The Effectivity of Integrated Social Media to the Patient's Understanding of Patient Safety Practice by Nurse in the Hospital

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Abstract: Patient safety incidents are several incidents that have the potential to threaten patient health. Efforts to meet the 6 Patient Safety Goals (PSG) standards which include; 1) accurate patient identification, 2) effective communication, 3) drug safety, 4) appropriate surgical location/procedure, 5) risk of infection, and 6) risk for falls (Albyn et al., 2022), are part of the indicators of hospital service quality . The patient's lack of understanding of the program will hinder the successful implementation of the PSG. Information related to PSG can be provided by the hospital through One solution to increase access to information is to utilize integrated social media, objectives Analyzing patients' understanding of PSG after being given Integrated Social Media (Full Text Media, Images and Text, monologue videos, and animated videos). The research used a Quesy experiment method with a design (One-group pretest -posttest design), with a simple random sampling technique of 119 patients at Dr Gondosuwarno Regional Hospital. The data analysis used was the Wilcoxon rank test. Results of patient understanding regarding (1) Patient identification by nurses p = 0.002, (2) effective communication p = 0.025, (3) drug safety p = 0.025, (4) appropriate surgical location/procedure p = 0.046, and (5) risks infection p = 0.083, (6) risk of falls p = 0.000. p-value < 0.05 (α) means there is a significant difference in. patient understanding of patient identity, effective communication, drug safety, appropriate surgical location/procedure and risk for falls. The use of Integrated Social Media has an influence on patient understanding of patient identity, effective communication, appropriate location/procedure, drug safety, and risk of falls.

Keywords: patient safety goals, Integrated Social Media

INTRODUCTION

Problems related to patient safety issues in hospitals are about patient safety incidents, several incidents that have the potential to threaten the health of patients and families due to disease, due to therapy, due to drug interactions with other drugs, due to drug interactions with food, due to an environment that is not ergonomic, due to slippery floors, due to inadequate lighting, etc. Patient safety is a special discussion that indicates the quality of service in a hospital, if patient safety incidents or incidents occur in large numbers, it shows that the quality of service in a hospital is not optimal. Patients and families often do not understand that some conditions are a threat to them, this happens because of the low level of information provided to the wider community about patient and family safety. The hospital can provide information through brochures, leaflets, posters, videos, etc., but not all of this information is maximally accessed by patients and patient attendants. Patient safety information is essential to avoid misunderstandings between the family and the hospital. Building awareness of patient safety values and involving and communicating with patients is also one of the steps towards patient safety.(Minister of Health of the Republic of Indonesia, 2017).

ObjectiveThe main focus of developing patient safety programs in hospitals and other health service facilities is the creation of a patient safety culture in hospitals, increasing patient and community trust, reducing unexpected incidents in hospitals, and implementing prevention programs so that unwanted incidents do not recur.(Rosyidi et al., 2020). One solution to increase access to IEC information is to utilize social media, social media has seen an increase in the number of users in Indonesia, even one person can use two to three mobile phones or even more to manage social media, this of course becomes an opportunity to disseminate information about patient safety through social media.

METHOD

This study uses the Quesy experiment method with a design (One-group pretest - posttest design). The population in this study was 1190 patients and families, the sample in this study was 119 patients and families. The research sample was taken using the simple rundome sampling technique of 119 patients at the research location, the inpatient room at Gondosuwarno Hospital, June 2022 to May 2023. The research procedure was carried out first by taking care of correspondence with the relevant agencies, asking for respondent approval and explaining the procedures to be carried out. After that, the researcher measured the patient's understanding with

a multiple-choice checklist question instrument related to the patient's understanding of the 6 patient safety targets. After that, the patient was given an intervention using Integrated Social Media (Full text media, images and text, monologue videos, and animated videos). The time for providing material in integrated social media was approximately 60 minutes for each patient, after which a post-test measurement was carried out regarding the patient's understanding. Univariate data analysis is used to describe each variable using frequency distribution and proportion, to describe data 1) Patient understanding of nurse accuracy in patient identification, 2) Patient understanding of Effective Communication, 3) Patient understanding of Drug Safety, 4) Patient understanding of accuracy of surgical location/procedure, 5) Patient understanding of Infection risk, and 6) Patient understanding of Fall Risk. Before conducting the Bivariate test, the sample was tested for normality first using Kolmogorov-Smirnov with the result that the data distribution was not normal. So the Bivariate analysis used was the Wilcoxon rank test(Sugiyono, 2022).

RESULTS

The results of the Univariate Analysis of patient understanding of the 6 Patient Safety Goals during the pre-test are as follows:

Table 1a Frequency distribution of patient understanding of nurses' accuracy in pre-test patient identification

Understanding 1	Frequency (f)	Percentage (%)
Not understand	18	15.1
Understand	101	84.9
Amount	119	100.0

Based on table 1a, it shows that the majority (84.9%) of respondents understand the accuracy of nurses in identification.

