The Behavior of Indonesian Society about Access Dental Care, using a Telephone Survey

Burhanuddin Pasiga[1]*

1. Department of Dental Public Health. Faculty of Dentistry, Universitas Hasanuddin, Makassar, Indonesia.

Abstract

Indonesia with a large area, the population of more than two hundred million people, spread over several islands, so it is estimated to have different behavior to determine the place, the cost for dental health care. Purpose: The purpose of this research is to know the behavior of dental health care for Indonesian people, by using telephone survey. Method: A sample of 180 is a known cell phone user from a Telkomsel provider (Cellular Telecommunication) is divided into 6 regions representing regions in Indonesia. Samples of each region were randomly selected systematically, then contacted by telephone for interviews. long interview no more than 15 minutes. Results: The results showed the average percentage of visits to dental care centers last year was 38.3%. Selecting dental care in private dental practice is 53.9%, choosing services in Public Health Centers are 30% and hospitals are 16.11%. The cost of treatment sourced from personal funds was 58.9%, using of insurance (BPJS is 41,1%. Conclusion: The Indonesian people's behavior toward regular dental care every year is still low, and the use of facilities in Public Health Centers has not been maximized.

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Introduction

Indonesian society is very heterogeneous conditions and access to dental health services are very varied causes uneven distribution and severity of oral disease in each region, even within the same region. One of the elements that play a role in accelerating the development of health is the health personnel who served in healthcare facilities in the community. The health worker is every person devoted to the health sector and has knowledge and or skills through education in the field of healthcare for certain types require the authority to make health efforts. In Indonesia, Number of dentists in 2013 totaled 24 598 and a number of a specialist dentist for 2,182 people. The ratio of dentists per 100,000 population of 9.9 dentists per 100,000. The most recent and accurate data on oral health that describe local conditions needed to make dental health program planning.[1] Results of basic national health research by the Ministry of Health of Indonesia that the percentage of people who have dental problems and mouth in 2013 amounted to 25.9% and Effective Medical Demand (EMD) amounted to 8.1%.[1]

Local governments are required to plan, implement and evaluate programs based on adherence to the ideals of health promotion, responsive to community needs. Telephone survey method can help to quickly determine the status of the state of the oral health community. Method telephone survey was developed by the Behavioral Risk Factor Surveillance System (BRFSS), which was developed by the Centers for Disease Control and Prevention (CDC) Disease and administered by the Department of Health of New York and in some countries already use this method to find out about some of the health behavior.[2]

Indonesia consists of several islands, with a vast area, consisting of the culture and customs have health behavior that is different, especially the behavior of access to health care of teeth and mouth, then the telephone survey can help and be a survey method alternative to find out about

Corresponding author:
Burhanuddin Pasiga
Department of Dental Public Health
Faculty of Dentistry
Universitas Hasanuddin
Makassar, Indonesia
E-mail: bpasiga@unhas.ac.id

the status of the behavior of dental health for Indonesian society.

The condition of Indonesian people are very heterogeneous with diverse cultures, as well as the distribution of oral disease severity in each different area and access to dental health services is uneven.

In many developing countries, access to oral health care is very limited, while in developed countries and in some industrialized countries, access to oral health care is much better.[3] Many factors influence the behavior of the community for no access to health services of dental and mouth, such as fear, expenses, no time, no problems with oral health, do not think about or do not assume dental problems is important, not been to the dentist.[3–5] Use of dental services and pattern of use can serve as indicators of oral health-related behaviors and beliefs.[4]

Factors associated with the use of public health services by adults is directly related to the socio-economic and demographic conditions of the individual, including a lower income level, which is in the small towns, has more teeth need treatment.[6–8]

From the results of research in some countries, access to oral and dental care on a regular basis in the past year as in Jordan, 47.4%; in India 46%; Australia 62%.[4-7] The cost issue is one of the reasons people not to seek treatment or do not regularly consult a dentist. Based on the results of previous studies in South Sulawesi, for cost reasons as much as 22.6%.

In Australia, the proportion of people aged 15 and older who visited a dentist in the previous 12 months treatment increased from 56% in 1994 to 62% in 2010. Results of the study by Carlson C, et al in Sweden to obtain a visit to the dentist regularly as much as 90.6%.[9]

Materials and methods

The population is the number of mobile users with *TELKOMSEL* providers in six zones, namely Jakarta, Sumatera, Kalimantan, Bali, Sulawesi and Maluku. Each zone has its own code number and randomly take a number. The selected phone number is the first samples for each zone and the next sample is a phone number with a multiple of 5 to get 30 samples for each zone so that the number of samples = 180. The inclusion criteria namely Telkomsel users mobile phone number aged over 18 years old and are willing to be interviewed. Then the sample was contacted by phone, the first convey the intent and purpose of the study and asked for a willingness to be interviewed. When ready then conducted structured interviews with BRFSS questionnaire (Behavioral Risk Factor Surveillance System), the longest 15-minute interview with the following question:[2]

1. Demographic data (name, age, sex)
2. When was the last visit to a dental care
3. Type of dental care what the place visited.
4. Type of payment used.
5. The status of education
6. Household income per month (in rupiah)

Results

This research was conducted in six zones in Indonesia, namely Jakarta, Bali, Sumatra, Kalimantan, Sulawesi, and Maluku. The number of samples per area as much as 30. So the total number of samples is 180.

