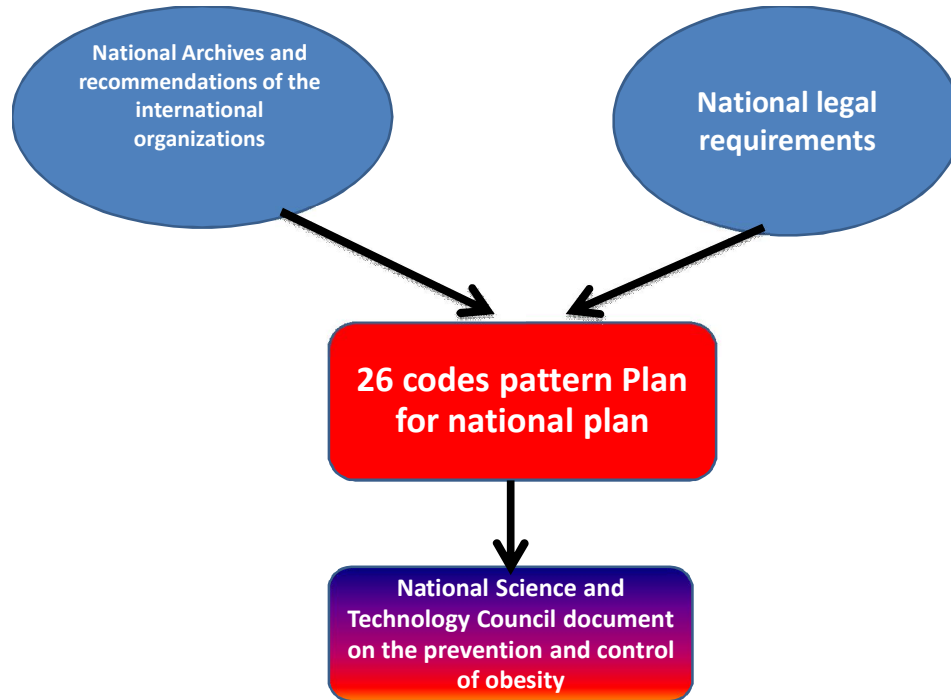
26 - Graduate Studies

Analytical framework and research model

This study is a comparative analysis which documents the study and analysis of upstream science and technology policy, and national policy documents in ten countries, the World Health Organization, Centers for Disease Control and National Institutes of Health, Prevention and Control of Obesity. The initial

model consists of twenty-six index Plan reached, then questionnaires designed pattern obtained in terms of

content validity and its reliability has been examined.



Methods of research and data analysis

Twenty-six of the code pattern obtained was tested for validity and repeatability. To investigate the validity (validity) of validity (content validity) were used.

Validity

The purpose of the narrative proper, meaningful and special benefits derived from the tales of an index or scale a model to follow.(30)

Content validity (Content validity) The content of the questionnaire by experts as one of the best ways to assess the validity of a measuring instrument. In order to ensure that the content validity of the test content represents structures or structures that can be claimed that the measures, the test content is considered (30). The content validity of an instrument definitions are:

1. Degree of fit index is a tool to measure the structure.
2. Developing indicators in whether a tool for representing content measurements are adequate or not?

To assess content validity, face validity as well, there are two proven methods of qualitative and quantitative.

The content validity of qualitative interviews conducted with a number of experts and asked them to study the exact tool to detail in the views of the experts and their writing. Quantitative methods used in

the formula, the validity are calculated. (30) Validity of quantitative

To investigate the validity of the quantitative indicators, the validity (CVR) and the content validity index (CVI) there. CVR index requires an index of statements and CVI, relevance, clarity and relevance of the research to see items experts suggest.

Calculate the relative validity (CVR)

Calculation of the CVR is to select the most important research content to ensure statistically.

- 1 - is essential. 2 - It is helpful, but not necessary.
- 3 - not necessary.

National policy document proposed five indicators of science, technology and innovation in the field of prevention, the overall appeal were:

- Code 5 - A look at the science, technology and innovation in the field of obesity prevention and control

- Code 9 - The mission of the National System of Science, Technology and Innovation in the area of prevention and control of obesity in 1404

- Code 11 - the fundamental values of science, technology and innovation in the field of obesity prevention and control in 1404

- Code 17 - for the dissemination and sharing of knowledge produced

- Code 20 - entrepreneurial orientation

Eleven indicators that require further explanation or document with minor changes:

- Code 1 - Introduction and Plenipotentiary Representative to the Strategic Committee
- Code 4 - A look at the current status of overweight and obesity in the country.
- Code 6 - the formulation of a national policy document Science, Technology and Innovation in 1404 to prevent and control obesity.
- Code 7 - Audience of the document
- Code 8 - The prospect of a national system of science, technology and innovation in the field of obesity prevention and control in 1404
- Code 10 - implications for national development of science, technology and innovation in the field of obesity prevention and control in 1404
- Code 16 - for the production of knowledge
- Code 19 - directed by facilitating increased production of goods and services
- Code 21 - To promote the norms and culture
- Code 22 - for making connections
- Code 26 - Graduate Studies

Suggestions

A. Before the implementation of the third stage, the content validity of the model proposed in this paper after changes, once again, by experts from the fields of health management and policy committee members is stipulated in the code of a template.

• B - track the administrative process for the third and fourth stages of the implementation of the National Plan

• First, to identify requirements indisputable, policies twenty-two countries and international organizations in the field of science and technology to prevent and control obesity

• Second stage: the design of national policy document editing paradigm of science, technology and innovation in the field of prevention and control of obesity in the country in 1404

• Second stage: the design of national policy document editing paradigm of science, technology and innovation in the field of prevention and control of obesity in the country in 1404

• Step Four: Review draft document and editing the final document

The results:

As a result of the 26 indicators presented as a model for a national document, the five index points to the importance of the acquisition were not, and revise. Eleven indicators of relevance, simplicity and clarity of the problem and should be clarification on the model. The two main recommendations from the study include:

A. Before entering the third phase of the project, patterned after the content validity of the proposed changes in the research By experts from the fields of health management and policy committee members outside of other health indicators included in a model to study.

B. The first and second stages of this study establish a national document, the document following the third and fourth stages of the National (third stage involves the formation of a panel of executives obesity prevention and control, and develop a draft document and the fourth stage document review and editing of the draft final document) should be performed. Proportion, simplicity and clarity, difficulty and need more explanation about the pattern can be.

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