Table 2a Frequency distribution of patient understanding Patient understanding of Effective communication, pre-test

Understanding 1	Frequency (f)	Percentage (%)
Not understand	18	15.1
Understand	101	84.9
Amount	119	100.0

Based on table 2a, it shows that the majority (84.9%) of respondents also understand effective communication.

Table 3a Frequency distribution of patient understanding of Drug Safety

Understanding 1	Frequency (f)	Percentage (%)
Not understand	13	10.9
Understand	106	89.1
Amount	119	100.0

Based on table 3a, it shows that the majority (89.1%) of respondents understand drug safety.

Table 4a Frequency distribution of patient understanding of the correct location/procedure of surgery

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	28	23.5
Understand	91	76.5
Amount	119	100.0

Based on table 4a, it shows that some (76.5%) respondents understand the accuracy of the location/operation procedure.

Table 5a Frequency distribution of patient understanding of infection risk

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	26	21.8
Understand	93	78.2
Amount	119	100.0

Based on table 5a, it shows that some (78.2%) respondents understand the risk of infection.

Table 6a Frequency distribution of patient understanding of Fall Risk

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	44	37.0
Understand	75	63.0
Amount	119	100.0

Based on table 6a, it shows that some (63%) of respondents understand the risk of falling.

Table 1b Frequency distribution of patient understanding of nurses' accuracy in post-test patient identification

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	8	6.7
Understand	111	93.3
Amount	119	100.0

Based on table 1b it shows that most (93.3%) respondents understand the accuracy of nurses in identification.

Table 2b Frequency distribution of patient understanding Patient understanding of Effective communication, post-test

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	13	10.9
Understand	106	89.1
Amount	119	100.0

Based on table 2b it shows that most (89.1%) respondents also understand about effective communication,

Table 3b Frequency distribution of patient understanding of Drug Safety post-test

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	8	6.7
Understand	111	93.3
Amount	119	100.0

Based on table 3b it shows that most (93.3%) respondents understand drug safety.

Table 4b Frequency distribution of patient understanding of the accuracy of the surgical site/procedure post-test

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	24	20.2
Understand	95	79.8
Amount	119	100.0

Based on table 4b it shows that some (79.8%) respondents understand about the accuracy of the location/operation procedure.

Table 5b Frequency distribution of patient understanding of post-test infection risk

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	23	19.3
Understand	96	80.7
Amount	119	100.0

Based on table 5b it shows that some (80.7%) respondents understand the risk of infection

Table 6b Frequency distribution of patient understanding of Fall Risk post-test

Understanding 1	Frequency (f)	Percentage (%)
Not really understand	3	2.5
Understand	116	97.5
Amount	119	100.0

Based on table 6b it shows that some (97.5%) respondents understand the risk of falling.

Analysis resultsBivariate using the Wilcoxon rank test is explained in the table below.

Table 7a Results of the Wilcoxon Test of Patient Understanding of Patient Identification by Nurses

Test Statistics

	PostSoal1 - PreSoal1
Z	-3.162b
Asymp. Sig. (2-tailed)	.002

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7aThe results of the Wilcoxon test showed a z-value of -3.126 and a sig. of 0.002 less than 0.05 (5% error rate), so it can be concluded that there is a difference in patient understanding of patient identification by nurses before and after the provision of Integrated Social Media.

Table 7b Results of the Wilcoxon Test of Patient Understanding of Effective Communication

Test Statistics

	PostSoal2 - PreSoal2
Z	-2.236b
Asymp. Sig. (2-tailed)	.025

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7bThe results of the Wilcoxon test show a calculated z value of-2.236and sig. of 0.025 less than 0.05 (5% error rate), it can be concluded that there is a difference in patient understanding of effective communication before and after the provision of Integrated Social Media.

Table 7c Results of the Wilcoxon Test of Patient Understanding of Drug Safety

Test Statistics

	PostSoal3 - PreSoal3
Z	-2.236b
Asymp. Sig. (2-tailed)	.025

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7cThe results of the Wilcoxon test show a calculated z value of-2.236 and sig. of 0.025 less than 0.05 (5% error rate), it can be concluded that there is a difference in patient understanding of drug safety by nurses before and after the provision of Integrated Social Media.

Table 7d Wilcoxon Test Results Patient Understanding of the Correctness of the Surgical Site/Procedure

Test Statistics

	PostSoal4 - PreSoal4
Z	-2,000b
Asymp. Sig. (2-tailed)	.046

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7dThe results of the Wilcoxon test show a calculated z value of-2,000 and sig. of 0.046 less than 0.05 (5% error rate), it can be concluded that there is a difference in Patient Understanding of the accuracy of the location/procedure of surgery before and after the provision of Integrated Social Media.