Based on the data in Figure 1, shows that the average percentage of a recent visit to a health care center teeth and mouth to 1 last year amounted to 38.33%, the highest in Jakarta (73.33%), for visits 2 last year 26.11%, the highest in Sulawesi (33.33%), time of visit last 5 years 11.26%, the highest in Maluku zone (50%), and more than 5 years 9:44%, the highest in Maluku zone (20%).

The average percentage of respondents choosing dental health services in private practice dentists (53.89%), the highest in Jakarta (86.67%) and Bali (70%), choosing in community health centers 30%, the highest in Sumatra , Kalimantan and Maluku, respectively 43.33% and choose hospitals (16.11%), the highest in Maluku (33.33%), can be seen in figure 2.

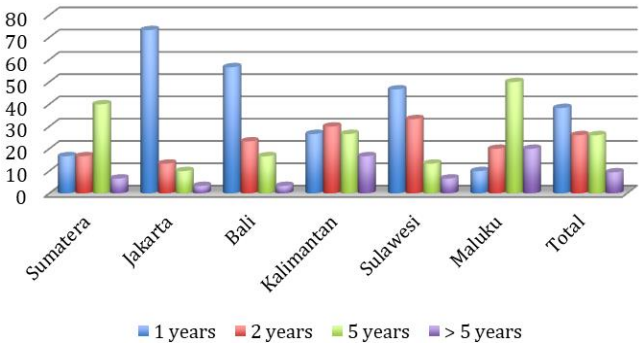

Figure 1. The percentage of visits Dental Health Care in six zones based on time of visit.

Results of the research that the greatest percentage of care financing comes from private funds (58.89%) and the Sources of financing of insurance funds amounted to 41.11%. Diagram 3 shows that the zone of Jakarta, Bali, Sumatra, and Sulawesi with the highest financing private funds. Financing the insurance system by Badan Pelaksana Jaminan Sosial (BPJS) is the highest in the zone of Kalimantan (53.33%), while the lowest in Jakarta zone (13: 33%) (Figure 3).

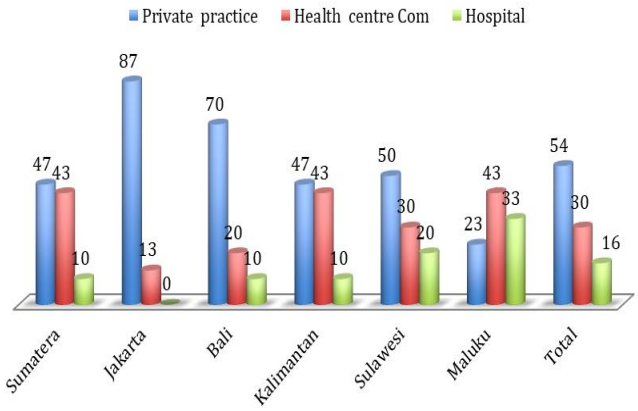

Figure 2. Percentage of respondents chose dental health services based on the region in Indonesia.

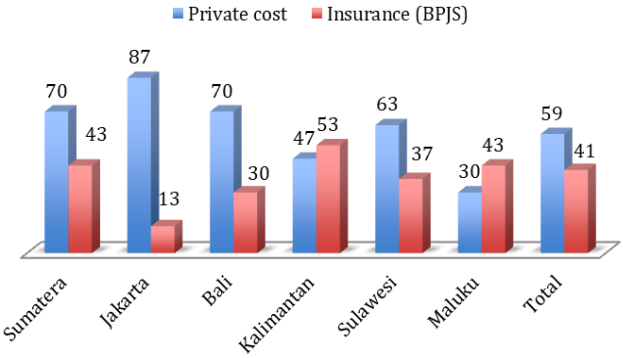

Figure 3. Percentage of payment system for dental health care.

Figure 4, The higher the educational status of respondents showed the higher the percentage of visits to dental health services for the last year. Results of research show the percentage of visits by education level is high school to Ph.D. level is 13: 33%; 21.62%; 49.02% and 72.73%. The Percentage of visit to dental health services last dental visit for 1 years = 39.18%, 2 years = 20.4%, 5 years = 40.18% and > 5 years = 10.58%.

