



## **Indicators of medical and demographic, socio -hygienic, physical and dental status of indigenous women of Taimyr Dolgan- Nenets Municipal District of the Krasnoyarsk Territory**

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### **ABSTRACT**

The paper presents the study of indicators of medical-demographic, social-hygienic, physical and dental status of 755 indigenous women of the Taimyr Dolgan-Nenets Municipal District of the Krasnoyarsk region.

Patients belong to socially vulnerable groups (low income and education level, remoteness of residence area, lack of adequate medical care), in connection with which there are big problems with health in general and in particular with the dental one. There is no permanent dental care in small settlements of North of Krasnoyarsk region, no dispensary registration and dental treatment of pregnant indigenous women of the North. Permanent dispensary dental care of indigenous women of the North of Krasnoyarsk region is a compulsory condition to improve the dental health of women and their progeny.

**Keywords:** dental status, indigenous women, mobile teams of dentists.

### **INTRODUCTION**

Socio-economic situation in the Taimyr Dolgan - Nenets Municipal District of the Krasnoyarsk Territory, changed the lives of the indigenous women of the Far North. Social insecurity, unemployment, declining living standards, in connection with this stressful situation, insecurity could not but affect the health status of women, both somatic and dental. The largest share of indigenous nationalities Dolgan, then Nenets, Nganasan, Evenki constitute, which lead traditionally nomadic and sedentary. The position of women the many lifestyle factors determine: these are hygiene skills, attitude towards their health, culture and way of life [3].

In connection with the situation implementation of national projects in the Russian Federation, including health care, changed socio-economic conditions of the population and how a healthy lifestyle, allowed at the federal level through the budget to take a program to provide dental care of Indigenous Peoples of the North (1,3,4,6,9) . Government of Krasnoyarsk Krai adopted long-term target program to provide dental care in Taimyr Dolgan- Nenets Municipal District in 2012-2016. Oral health is an integral part of general health. Patients with much somatic pathology are also at risk of dental disease, which worsen their general condition. Poor



hygienic condition of the teeth, partial or complete absence of teeth affects the decrease of self-esteem as human beings, and to the stability of his body to different physical conditions. Conclusively proven that various somatic non-communicable diseases, various gynecological diseases, diseases of the oral cavity, poor nutrition, smoking, alcohol, are risk factors for the condition of general health. The presence of such factors largely depends on a person wants to fight for his health, and timely professional medical help (in this case dental) is one of the most important factors in recovery [ 5,7,8].

Therefore, the timely provision of dental care to remote communities is an important task for the state.

**The purpose of the study.** Improving the effectiveness of prevention and dental care to residents of remote settlements Taimyr Dolgan- Nenets Municipal District of Krasnoyarsk Krai.

## MATERIALS AND METHODS

According to the long-term target program "Providing dental care of the Far North" (2012 2016), in 2013 dental care was provided to the population of the Taimyr Dolgan- Nenets Municipal District, Krasnoyarsk Territory, Taimyr eastern townships, etc. Syndassko, Popigaj, Katyryk. The total population in the three villages was 1300 people, of which the 60.0 % of the female population. Sources of funding: regional budget -15.0 %, the federal budget - 85.0%. Away team consists of dentists: dental surgeon, two dental therapist, dental orthopedic, dental technician and senior nurse (among medical interns). Work term average is 40 days. In the process used to assist the latest medical technology in the field of advanced materials science and dental equipment. Having a modern portable X-ray machine «REXTAR» (Korea), photopolymerization device Demi Plus LED (manufacturer: KERR), mobile dental equipment «TASK FORSE» (USA) revealed dental disease at different stages of development, properly differentiate and apply the method of treatment. Figure 1 is a mobile dental office in Syndassko. Syndassko village - located 285 km from p. Hatangi, borders with the Republic of Sakha - Yakutia. It is one of the northernmost settlements in the world. The main occupation of the population is reindeer

herding, fishing and hunting wild reindeer on the north.



Fig. 1. Mobile dental office.

**The study of small indigenous population of the three villages Taimyr Dolgan-Nenets Municipal District of Krasnoyarsk Krai.** The total number of women surveyed was 755 persons in the age group from 15 to 65 years, including children under age 15 - 23. Division along ethnic lines as follows: 90.3 % of the population - Dolgan, 5.0 % - 2.2% Nenets - Nganasans, 1.2 % - Evenki, 1.0 % - the Yakuts .

