

KNOWLEDGE AND ATTITUDE OF POSYANDU CADRES REGARDING THE USE OF TELEDENTISTRY (STUDY ON PISANGAN VILLAGE, EAST CIPUTAT)

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ABSTRACT

Teledentistry is part of telemedicine, and it can effectively provide dental and oral services to the community, especially to underserved communities. Posyandu cadres can also use teledentistry. The knowledge and attitude of posyandu cadres is the basis that can encourage posyandu cadres to be able to carry out one of the roles of posyandu cadres as a long-arm health center to help provide access to dental and oral health services to the community by utilizing teledentistry. The purpose of this study is to explain the knowledge and attitude of posyandu cadres regarding the use of teledentistry in Pisangan Village, East Ciputat. The descriptive research method used a cross-sectional design with a total sample of 207 posyandu cadres using a purposive sampling technique. The questionnaire was a Google form containing an informed consent sheet, six knowledge questions and nine statements of attitude regarding teledentistry. The Univariate test showed that of the 207 posyandu cadres, the majority were in the age range of 46-55 years (48.3%) with a high school/equivalent education level (60.9%) who had a good level of knowledge (69.1%) and had a positive attitude (97.1%) towards teledentistry.

Keywords: teledentistry, posyandu cadres, knowledge, attitude

INTRODUCTION

The Coronavirus Disease pandemic in 2019 (COVID-19) made all systems switch to online and digital methods, including health sector ones. The COVID-19 pandemic is the main factor in implementing online health services using telemedicine and teledentistry. (World Health Organization | WHA 71, 2018).

Teledentistry is part of telemedicine that provides technology-based and telecommunication dental and oral services by exchanging clinical information through digital images related to consultation, treatment planning and monitoring of dental care (Astoeti & Widyarman, 2020). The purpose of teledentistry services is to help improve the quality of dental and oral health services. The results of Basic Health Research (RISKESDAS) in 2018 show that 57.6% of the population of Indonesia experience dental and oral health problems, but only 10.2% receive dental and oral health services, from which teledentistry can be an effective means of providing dental and oral health services to underserved populations (Tim Riskesda, 2018; Modak & Basu, 2020).

Several references mention the effective use of teledentistry (Sari & Sulistiadi, 2022), teledentistry can increase and expand the availability of dental and oral services not only in urban areas but also in rural areas that do not have access to health services. Research by (Hudyono et al., 2020) noted that during the COVID-19 pandemic, patient visits to dental polyclinics were low, only 38% of patients visited dental polyclinics. Teledentistry is an alternative to providing dental and oral health services during the pandemic, in a study conducted by Amer et al., quoted from (Rachim et al., 2021), patient satisfaction with the use of teledentistry during the pandemic increased because it could facilitate dental and oral health needs and patients would continue to use teledentistry.

The use of teledentistry can also be applied to posyandu cadres to help provide access to dental and oral health services to the community, this is considering the duties of posyandu cadres as managers and implementers of posyandu activities who know the needs of the community and health problems experienced by the community (Marufah et al., 2022). According to (Marufah et al., 2022), posyandu cadres have an important role in the health sector to assist the health centre in providing dental and oral health services through teledentistry to the community. In addition, posyandu cadres can also bridge the relationship between the community and the health centre through teledentistry. This paper aims to explain the knowledge and attitude of posyandu cadres in using teledentistry to provide dental health services to the community. It can provide information on dental care needs to related dental health workers.

METHODS

The research is a descriptive type of research with a cross-sectional design. This research was carried out in the area of East Ciputat Pisangan Village. The subject of this study is posyandu cadres. Sampling with purposive sampling techniques, 207 posyandu cadres were obtained who met the inclusion criteria.

The instrument in this study used a questionnaire in the form of a Google form containing informed consent, six knowledge questions with four answer choices and nine attitude statements using a Likert scale regarding teledentistry which has been tested for validity and reliability with a value of r calculation > r table and Cronbach alpha on six knowledge questions 0.65 and nine attitude statements 0.881. The questionnaire was distributed through the WhatsApp application to each posyandu head.

RESULTS

The results of the research were obtained by 207 posyandu cadres who filled out informed consent and questionnaires completely. Table 1 shows the results of the characteristics of posyandu cadres in the age range of 34-35 years as many as 100 people (48.3) and 126 people (60.9%) of posyandu cadres have a high school education level/equivalent.