Figure 5 shows that revenue per month between 5-9 million rupiah (IDR) is the highest percentage of visits to dental service one year ago (62.26%), the lowest 21.21%, while the highest percentage of visits over 5 years are respondents who answered no regular income, which amounted to 60.61% and 15.09% in the lowest income of 5-9 million.

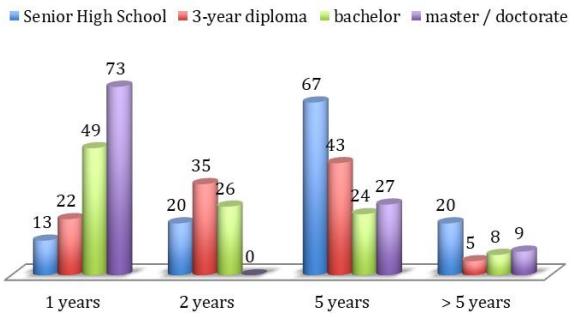

Figure 4. Time visits dental health services by level of education.

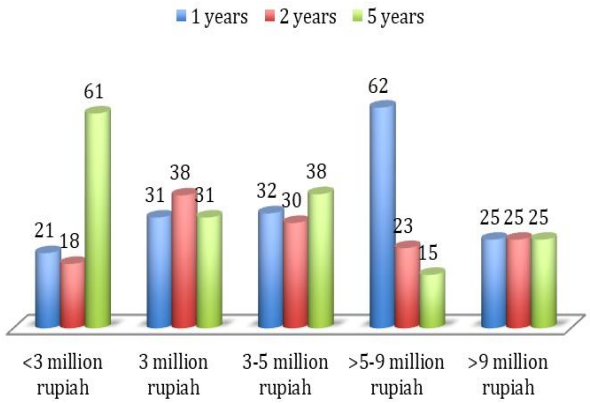

Figure 5. Description of a visit to the dental health service units based on respondents' income per month.

Discussions

Results of basic national health research by the Ministry of Health of Indonesia that the percentage of people who have dental problems and mouth in 2013 amounted to 25.9% and EMD (Effective Medical Demand) amounted to 8.1%.[10]

The results of this study indicate that the percentage of visits to dental health services last year averaged 38.33%. The highest percentage of visits was residents living in big cities, such as Jakarta (73.33%). The percentage of visits last year for dental care in some countries is quite diverse, for example in India, the percentage of visits last year for urban areas 60%, rural 50%.[5]

Results of the study by Machado, et al in Southern Brazil to obtain the prevalence of regular use of dental services as much as 27.5%.[11]

The high percentage of visits to people living in cities, ie Jakarta as the capital of the State can be caused by several factors, factors monthly income higher than other cities in Indonesia, the availability of adequate infrastructure, many choices of care oral health, general dentists and specialists are adequate.

There are still many people do not do the examination oral hygiene routine every year, in general, the majority of Indonesian people assume that dental problems do not matter and are not harmful, consequently they do not think about the health of teeth and mouth, is evident from the results of previous studies in South Sulawesi with a sample of 374 based on employment status (port workers, farmers, fishermen, businessmen and government civil servants) that there are four reasons why they are not the most check-up for routine dental care is reason to fear (23.7%), reasons of cost (22, 6 %), did not think of dental health problems (20.9%), do not assume there is a problem with healthy teeth and mouth (20.3%), whereas they had 5 complaints most oral health problems that a toothache (68.5%), bleeding gums (47.8%), bad breath (28.5%), difficulty chewing (28.1%), bad taste in the mouth (27.5%).

There is a huge gap between needs of the population and demand for dental care. In Indonesia, people face many obstacles in the utilization dental services. The utilization of dental services has increased; issues like dental anxiety, price, income, the distance a person had to travel to get care, and preference for preservation of teeth are treated as barriers in regular dental care.[12-14]

These barriers can be removed by motivate people and make them aware of oral health problems which remove anxiety and fear that they develop a positive attitude toward dental care. This the duty on dental health workers in community health centers, hospitals, private practice area could be a solution to deploy public awareness about the importance of dental care.[15] It is important to inform the patient about dental and oral hygiene habits and raise their awareness of how to prevent oral diseases is important for oral health care providers.[16] The importance of the role of parents, schoolteachers and health workers about the knowledge, habits and attitude of dental health problems from an early age is needed.[17,18] From the results of research on knowledge, habits and attitudes obtained under 50% answered correctly.[19]

In India, the highest percentage of the reasons not to visit for dental health care on a regular basis because the reason there is no time (39.2%).[4] In Switzerland, the cost issue into factors that affect the health care of teeth and mouth[13]. According to Poudyal, et .al arguing no problems with his teeth (60.7%), in Australia with a 25-30% cost reasons.

