
**Assessment of the Importance of Population Awareness about Oral Health
Analysis of the Expert Opinions**

A. Makalatia, E.Mirvelashvili, N. Chipashvili, L.Baramidze, L.Gumbaridze

Tbilisi State Medical University, Department of Public Health Management, Economics and Policy

Abstract

Prevention and control of organ and tissue pathologies of the oral cavity are considered to be a relevant topic of public health throughout the world. According to the World Health report 2003 (unless we take action today, many countries will not be able to pay for treatment programs), the cost of treatment of oral diseases is high and ranks fourth among the diseases with high treatment and management spending. Without the implementation of oral disease prevention programs and interventions, even many high-income countries cannot fund oral health programs, which negatively affects public health. In low- and middle-income countries, due to increased rates of consumed unhealthy diet and tobacco consumption, an increase in the burden of oral disease might be expected.

The aim of the study is an assessment of the importance of adequate oral health awareness among the general population by healthcare professionals.

The Study Materials and Methods: there have been conducted - qualitative research/study, in-depth interview; all basic principles of qualitative research were observed; the goals and objectives of the research were shared with the persons/experts involved in the study. 8 experts (average age of expert $52,17 \pm 2,89$ working experience $14,5 \pm 3,5$ year), 2 women and 6 men were involved in the research/study.

The study results: To the first group question - what is your position on the need in population oral health awareness, the vast majority of experts answered that oral diseases are considered the major public health problems. Their impact on the health status of both, the individuals and the community as a whole is of great significance.

Answering the second part of the questions - what is the current reality in the country regarding the promotion of oral health issues - most experts noted that there is no unified oral health strategy in the country. The population is provided with information by the National Center for Disease Control and Public Health (NCDC), however, the measures taken are unsystematic.

The third part of the questions related to the desirable reality, being relevant to the challenges on the one hand and based on real opportunities of the country's healthcare sector on the other, was answered by experts as follows: first of all, unified strategic document on oral health with the active involvement of the Public Health Center, professional associations and experts should be elaborated.

In addition, the prevention and management of oral diseases should be integrated into a unified strategy for managing non-communicable diseases. The creation of multi-sectoral group/team to work on the development of a strategy and long-term plan of action and to promote their implementation is needed. In addition, experts unanimously note that for Georgia it is necessary to share world experience in this direction, and especially to follow the WHO and CDC recommendations.

Conclusion: Thus, the vast majority of experts believe that informing the population about oral health affecting many aspects of oral health is of great importance. According to them, low levels of oral health-related public awareness are directly related to the burden of oral disease.

Keywords: Awareness, Oral Health, qualitative research/study, public health, population needs, experts' attitude

Introduction

Prevention and control of organ and tissue pathologies of the oral cavity are considered to be a relevant topic of public health throughout the world. Prevalence and severity of oral diseases playing an essential role in global burden of morbidity, depend on economic, social, behavioral and environmental factors. Tooth decay/caries and periodontitis were long belonged to the most common oral pathologies. Even in high-income countries, dental caries affects 60-90% of school children and a large majority of adults. Oral health is integral and essential to general health, determining population well-being and quality of life. Proper oral hygiene and care reduces premature mortality. Early detection of oral diseases plays a crucial role in saving or prolonging patients' lives. Preventive oral examination can reveal a number of diseases such as: nutritional deficiency, microbial infections, immune system disorders, oral trauma, tumors, etc.

According to the World Health report 2003 (unless we take action today, many countries will not be able to pay for treatment programs), the cost of treatment of oral diseases is high and ranks fourth among the diseases with high treatment and management spending. Without the implementation of oral disease prevention programs and interventions, even many high-income countries cannot fund oral health programs, which negatively affects public health. In low- and middle-income countries, due to increased rates of consumed unhealthy diet and tobacco consumption, an increase in the burden of oral disease might be expected.

In high-income countries, 5-10% of the annual national resources allocated to public health are spend on dental services (oral health), while in low- and middle-income countries, oral health care is not covered at all or is covered only the emergency cases such as treatment of acute toothache and/or dental extractions. Investment in oral health is a necessary precondition for an overall good health!

The aim of the study is an assessment of the importance of adequate oral health awareness among the general population by healthcare professionals.