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics of Respondents	n	%
Age Group		
25-35 years old	7	4%
34-45 years old	49	23,7%
46-55 years old	100	48,3%
> 55 years old	51	24,6%
Education level		
Primary School/Equivalent	16	7,7%
Junior High School/Equivalent	27	13%
High School/Equivalent	126	60,9%
Diploma	12	8,2%
Bachelor	21	10,1%

In Table 2, the results of the measurement of questions about the knowledge of posyandu cadres about teledentistry were obtained. As many as 143 posyandu cadres (69.1%) already knew about teledentistry through social media, as many as 91 people (63.6%). Most of the posyandu cadres as many as 193 people (92.3%) have never received socialization about teledentistry and the majority of posyandu cadres as many as 194 people (93.7%) have never done dental and oral consultation using teledentistry.

Table 2. Distribution of Question Frequency Related to Posyandu Cadre Knowledge Regarding Teledentistry

Question	n	%
1. Have you ever know about teledentistry before?		
Yes	143	69,1%
No	64	30,9%
2. Where did you find out about teledentistry?		
Social media	91	63,6%
Fellow posyandu cadres in other villages	45	31,5%
Puskesmas	7	4,9%
3. Have you ever received socialization about teledentistry?		
Yes	14	6,8%
No	193	93,2%
4. Have you ever consulted dental and oral health using teledentistry? ?		
Ya	13	6,3%
Tidak	194	93,7%

Table 3 shows the knowledge category of posyandu cadres, the majority of posyandu cadres as many as 143 people (69.1%) are included in the category of having good knowledge with a score of 4-6, as many as 51 people (24.6%) of posyandu cadres are included in the category of sufficient knowledge with a score of 2-3, and as many as 13 people (6.3%) of posyandu cadres are included in the category of poor knowledge with a score of 0-1. In the attitude category, the majority of 201 people (97.1%) of posyandu cadres were included in the category of having a positive attitude with a score of 33-45 and as many as 6 people (2.9%) of posyandu cadres were included in the category of having a positive attitude with a score of 21-32.

Table 3. Frequency Distribution of Knowledge Categories

Categories	n	%
Knowledge		
Good Knowledge (Score 4-6)	143	69,1%
Sufficient Knowledge (Score 2-3)	51	24,6%
Poor Knowledge (Score 0-1)	13	6,3%
Attitude		
Positive attitude (Score 33-45)	201	97,1%
Neutral attitude (Score 21-32)	6	2,9%

Figures 1 and 2 show that the majority of posyandu cadres who have good knowledge are in the age range of 46-55, as many as 66 people (66%), and the majority of posyandu cadres who have good knowledge have a high school/equivalent education level of 87 people.

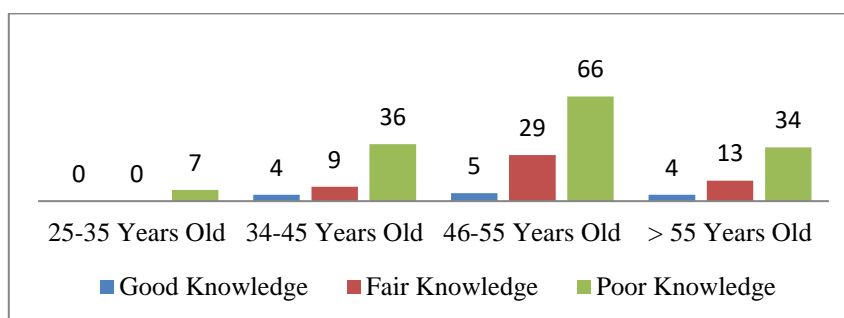


Figure 1. Graph of Knowledge Category of Posyandu Cadres with Age of Posyandu Cadres

