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The Effect of the Use of Photonovela and Interactive Communications Video as Media on Increasing Understanding of Informed Consent in Exodontia Patients: Case Study on RSGM Unpad and RSGM Maranatha, Indonesia

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Abstract:

Background: Hospitals need to consider patient safety which can be obtained with complete informed consent. The process of delivering informed consent needs to be reviewed due to the patient's lack of understanding about the risks and impacts that may occur during tooth extraction. Submission of informed consent using traditional comic strip photonovela and animation interactive communication videos as media can be an alternative to provide information on action to patients. Study objective : to determine the effect of the use of traditional comic strip photonovela and animation interactive communication videos as media on increasing the understanding of exodontia patients' informed consent at RSGM Unpad and Maranatha. Research methodology: The study used a quasi-experimental research method with a non-equivalent control group design. The sample of this study was 94 people. Result: This study showed that the patient's understanding increased significantly after the patient was given traditional comic strip photonovela and animated interactive communication videos as media. Hypothesis testing is known that the provision of traditional comic strip photonovela and animation interactive communication videos as media provides a significant increase in understanding about the informed consent of exodontia patients at RSGM Unpad and Maranatha.

Keywords: *Informed consent, photonovela, interactive communication video, patient understanding, exodontia*

1. Introduction

Hospitals need to consider patient safety which can be obtained with complete informed consent (Minister of Health of the Republic of Indonesia, 2009). Informed consent is a form of approval for the action to be taken after getting a complete explanation of the medical action. The importance of obtaining informed consent to increase the sense of security in medical treatment for patients and as self-defense against the possibility of demands from patients if something unwanted arises (Darmini, Nunik, and Widyaningtyas, 2014). The process of submitting informed consent needs to be reviewed considering the patient's lack of understanding about the risks and impacts that may occur when a medical action will be carried out. (Hakim, Busro and Hendrawati, 2016).

Dental and Oral Hospital (RSGM) Unpad and Maranatha is an educational hospital that was established for dental and oral services in the Bandung area, Indonesia. Oral surgery (minor) installations in RSGM are installations that perform extractions on patients who are categorized as adults and have the highest average number of patients. From the survey results at the exodontic minor installations of RSGM Unpad and Maranatha, it was found that 31.80% did not understand the contents of informed consent.

Photonovela is a print media that resembles comics or illustrated stories, with the dominance of photographs compared to writing as a substitute for illustrations (Susanto, Rasyid and Hakim, 2017). Photonovela has the potential to be a media that makes it easier for patients to understand information, especially those who have low cognitive abilities and understanding (health literacy), improve memory of the information conveyed, and describe the existing reality. (Susanto, Rasyid and Hakim, 2017). While interactive communication video is an electronic media that is able to combine audio and visual technology together to produce dynamic, interesting, and interactive shows.

Street and Haidet (2011) mentions that a doctor is not very good at assessing the patient's ability to understand the medical information provided, so that activeness, participation, understanding from within the patient himself is

needed to prevent readmissions to the hospital. The assessment can be carried out by many evaluation methods, one of which is the teachback collaborative method, namely the patient's ability to explain back the information provided. This method is very well applied to patients who have low cognitive abilities and understanding (health literacy) (Lorenzen, Melby and Earles, 2008).

The purpose of this research is to analyze the effect of giving phonovela traditional comic strip media to the understanding of exodontic patients regarding informed consent; Analyzing the effect of providing video animation media on the understanding of exodontic patients regarding informed consent; Analyzing the effect of giving photonovela traditional comic strips and video animation on the understanding of exodontia patients regarding informed consent.

2. Literature Review

Informed consent is an agreement for medical action, after getting an agreement between the patient and the doctor, with evidence of the patient signing a form in front of the doctor (Syafruddin and Anand, 2015). Informed consent according to regulation of the minister of health No. 290 of 2008 is divided into two forms, namely implied consent and expressed consent. Consent to medical treatment is the responsibility of the doctor to ensure that the consent is obtained correctly and appropriately. Informed consent includes at least nine things, namely diagnosis, indications and procedures for medical action; The purpose of medical action; Alternative actions and their risks; Risks and complications that may occur; Prognosis of the action taken.; Cost if in the form of Action

Juntos (2012) states that there are ten factors that become obstacles to the delivery of informed consent, namely: (Plankey-Videla, 2012): Medical personnel do not have time and do not know the right time to convey informed consent to patients; Medical personnel are afraid of providing too much information; Patients feel that informed consent is a legal formality for the safety of doctors or hospitals; Patients do not know that they can refuse or delay medical treatment; The patient's language and culture problems are difficult to receive information; Factors that come from the patient (IQ, stress, and fear); Poor submission of informed consent; The patient misunderstood the informed consent given; and the ability of medical personnel to understand the limitations of the patient.