The Study Materials and Methods: there have been conducted - qualitative research/study, in-depth interview; all basic principles of qualitative research were observed; the goals and objectives of the research were shared with the persons/experts involved in the study; ensuring the assumed from the beginning protection of confidentiality; research recording was performed and interview location was also selected in advance with the prior consent of the experts involved in the study. Individual interviews were conducted and individual locations were selected for each participant separately in a comfortable and organic environment. The timing of the interview duration was also determined by the researchers in advance, and at the next step, the prior consent of the experts was obtained as well. The fixed interview duration was 1.5 hours (90 minutes). A preliminary arrangement for performing the recordings by researchers during the interview has been concluded.

Sample selection/collection:

The sample was selected according to the following criteria:

- At least 10 years' experience in the field of healthcare;
- Individuals of both sexes (males and females);
- Writing and speaking in Georgian fluently;
- Work experience in health care management for at least 7 years;

It should be noted that over the years, the healthcare financing mechanisms have been changed, and the approaches relevant to the health care challenges have been chosen. A Decree of the Government of Georgia (#724, December 26, 2014) was adopted and the Georgian Healthcare System State Concept 2014 – 2020 – “Universal Healthcare and Quality Management for Protection of Patients' Rights” was approved.

The research questionnaire was “mixed”, consisted of closed as well as open-ended questions, the questions were divided into 3 thematic groups:

The first group questions reflected the following issues - the experts' attitude to the importance of informing the public about oral health - this section included 3 questions, the answers to which were sorted not only by exclusion, but by severity as well;

The issues reflected in the second group questions – the situation in the country regarding the promotion of oral health issues. This section contained 4 questions, requiring the opinion of experts, that gave a significant advantage to hearing their opinion, which was not accentuated/stipulated or agreed in the process of research planning and design approval;

The third group questions include the following - the situation desired and acceptable in terms of oral health issues bearing into account the resources at the country's disposal and population needs (education and adequate care). Here were gathered 2 questions that, like the ones in the

previous group, allowed the experts to express their opinions on the risen issues in full and without limitation taking into account the objectives of the research and without any frames forced upon to a certain extent.

Finally, the message box of our questionnaire was as follows: attitude, reality, desired future. All three of these messages were united by one major issue—oral health.

The study results: 8 experts (average age of expert $52,17 \pm 2,89$ working experience $14,5 \pm 3,5$ year), 2 women and 6 men were involved in the research/study. Expert opinion should be expressed in a comfortable environment for them, with the prior informed consent specifying the location of interview; the interview timing was fully observed and the audio recording was made according to the preliminary agreement. The obtained results were processed and analyzed.

The questions have been personally answered by the experts:

To the first group question - what is your position on the need in population oral health awareness, the vast majority of experts answered that oral diseases are considered the major public health problems. Their impact on the health status of both, the individuals and the community as a whole is of great significance.

Experts were unanimous answering the most of the first group questions and they noted that informing the public about oral health is important; oral health can be considered as determinant of overall health, but the perception of this issue by population does not correspond to assumed actual severity of the issue. Unlike the first two questions, the experts' opinion on the third question of the first group was divided into two. The third question was about the extent to which oral health belongs to the curative area of public health and whether there is a need the community to be involved like the other health care interventions. Here, some experts believe that the issue is important and requires not only contribution of public health, but also the need in attracting dental services and ensuring support. As for the community involvement, some experts believe that community awareness and involvement is of great importance and possible, while others suppose that the issue requires financial support and runs through behavioral changes, therefore, containing some difficulties.

Answering the second part of the questions - what is the current reality in the country regarding the promotion of oral health issues - most experts noted that there is no unified oral health strategy in the country.

The population is provided with information by the National Center for Disease Control and Public Health (NCDC), however, the measures taken are unsystematic. Particular stomatologists/dentists are providing specific work as well, but unfortunately, only for their patients. Answering the questions of the mentioned group, the experts were unanimous, consequently, the content of their answers can be deemed the same, especially the answer to the first question of the group - "What is the country reality in terms of promoting oral health prevention?".