Generally, people consciously took care of his teeth, as the results of previous research they want to clean teeth (57.5%), filling (46.1%), eliminate tooth pain (39.3%). When people who have previously visited the dentist asked the reason for their last visit, the majority of them said that they were due to a toothache (35.3%), decayed teeth (27%). None of them said they had visited the dentist for regular inspections. In India reason for the last visit with toothache amount 35,2 %.[6] Percentage of U.S. population with a dental visit during the past year, 1997 to 2010, ranged between 63-66%.[15] According to Ajayi DM, Most of the respondents (55.8%) consulted the dentists only when there was a pain while 27.3% had never visited the dentist. Fear of dental injection, cost of treatment, feeling of insecurity when the dentist is operating and disturbing noise from dental drill were the major barriers.[20]

Based on these results that the selection of Indonesian society for dental care from 6-sample area, the highest percentage of choosing a private dental practice as much as 5 zones (83.33%). This may be caused by factors such visit was a time when the afternoon because in most cases the patient work in the morning; Another factor because of the sophistication of the equipment that is owned dentist so that patients feel comfortable and painless. Unlike in community health centers, where the equipment is not yet complete, so not all cases can be treated, most just a case of tooth extraction, while endodontic treatment, orthodontic or other dental work is not done.

The highest percentage who chose oral health care at the dentist in private practice in Jakarta (86.67%) is not different from other countries, for example in Australia 70%, the result of Wistron

76.1%, but in Jordan, the community prefers in public dental clinic (93.3%).[11]

Financing dental care is quite expensive than financing the insurance system be the best choice. But the health insurance system does not cover all types of treatment or only some types of dental treatment; generally limited to curative measures only, but not for dental health precautions.[9]

Financing dental care is quite expensive to be one-factor inhibiting people not to dental care, thus financing the insurance system is an option. In Indonesia, as of December 2013, there were 181 292 912 people who have health insurance with a percentage of the total population of 76.18In Indonesia, the government insurance program is a health insurance program organized by BPJS (Social Security Executing Agency). Indonesians are required to participate in this insurance. But the health insurance system does not cover all types of treatment or only some types of dental treatment; generally limited to curative measures only, but not for dental health precautions.[21]

In Indonesia, the type of care that is covered by insurance, according to Health Regulations on Insurance BPJS with No. 1 of 2014, Article 52 paragraph (1), dental health services guaranteed include a). administrative services consisting of the registration fee the patient and other administrative costs that occur during the care or health of patients; b). examination, treatment and medical consultation; c). premedication; d). revocation of deciduous teeth (topical); e). extraction of permanent teeth without complications; F) post-extraction drugs; g). Tumpatan GIC; and h). Scaling of teeth.[22]

Results of this study in which the use of insurance as a financing alternative treatment is not maximized. Precisely the people in large cities a lower percentage of its use, such as the Jakarta area only 13:33% compared to other cities in Indonesia. The average use of financing by insurance of 41.11%, still low utilization of financing with insurance may be due to the type of care that is covered is limited. Results of this study are not different from the results of research by Obeidat in 2014 in Jordan where the use of government insurance 47.3%[5.] In contrast to respondents who have no income seek dental treatment last 5 years is very high (60.61%). This may be due to financial factors, so they assume that dental health is not important to do. Results of the research we have done previously obtained that the reason they do not seek treatment for cost reasons (22.6%) is not considered to be involved in the examination (20.9%), saw no problem with oral health (20.3%).

Monthly household income had a negative linear relationship with the foregoing dental care for economic reasons.[8]

Based on these results it can be concluded that the behavior of people still lacks access to regular dental care, utilization of community health centers and the use of insurance as a financing system. Socioeconomically disadvantaged individuals who are known to be at higher risk of the oral disease often forget about dental care for economic reasons. Efforts should be made to provide dental public health service facilities are evenly distributed throughout the territory of Indonesia.

Factors that affect the utilization of dental care are gender, age, education level, income level, Race and ethnicity, geographic location, common general health status, and dental insurance status. These factors are closely related to domestic economic conditions are expected utilization dental care will fluctuate, to some degree, with macroeconomic conditions.[23] Habit and attitude affect health status and can interact with several factors such as health awareness, social culture, demography, economy, education and politics. Beliefs, customs, myths, practices related to health and disease, also affect the health behavior of rural communities.[24]

Conclusion

The behavior of the Indonesian people for regular dental care each year is still low, and the use of facilities at community health centers and the use of financing by the health insurance system of government is not maximized. Necessary efforts for the program of the Government of sustainable and continue to increase community awareness of the importance of oral and dental care.

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