

The Relationship between Patients' Level of Education and Utilization in RSGM UNIMUS

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INDEXING

Keywords:

Utilization;
Dental and Oral
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Level of Education.

ABSTRACT

The level of oro-dental health awareness in Indonesia is in a low category. One of the indicators used to determine the level of health awareness is the level of health service utilization. Exploring factors contribute to level of health service utilization may help policymakers to seek solution for a better and higher or-dental health awareness. The method of this study was analytic observational study, using a cross-sectional design, which emphasizes the time of observations made at that time. The subject of this study was patients of UNIMUS Oral and Dental Hospital Semarang. Sampling taking method was accidental sampling which involved 76 research subjects. In this study, the relationship between education and oral and dental healthcare utilization was analysed in UNIMUS Oral and Dental Hospital, using data obtained from questionnaires. The results of the research using chisquare analysis showed that there was no significant relationship between the level of education ($p = 0.089$) and utilization of dental and oral health services at RSGM Unimus. Interestingly, respondents with a higher level of education had higher frequencies to utilize facilities at RSGM Unimus compared to respondents with lower level education.

Kata kunci:

Utilisasi;
Kesehatan Gigi dan
Mulut;
Tingkat Pendidikan.

Tingkat kesadaran kesehatan oro-dental di Indonesia termasuk dalam kategori rendah. Salah satu indikator yang digunakan untuk menentukan tingkat kesadaran kesehatan adalah tingkat pemanfaatan pelayanan kesehatan. Menggali faktor-faktor yang berkontribusi pada tingkat pemanfaatan layanan kesehatan dapat membantu pembuat kebijakan untuk mencari solusi untuk kesadaran kesehatan oro-dental yang lebih baik dan lebih tinggi. Metode penelitian ini adalah penelitian observasional analitik dengan menggunakan desain cross sectional yang menekankan pada waktu pengamatan yang dilakukan pada saat itu. Subjek penelitian ini adalah pasien Rumah Sakit Gigi dan Mulut UNIMUS Semarang. Metode pengambilan sampel adalah accidental sampling yang melibatkan 76 subjek penelitian. Dalam penelitian ini, hubungan antara pendidikan dan pemanfaatan kesehatan gigi dan mulut dianalisa di Rumah Sakit Gigi dan Mulut UNIMUS, menggunakan data yang diperoleh dari kuesioner. Hasil penelitian dengan menggunakan analisis chi-square menunjukkan bahwa tidak terdapat hubungan yang signifikan antara tingkat pendidikan. ($p = 0,089$) dan pemanfaatan pelayanan kesehatan gigi dan mulut di RSGM Unimus. Menariknya, responden dengan tingkat pendidikan yang lebih tinggi memiliki frekuensi yang lebih tinggi untuk memanfaatkan fasilitas di RSGM Unimus dibandingkan dengan responden dengan tingkat pendidikan yang lebih rendah.

INTRODUCTION

Oro-dental health awareness is important since poor oral hygiene can lead to dental cavities and gum disease, which has been linked to systemic health complication such as cardiovascular disease, bacterial pneumonia, diabetes mellitus, and low birth weight (Ferizi et al., 2018; Suzuki et al., 2015; Park et al., 2019; Chiang et al., 2020). Good health is key to the nation development, since a healthy population contributes to quality of life. Health enables people to fully participate in productive activities, economic development, and poverty reduction (Yahaya and Gunduz, 2018; Dang et al., 2016).

Rahardjo and Maharani explained the level of oro-dental health awareness in Indonesia is in a low category based on high amount of dental case in Indonesia (Rahardjo and Maharani, 2014). Maharani reported the prevalence of caries was 90.9%, with an average Decayed Missing Filling (DMF-T) of 6.4 (Maharani, 2009). Rahardjo and Maharani found that regular dental checkup is needed to maintain its healthy, but Indonesian society tend to seek treatment when experiencing complaints. It's very often for them to come to a dentist with an acute condition that requires treatment (Rahardjo and Maharani, 2014). One of the indicators used to determine the level of health awareness is the level of health service utilization (AEGHSP, 2019). Utilization of health services is an interaction between consumers and providers. Where consumers are defined as people who need health services, and providers are defined as operators or health care workers. The service relationship between consumers and providers also has a very close relationship. This type of health service will occur if there is intense interaction between the two (consumers and providers) (Rout et al., 2019). Exploring factors contribute to level of health service utilization may help policymakers to seek solution for a better and higher oro-dental health awareness in a certain community. The result will also be very beneficial for brand-new health care providers such as RSGM UNIMUS in understanding the market to run the hospital management.

Though there is a great variation by different determining factors (gender, age, religion, place of residence, economic condition), education directly has strong impact on the utilization of oral and dental care services. Education helps them to know about the human body system, knowledge about the oral hygiene and its impact on total health. On the other hand, education also triggering the improvement of economic opportunities, and employment status which may help to take the better decision to health care (Rout et al., 2019; Mohammadbeigi et al., 2015; Barman et al., 2020).

Muhammadiyah University of Semarang Oral and Dental Hospital (RSGM UNIMUS) is a new oral and dental hospital. Preliminary studies showed level of dental and health care utilization was not in accordance with the perception utilization in UNIMUS Oral and Dental Hospital. Level of utilization in UNIMUS Oral and Dental Hospital was decreased each month from January to November 2020, however perception of utilization was good. Level of education is interesting to be inspected to understand the reason behind this phenomenon.