In addition, the survey group consisted of two questions covering two directions: involvement of public health and community in problem solving, as public health consists of the "set of community-based interventions/actions focused on disease prevention, lifetime prolongation and health promotion", in this regard oral health is no exception as well. According to the one expert responses, public health involvement suggests the following interventions:

"Passive epidemiological surveillance of oral diseases regulated by 01-27/N of May 23, 2012 issued by the Minister of Labour, Health and Social Affairs of Georgia "on the Rules of Administration and Provision of Medical Statistical Information" is carried out in Georgia.

According to the mentioned normative document, medical institutions, regional/city dental clinics and offices are obliged to submit annual disease registration forms: Form IV-01 (annual report) - Report of Healthcare Facilities, Form IV-01/1 - Rural Physician Report, Form IV-08 - Malignant Cancer Report to the Department of Statistics at the National Center for Disease Control and Public Health (NCDC). According to the expert in 2016, a study of risk factors for non-communicable diseases was conducted in Georgia using standardized instruments of the STEPS (WHO STEPwise approach to NCD Surveillance - STEPS).

The aim of the study was to investigate the prevalence and characteristics of major risk factors for noncommunicable diseases (NCDs) in Georgia, in order to develop and plan effective measures to ensure the control and prevention of non-communicable diseases. According to the surveillance study, 60.9% of the respondents have more than 20 natural teeth. 4.3% of respondents have no teeth at all.

It is important to analyze the research data by age; it should be noted that more than 20 natural teeth were observed in both male and female sexes, especially in the young age groups (18-29 and 30-44 years of age); the number of natural teeth steadily decreases with age: sharp decrease in number or absence of natural teeth was observed in the 60-69 age group. A similar trend was observed among the representatives of both - males and female.

It is interesting to analyze the obtained study results on patients' referrals, according to the STEPS study data:

1. Less than half of the survey respondents (46.3%) referred to a doctor or medical personnel during the last 12 months;
2. In most cases (75.0%) the reason for the last visit to the doctor was a specific health problem;
3. Among those who went to the doctor for a preventive examination, the sex ratio was 1.5: 1, with the predominance of women.
4. Among those visiting the doctors for preventive examination, the sex ratio was 1.5:1 with the advantage of women.

During the interview, we had to face an emergency and sad reality, such as the COVID-19 infection, that has affected the whole world and completely changed the attitude of the healthcare

sector towards the various topical issues, transforming the existing reality into a different framework.

Experts' opinions were completely uniform here as well. They believe COVID-19 to be a respiratory infection, since the unhealthy oral cavity directly correlates with the prevalence of chronic non-communicable diseases and people with chronic diseases, as well as older people are more vulnerable to new COVID-19 infection.

Taking certain measures in this direction, including the development of state preventive health care policies and advocacy and promotion of correct behavioral skills among the population in accordance with behaviorism theory are of great importance.

The third part of the questions related to the desirable reality, being relevant to the challenges on the one hand and based on real opportunities of the country's healthcare sector on the other, was answered by experts as follows: first of all, unified strategic document on oral health with the active involvement of the Public Health Center, professional associations and experts should be elaborated.

In addition, the prevention and management of oral diseases should be integrated into a unified strategy for managing non-communicable diseases. The creation of multi-sectoral group/team to work on the development of a strategy and long-term plan of action and to promote their implementation is needed. In addition, experts unanimously note that for Georgia it is necessary to share world experience in this direction, and especially to follow the WHO and CDC recommendations.

Conclusion:

Thus, the vast majority of experts believe that informing the population about oral health affecting many aspects of oral health is of great importance. According to them, low levels of oral health-related public awareness are directly related to the burden of oral disease.

References:

1. The world health report 2003 - shaping the future, World Health Organization, https://www.who.int/whr/2003/en/whr03_en.pdf?ua=1
2. Awareness, Attitude and Knowledge Regarding Oral Health among Pregnant Women: A Comparative Study Gautami S Penmetsa 1, K Meghana 1, P Bhavana 1, M Venkatalakshmi 1, Vivek Bypalli 1, B Lakshmi 2 PubMed
3. Survey of medical doctors' attitudes and knowledge of the association between oral health and pregnancy outcomes R Al-Habashneh 1, S H Aljundi, H A Alwaeli PubMed
4. Georgian National Center for Disease Control and Public Health, health care statistical yearbook, 2018, <https://www.ncdc.ge/Pages/User/News.aspx?ID=bec659c0-56a2-4190-9c0c-e47a63bcc4f>