Tooth extraction is the process of removing a tooth from the alveolar bone because the tooth cannot be filled. Tooth extraction is a benchmark in determining dental and oral health status. The rate of tooth extraction increases with age. Age is one of the factors that influence the level of utilization of health services and the selection of types of health services. Older people tend to prefer curative care (medication), while younger people generally prefer preventive care (prevention). The number of tooth extractions decreased as the level of education increased. This result is supported by previous research where the lower education group experienced more tooth extraction than the higher education group. The level of education represents the level of a person's ability to obtain and understand health information. The higher the level of education of a person, the better level of understanding of the information obtained (Fenanlampir, Mariati and Hutagalung, 2014).

Media is part of the communication process that must exist based on Lasswell's classical theory. This study makes the media as a tool used by patients in obtaining information about informed consent. Photonovelas are print media that resemble comics or illustrated stories, using several photos instead of illustrations. (Ariyani et al., 2018). The number of pictures and a little text make this media able to be used as a medium for discussion between doctors and patients in explaining informed consent. Photonovela has the potential to be a medium that easily influences patients to understand and take recommended actions compared to other print media (Casillas et al., 2020). The media used in this research is Photonovela Traditional comic strip. Photonovela Traditional comic strip is a form of photonovela with a three-panel comic strip format with an explanation on each panel. In addition to photonovela, the media that can be used to increase patient understanding regarding informed consent is video. Video is an audio-visual media that transmits images on television, live recordings or television programs that are broadcast quickly (KBBI, 2016) and the method of delivering material using machines and electronics to present audio and visual messages. This research uses interactive communication video which is designed as an effective, targeted media, and is presented through audio-visual presentations (images and sound) (Dewi, 2019).

This media provision is intended to adapt the theory of Health Believe Model (HBM) and Social Cognitive Theory (SCT). Social cognitive theory is a theory to see the patient's interpersonal factors (Bandura, 2011). The concept that underlies the Health Believe Model (HBM) theory is that health behavior is strongly influenced by personal beliefs and perceptions about the illness. Communication barriers often go undetected in healthcare services that have a serious impact on patient health and safety. Measurement of the ability of health literacy in each patient is very necessary before the process of giving informed consent is carried out in every hospital. Individuals with low health literacy skills are at risk for making mistakes and having poorer health outcomes (Bitzer and Sorensen, 2018; Velardo, 2015)

3. Research Methodology

This study uses a quasi-experimental research method with non-equivalent control group design to measure and analyze the comparison of the effect of giving traditional comic strip photonovelas and animation interactive communication videos to the level of understanding of exodontia patients' informed consent. This research method is generally carried out by making media, finding samples, applying photonovela and video as media, evaluating patient understanding. The evaluation method that will be used to measure understanding is teach back collaborative. The study population for this study were all exodontia patients who required tooth extraction at the RSGM as many as 123 people.

The author takes a sample using the Slovin formula in Umar (2000), so that the number of samples is 94 people. This study measures the knowledge or understanding of patients regarding informed consent for extraction. The patient's understanding can be assessed by comparing the patient's understanding before and after being given the media. Patients

will be assessed before giving the media to their understanding of the informed consent that has been explained by the doctor. After that the patient will be given media and the patient will be reassessed. Patients are said to understand if they are able to re-explain the contents of the informed consent using their own language, and the operator performs an assessment.

The data taken from the research sample is primary data. Data were collected through interviews with patients and research instruments in the form of questionnaires. The instrument for measuring patient understanding uses a teach back collaborative in the form of a checklist. The measurement method used is scoring based on keywords that have been created and matched based on the teach back collaborative evaluation method. The material that is the content of the questionnaire is adjusted to all indicators of informed consent in the regulation of the minister of health number 290 of 2008. The answer checklist was obtained from a study made by Susanto, Rasyid, and Hakim (2017) with a validity test value of 0.920 and a reliability test of r count more small compared to r table (r table = 0.632), so no statistical test is needed (Susanto, Rasyid and Hakim, 2017). Data analysis in this study used the Independent T-test method.

4. Discussion

This study describes the nine contents of informed consent regulated in the regulation of the minister of health No. 290 of 2008, there is an increase in understanding related to informed consent throughout the total value after giving traditional comic strip photonovela and animation interactive communication videos as media. The biggest difference is seen in the indications, complications and costs in the two groups given two different media, namely the difference in the percentage of correct answers is more than 35%. It is known that exodontic patients still do not understand the difference between complications and the risk of tooth extraction, and exodontic patients do not understand well what considerations underlie dentists performing tooth extractions.