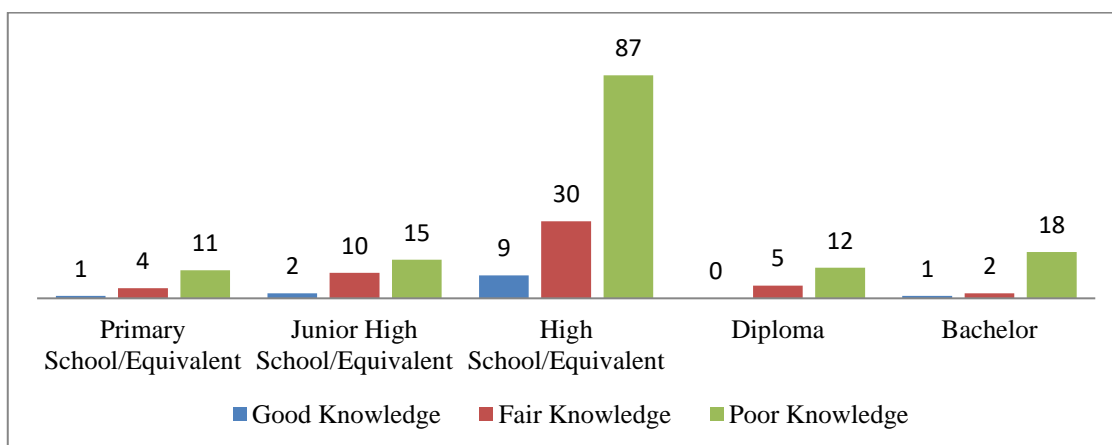


Figure 2. Graph of Posyandu Cadre Knowledge Category with Posyandu Cadre Education Level.

Figure 3 and Figure 4 show that the majority of posyandu cadres who have a positive attitude are in the age range of 46-55 years as many as 99 people (99%) and the majority of posyandu cadres who have good knowledge have a high school/equivalent education level of 122 people (96.8%).

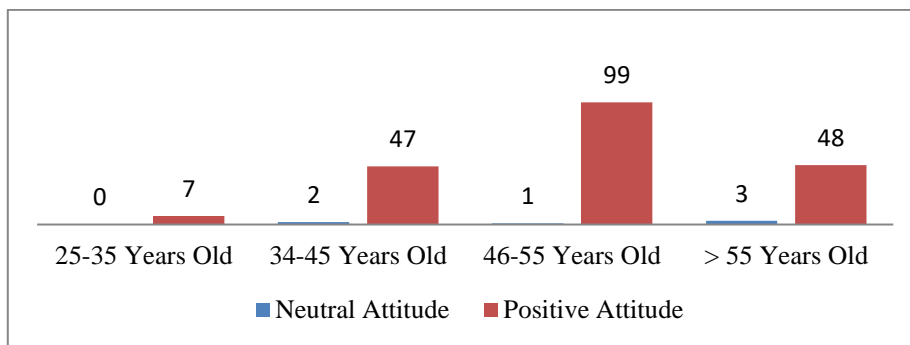


Figure 3. Graph of Posyandu Cadre Attitude Category with Age of Posyandu Cadre.

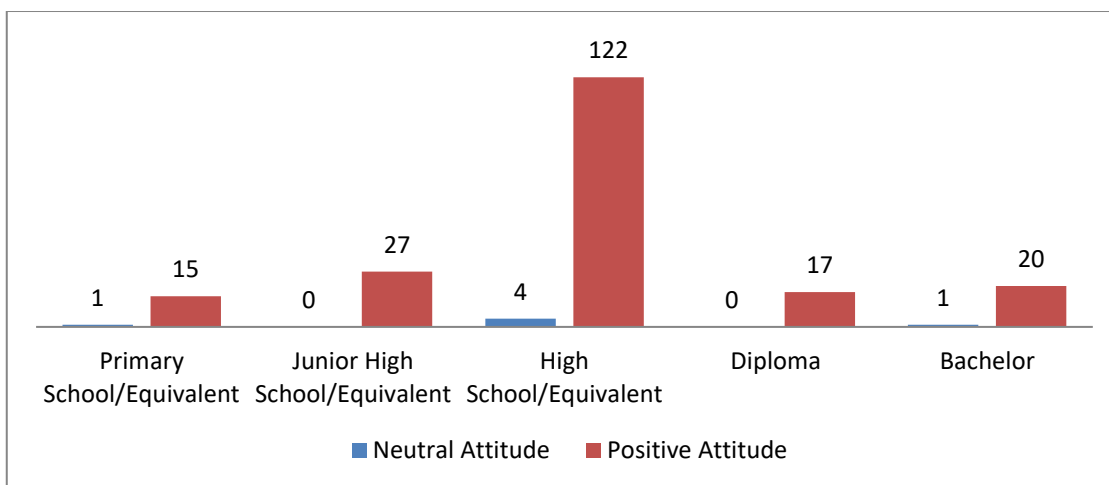


Figure 4. Graph of Posyandu Cadre Attitude Category with Posyandu Cadre Education Level.