Research methods included: questioning residents, which included part of the passport; issues of socio- economic well-being, the presence of somatic pathologies and oral examination, and analysis of primary medical records ( outpatient somatic map). Thereafter, the replacement of dentition defects removable and fixed prostheses.

Statistical processing of the results was performed using the programs «Microsoft Excel» «Statistica 6», «SPSS 17.0 for Windows». The relationship between the independent variables, measured in nominal and ordinal scales were determined using Pearson ( $\chi^2$ ), we used the method



of correlation and analysis of variance [2].

## RESULTS AND DISCUSSION

In terms of socio - economic welfare of women three settlements 77.6 % reported as unsatisfactory, and only 22.4 % of respondents reported as satisfactory. Among indigenous women without primary occupation are the most of Nenets, they are mostly housewives. Indigenous women have marriage registration only 40.7% - Dolgan; Nenets - 26.7% . Among the nomadic and settled indigenous women had incomplete secondary education, secondary - 78.8 %, elementary education - 12.9 % higher education - 8.3%. Prevail somatic pathologies revealed by the survey and analysis of primary medical records in township clinics: respiratory diseases - 28.4% (various forms of bronchitis, tuberculosis) of the gastrointestinal tract - 24.5%; cardiovascular disease – 18. 2% cancer - 5.7%; gynecological diseases - 22.0 % other diseases associated with specific diseases (syphilis, hepatitis, HIV) - 1.2%.

Total visits to the dental examination was in Syndassko - 980, Popigaj - 769, Katyryk - 694. The index definition caries intensity (KPU) showed that 89.0% of women surveyed villages the average value of the Communist Party was  $10,4 \pm 0,43$  ( high intensity level of dental caries ). Index of oral hygiene in the adult population was  $2,2 \pm 0,05$ , which is unsatisfactory.

Prevalence of dental hard tissue and periodontal centuries women aged 15 to 55 years old was found in 100 % of cases. In providing dental practitioner care were treated caries complicated caries, fissure sealing, conducting professional oral hygiene. The total number of seals was - 578, including the treatment of dental caries - 14.6%, on complications dental caries - 72.7 %, fissure sealing under the age of 15 years - 12.7 % of cases. Of these indicators, we can conclude that there is a high need for therapeutic treatment of teeth of indigenous peoples. Exhibited a high degree of correlation relationship in individuals with pathology of the gastrointestinal tract with complicated forms of caries posterior teeth in the age group 15 to 27 years  $r = 0,874$  (  $p = 0.001$ ). In women of childbearing age suffer from cardiovascular disease reveal an average correlation relationship with carious lesions of anterior teeth  $r = 0,657$  (  $p =$



0.001).

Within the scope of surgical dental care to the female population settlements conducted extractions. Totally 224 teeth were removed, including 39 temporary teeth, according to testimony in connection with the change of the bite. At the age of 19 to 60 years were conducted by removing the complicated forms of caries with destructive changes in the periodontium. Of the total number of removable dentures, making full removable plate dentures was 54.8%, indicating that the complete absence of teeth in the age group from 29 to 40 years. There are needs in prosthetics dentition in age from 19 to 30 years - 34.7 % of the total female population, from 31 to 45 years - 43.5 %, from 46 to 65 years - 90.0%.

It is clear that women need prosthetics in settlements Syndassko, Popigaj, Katyryk, with a large percentage of persons who need removable prosthetics.

### CONCLUSIONS

1. Taking into account the disunity of small in number northern points of the Krasnoyarsk Territory, features of employment, it is necessary to improve not only the mobile forms of dental, but also outpatient gynecological care to the female population, especially pregnant women, which in turn should be focused on clinical examination and detection of pathologies at early stages.
2. It is necessary to eliminate the causes of socio-economic nature, negatively affecting the quality of life of indigenous women of the North, thus, which are preventable with the current level of access to health care.
3. Implementation of on-site projects requires the relationship of dental service with other institutions of general medical network, particularly of obstetric-gynecologic plan, as there was revealed correlation relationship of diseases of the oral cavity with gynecological pathologies ( $p \leq 0,001$ ).
4. It is necessary to organize dental health social patronage of women in Syndassko, Popigaj, Katyryk with complete lack of teeth in the age group of 19 to 30 years.



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