Based on the descriptions above, the researcher is interested in examining a situation at the UNIMUS Oral and Dental Hospital. The formulation of the problem: "is there any relationship between level of education and level of utilization?"

RESEARCH METHOD

The method of this study was analytic observational study, using a cross-sectional design, which emphasizes the time of observations made at that time. The subject of this study was patients of UNIMUS Oral and Dental Hospital Semarang. Sampling taking method was accidental sampling which involved 76 research subjects. In this study, the relationship between education and oral and dental healthcare utilization was analyzed in UNIMUS Oral and Dental Hospital, using data obtained from questionnaires (presented in table 1.). The study specifically examined the differences in oral and dental healthcare use in terms of level of education, measured by the number of attendances, perception utilization, perception of the importance of oral and dental health. If a respondent has more than 50% total answer

“yes”, thus his/her level of utilization will be categorized as high, and vice-versa. The results of the research were analyzed using the *chi square* method.

Table 1. Questionnaires Used to Analyse Respondent's Level of Utilization

No.	Question	Answer (Yes/No)
1	Do you often seek treatment in RSGM UNIMUS when your family members experiencing toothache?	
2	Do you think the existence of RSGM UNIMUS is very beneficial to help treating your oral and dental problems/concerns?	
3	Do you think RSGM UNIMUS service procedure has maintained orderly and accordingly?	
4	Whenever you have oral and dental concern, do you always seek help in RSGM UNIMUS?	
5	Do you visit RSGM UNIMUS not only for treating problems but also for routine checkup?	
6	Do you visit RSGM UNIMUS for more than 6 times during this year?	

RESULT AND DISCUSSION

Respondents' background characteristics by their level of education are shown in Table 2. Out of 76 respondents, 68.47 % (n=52) had been educated up to university level, followed by those with high school level (27.63%; n=21) and junior high level (3.9%; n=3). There were more females (64.5%; n=49) than males (35.5%; n=27). Majority of the respondents were 21 to 40 years old with only 7.9% (n=6) being more than 40 years old.

Table 2. Characteristics of Respondents Based on Gender, Age and Level of Education

Gender	Frequency	Percentage (%)
Male	27	35.5
Female	49	64.5
Total	76	100
Age	Frequency	Percentage (%)
21 - 40	70	92.1
41 - 60	6	7.9
Total	76	100
Education	Frequency	Percentage (%)
Elementary	0	0
Junior High	3	3.9
High school	21	27.63
University / College	52	68.47
Total	76	100

Source: data processing results

Utilization of health services determined as the interaction between consumers and providers. Where consumers here are defined as people, patients or someone who needs care, and the providers here are operators, doctors, or health care workers (Lotfi et al., 2017; Oladipo, 2014). According to Janssen and Swart, health service utilization is an activity carried out by individuals or groups to take advantage of health services (Janssen and Swart, 2016). One of the factors influence a person to take advantage of health services is the knowledge of

each individual. Agyemang and Asibey conclude education offers opportunities to learn more about health and health risks, both in the form of health education in the school curriculum and by giving individuals the health literacy (Agyemang and Asibey, 2018). In this study, respondents' level of education was based on the diploma they hold. Diploma up to junior high school will categorized as low, while up to university or college degree will categorized as high. The results of the analysis of the relationship between education and the utilization of dental and oral health services at UNIMUS Oral and Dental Hospital is shown in table 3. The statistical test results obtained by the value of $P = 0.089$, it can be concluded that H_0 failed to be rejected, which means that there is no significant relationship between education and the utilization of health services at the Unimus Dental Hospital.

Table 3. Distribution of the Relationship between Level of Education and Level of Utilization in UNIMUS RSGM

Level of Education	Utilization of Health Services				OR	95% CI	P- VALUE
	High	%	Low	%			
Low	1	33.3%	2	66.7%	0.152	(0.013 - 1.778)	0.089
High	56	76.7%	17	23.3%			

Source: data processing results

According to (Dorin et al., 2014; Lilienthal et al., 2017) there are two important factors in the utilization of health services that demographic factors such as age, sex, marital status. And social factors include education, work, race, hobbies, religion. However, the results of this study, predisposing factors for education do not have a relationship with the utilization of dental and oral health services at the Unimus Dental Wahyuni (2011) research that predisposing factors for education do not affect the utilization of health services. This study is in line with research by Adam (2008) in (Wahyuni, 2011) that based on the results of the analysis, the level of education has no relationship with the use of health services. However, the results of this study are different from the theory put forward by Syahlan (1996) in Wahyuni (2011) where the search for health efforts is very much determined by the level of education, that families who have a low level of education will tend to surrender to the situation so that they come to the health service if the situation is already awfully. According to (Beatty, 2019) and (Nies and McEwen, 2019) theoretically formal education will greatly affect one's knowledge so that if someone has a high level of education, they will have a high level of knowledge compared to someone who has a low level of education.

Predisposing factors for the level of education do not have a relationship with the use of dental and oral health services at the Unimus Oral and Dental Hospital, however respondents who have a higher education level use more dental and oral health services at the Unimus Dental Hospital compared to respondents who have a low level of education. This is due to more respondents or patients who visit RSGM Unimus are students, so that it affects the level of education so that higher education outcomes are obtained.

CONCLUSION

Based on the results of research on the relationship between education and the use of dental and oral health services at the Unimus Dental Hospital, the following conclusions as

follow: The predisposing factor, namely education, did not have a significant relationship with the utilization of dental and oral health services at the Unimus Dental Hospital. These results imply that. The limitations of the research were the use of the instrument to assess level of utilization would be best if it was tested for its validity first.

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