The provision of photonovela and interactive communication videos given to patients will increase patient knowledge so as to reduce the number of patients who do not understand the explanation of informed consent by doctors regarding tooth extraction. Increasing patient understanding regarding informed consent can have an impact on increasing patient safety in hospitals, because it will reduce the impact of unexpected events. The use of media that is simple, easy to understand, interesting, and easy to read and watch, is very important to consider in making educational media in the future (Kusuma, 2009). Photonovela traditional comic strips and animation interactive communication videos are media that are able to invite discussion and be interactive with readers or viewers. According to Rahayu, Murniati and Farikhah (2013), the role of a good media is to be able to provide information that can 'talk' to readers in conveying existing information. This research is related to the concept of Social Cognitive Theory (SCT) theory which is related to Information theory and the process of understanding.

The results of data processing showed that there was a significant difference between the effect of the variable giving photonovela traditional comic strip and animation interactive communication videos as media with increasing patient understanding regarding informed consent for dental extraction. The media in this study have a major role in bridging the information conveyed by the information giver and the recipient of the information. Media is a tool that can improve the way doctor-patient communication becomes easier to understand. This is in accordance with research conducted by Djohani (2007), showing that the media is able to increase knowledge of the information to be conveyed, in this case informed consent for medical actions including tooth extraction, compared to relying on informed consent given by doctors alone.

When the patient is given the media after explaining the informed consent by the doctor, the patient's understanding will increase towards the information provided because it indirectly provides repetition of explaining and providing information that can be captured easily through a media, compared to only using the informed consent explanation given by the doctor (without using media).

In detail, based on nine contents of informed consent, it is influenced by the provision of traditional comic strip photonovela and animation interactive communication videos. This is in accordance with research conducted by Susanto, et al (2017), which states that media that does not bring up many and complex words is needed to make it easier for patients to grasp the understanding of medical explanations related to informed consent and the provision of photonovela media can increase patients' understanding of the contents of informed consent (Susanto, Pratama and Hariyanto, 2017). Research conducted by Valle, Yamada and Matiella (2006) and Dewangga (2017), said that the photonovela media is very helpful for patients who have low health literacy related to informed consent, so it will be very easy for patients to understand. Based on the results of descriptive analysis, hypothesis testing and research results, it can be concluded that the provision of photonovela media has an effect on increasing patient understanding regarding informed consent in dental extraction patients at RSGM Unpad and Maranatha.

Related to animation interactive communication videos media, previous research conducted by Karim, Supriawan, and Sukrawan, that video learning media has increased understanding in achieving learning goals (Karim, Supriawan and Sukrawan, 2016). According to Erna Rahmawati and Soekarsono Hardjono (2013) in their study said that as well as interactive communication videos that can increase retention of understanding of the material presented to the audience, According to Nomleni and Manu, video media can be used effectively in increasing one's understanding of concepts (Nomleni and Manu, 2018).

The hypothesis in this study regarding the provision of a medium to improve patient understanding compared to relying solely on doctor's information proved to be true and acceptable when an assessment was made of all dental extraction patients at RSGM Unpad and Maranatha. Photonovela traditional comic strip and animation interactive communication videos are expected to help RSGM to improve quality control, reduce patient safety incidents, and improve

patient safety in hospitals. Where is currently felt to be so minimal when there is only an explanation of the informed consent given by the doctor to the patient.

Photonovela traditional comic strips and animation interactive communication videos are known to be media that can assist the process of delivering information by the information giver to the information recipient. In addition, photonovelas and interactive communication videos in this study make it easier for exodontic patients to understand information about dental extraction procedures. All doctor's explanations can be illustrated on photonovela traditional comic strip media, so that patients can easily imagine and understand the information conveyed. What is known to be an advantage of photonovela media is that the language displayed is not a rigid text book language, but the language used is the language of everyday conversation played by doctors. This is in accordance with Mediawati's research (2011) that photonovela media can help patients return to visualizing that the patient is in the position of the illustration image in the photonovela traditional comic strip media, so that indirectly the patient will feel participation in the conversation. Of course, this will further help the patient in understanding the information on the dental extraction procedure. In addition to photonovela media, animation interactive communication video media is a media designed to visualize with audio anything related to delivering information on dental extractions in a more real way. This media can also be given to patients with low health literacy because it will bring the audience to imagine that they are in that position and the material is packaged in a multimedia way that includes text, animation, sound, and video according to the demands of the material.

In addition to the above, the results of this study indicate that there are incomplete explanations carried out by almost all the contents of the informed consent for dental extraction that must be explained, and it is known that many patients do not understand the indications for the procedure, the complications of the procedure, and the costs required for the tooth extraction procedure. This is an input for RSGM Unpad and Maranatha in providing improvements to doctors regarding the provision of informed consent, which is more pressing the delivery of explanations regarding indications of action, complications of the procedure, and costs to patients who will be given informed consent for tooth extraction, without ignoring other components in the content of informed consent.

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