Table 7e Results of the Wilcoxon Test of Patient Understanding of the Risk of Infection

Test Statistics

	PostSoal5 - PreSoal5
Z	-1.732b
Asymp. Sig. (2-tailed)	.083

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7eThe results of the Wilcoxon test show a calculated z value of-1,732 and sig. of 0.083 less than 0.05 (5% error rate), it can be concluded that there is no difference in Patient Understanding of the risk of infection before and after the provision of Integrated Social Media.

Table 7f Wilcoxon Test Results Patient Understanding of Fall Risk

Test Statistics

	PostSoal6 - PreTestSoal6
Z	-6.403b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

In table 7fThe results of the Wilcoxon test show a calculated z value of-6.403 and sig. of 0.000 less than 0.05 (5% error rate), it can be concluded that there is a difference in Patient Understanding of the risk of falling before and after the provision of Integrated Social Media.

DISCUSSION

Occupational safety and health is a system that is interconnected with efforts to prevent injuries and diseases that have the potential to impact the surrounding community and the environment.(Albyn et al., 2022). So that patient safety becomes one of the main priorities in all areas of health. This means that all steps must be taken to ensure that patients receive safe and high-quality care while in the hospital or under other health care. This includes ensuring that the medical care provided is correct, maintaining patient privacy, and ensuring that patients are not exposed to the risk of infection or injury. Knowledge of patient safety must be possessed by health workers and patients, such as the results of research conducted by(Arrum, 2015)with the result that the knowledge of health workers is still lacking at 63.8% in North Sumatra Hospital, thus providing suggestions for the hospital to hold seminars and training regularly. Patient safety also includes identifying and addressing potential safety issues before they occur, such as medical accidents or errors in providing medication or other treatments. Furthermore, the results of the study related to the achievement of the six patient safety standards have not met the expected standards, the average indicator achievement results are 73.4%(Neri et al., 2018)

Many factors affect the implementation of patient safety. Some of these factors include: Health workers who are not sufficiently qualified or lack of effective communication between health teams can lead to medical errors or unsafe care. The lack of standard procedures or clear steps to handle certain situations can increase the risk of medical errors or unsafe care. Inadequate physical conditions of hospitals or other health facilities or lack of maintenance can increase the risk of infection or injury to patients. Irregularity or lack of supervision in managing drugs or medical equipment can increase the risk of errors in administering drugs or care.

Patients and families in efforts to improve the realization of the 6 patient safety targets must also be actively involved in activities such as the safe use of drugs.(Albyn et al., 2022). Several media can be used to provide education for patients, including: Informative brochures or leaflets: Brochures or leaflets that explain the disease or treatment that the patient will receive can provide useful information for patients and help them understand what is happening. Websites: Many

hospitals or health organizations have websites that provide useful information for patients, including about the disease or treatment they are undergoing.

In addition to the media mentioned above, social media can also be used as a way to provide health education to patients. Social media can provide useful information for patients through posts on social networking sites such as Facebook, Instagram, or Twitter. The information presented can be in the form of articles, infographics, or videos that explain diseases or treatments that are useful for patients. In addition, social media can also be used as a means to answer patient questions or concerns and help them find more detailed information. However, the results of the study (Rosini, 2018) conveyed the results that the most widely used social media is Whatsapp (58.8%)(Rosini & Nurningsih, 2018). The use of digital technology to improve collaboration between health workers and help them work more effectively. In article 5 paragraph 2(Republic of Indonesia, 2009)It is stated that everyone has the right to obtain safe, quality, and affordable health services. Article 9 paragraph 1 explains that everyone is obliged to participate in realizing, maintaining, and improving the highest level of public health. This reflects that the role of patients and families in realizing safety during hospitalization is a concern.

Digital transformation can help improve the accessibility, quality, and efficiency of healthcare services, and provide opportunities for patients to be more involved in their healthcare. However, it is important to remember that digital transformation must also be carried out with attention to the security and privacy aspects of patient data. The patient safety goals include; 1) Identifying patients correctly, 2) Improving effective communication, 3) Improving the safety of high-alert medications, 4) Ensuring the correct surgical site, correct procedure, surgery on the correct patient, 5) Reducing the risk of infection due to healthcare, 6) Reducing the risk of patient injury due to falls(Minister of Health of the Republic of Indonesia, 2017)is the target of patient safety that must be implemented and requires cooperation with patients and their families. So that a media of information and innovation of digitalization of health services is needed to help increase efficiency and provide wider access to patients.

CONCLUSION

Patient and family understanding of SKP with the use of integrated social media (Full text media, images and text, monologue videos, and animated videos) is effective in increasing patient and family understanding. So that the success of patient safety requires cooperation between nurses, patients and families.

Conflict of Interest

There is no conflict of interest in this study between the author and the patient and the author and the hospital.

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