DISCUSSION

The research was conducted on posyandu cadres because, according to (Hariyani et al., 2022) posyandu cadres have an essential role as an extended hand of the puskesmas in bridging the relationship between the community and dentists in providing dental and oral health services to the community who can use teledentistry (Hariyani et al., 2022). In this study, the majority of posyandu cadres were in the age range of 46-55 years, as many as 100 people (48.3%), the results of this study showed results that were in line with the research conducted by (Suharja et al., 2022), seen from the age range, that the majority of posyandu cadres were in the age range > 40 years because in that age range a person will be more active in a social activity. According to Hovighurts Developmental Theory quoted from (Sukandar et al., 2018), in this age range, an individual has entered the stage of having responsibility for social activities in the community where the environment is located, so this age range is widely found in social activities, one of which is becoming a posyandu cadre. The results of the study show that most of the posyandu cadres are at the senior high school/equivalent education level, the results of this study are in line with the research conducted by (Ayu, 2018) judging from the education level, the majority of posyandu cadres are at the senior high school/equivalent educator level. (Herlinawati, 2019.) stated that for someone to become a posyandu cadre, there are no requirements for a certain level of education, because becoming a posyandu cadre is voluntary.

The results of this study show that the level of knowledge of posyandu cadres about teledentistry was obtained by the majority of posyandu cadres as many as 143 people (69.1%) have a good level of knowledge. According to Notoadmodmojo 2010, the level of good knowledge obtained by a person can be influenced by age and education factors, from the results of cross-age tabulation with the knowledge category of posyandu cadres, the majority of posyandu cadres who have a good level of knowledge are in the age range of 46-55 years as many as 66 people (66%). According to Hurlock, quoted from (Darsini et al., 2019) the older a person gets, the more mature his mindset will be in doing his work, and his catching ability will be better so that the knowledge obtained by a person will be better. According to Boni et al., quoted from (Rahayuningsih & Margiana, 2023), the posyandu cadres who carry out posyandu activities are cadres who are in a sufficient age range because the older the posyandu cadres, the better the

experience that posyandu cadres have, so that there will be much information owned by posyandu cadres that can affect their education level to be better. In addition to the age factor, there are educational factors that can affect it, namely in the results of cross-tabulation of education with the category of cadre knowledge, the majority of posyandu cadres who have a good level of knowledge, namely at the high school /equivalent education level as many as 87 people (69%), this is in line with (Ayu, 2018) that most of the posyandu cadres who have a high school/Simplified education level are considered to have more insight and better abilities in absorb information that has been obtained. Although there is a higher level of education than high school/equivalent, the level of education in this study is not widely owned by posyandu cadres.

The good knowledge obtained by 143 posyandu cadres (69.1%) in addition to being influenced by age and education, there are other factors, namely based on the results of 4 questions related to the knowledge of posyandu cadres about teledentistry, it was obtained that the majority of posyandu cadres had previously known about teledentistry, namely 143 people (69.1%) and the majority of posyandu cadres knew about teledentistry through social media as many as 91 people (63.6%), This is in line with the beginning of the use of teledentistry in social media that various platforms have provided, one of the studies conducted by (Hervina, Haris Nasutianto, 2021) conducted socialization using teledentistry using the "TanyaPepsodent" platform to carry out teledentistry.

The attitude of posyandu cadres regarding the use of teledentistry in Pisangan Village, East Ciputat, based on the results of 9 statements regarding teledentistry, the majority of cadres showed a positive attitude towards teledentistry which means that posyandu cadres support the existence of teledentistry. However, most posyandu cadres have never used teledentistry. Still, cadres support the existence of teledentistry, this is in line with the research of (Asriawal et al., 2022) namely almost most of the people who have not used teledentistry, but supported the existence of teledentistry. In addition, the positive attitude of cadres towards teledentistry is influenced by the condition of posyandu cadres in posyandu activities, namely in every posyandu activity in Pisangan Village, East Ciputat, each cadre must be absent from attendance online and in reporting the results of posyandu activities that have been carried out must be done online through the i-posyandu application, So that in this case the cadres of the posyandu of East Pisangan Ciputat Village are used to the online-based system, from this it has a positive impact on the attitude of posyandu cadres towards the existence of teledentistry. In addition to the influence of the condition of the posyandu cadres in their activities, the positive attitude obtained by the posyandu cadres can be influenced by their knowledge, according to Razak's theory states that the level of knowledge greatly influences the formation of a person's attitude, if a person has good knowledge then a positive attitude will be formed. Based on their knowledge level, most posyandu cadres are included in the category of good knowledge level, so it can influence posyandu cadres to have a positive attitude towards teledentistry (Irwan, 2017).

CONCLUSION

The knowledge and attitude of 207 posyandu cadres in Pisangan Village, East Ciputat, regarding the use of teledentistry, was achieved by 143 people (69.1%) posyandu cadres had a positive understanding of the use of teledentistry, and as many as 201 people (97.1%) had a positive attitude towards the use of teledentistry.

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