European Journal of Molecular & Clinical Medicine
ISSN 2515-8260 Volume 07, Issue 06, 2020

Video Education About Spiritual Needs For Attached Medical Devices Patients

Fahni HARIS[1], Kellyana IRAWATI[2], Resti, Yulianti SUTRISNO[3], Ferry Fadzlul, RAHMAN[4]

[1,2,3]UniversitasMuhammadiyah Yogyakarta, School of Nursing, Indonesia
[1,2,4] Department of Healthcare Administrative, Asia University, Taiwan
[4] Department of Public Health, UniversitasMuhammadiyah Kalimantan Timur, Indonesia
[4]ffr607@umkt.ac.id

Abstract:
WHO has mentioned spiritual care for decades as well as the United States. Spiritual care in hospitals is heightened concern for not only terminal illnesses people but also patients that attached medical devices. Because of the overloaded workload, nurses did not provide adequate spiritual care. Video, as the latest tools that believe in enhancing patients' knowledge been assumed to lack evidence, especially to achieve their spiritual needs. The purpose of this study was described how brief video information: "Hospitalized patients could comply their spiritual needs" can improve patients' knowledge? The study using a quasi-experimental design: pre-posttest without control. Sixty-five respondents were included after written and verbally informed consent. It was using a questionnaire and video as an instrument designed by researchers. There are statistically significant (α= 0.001), which means respondents gained new knowledge after watching a brief video about praying in exceptional condition. It suggests that clear and precise intervention in education at the time of admission to the hospital might lead to a higher acceptance of the spiritual treatment of video education. Even there is statistically significant, but nurses need to facilitate patients' spiritual needs with visits and remind them each praying time begins frequently.

Keywords:Knowledge, Medical devices, Pray, Spiritual needs, Video education

1. INTRODUCTION:

Provide holistic care that consigns the spiritual and other scopes of personality affirmed by nurses as one of the healthcare teams [1]. WHO has mentioned spiritual care for several decades as well as the United States [1]. To date, spiritual care in hospitals is heightened concern for not only terminal illnesses people but also patients that attached medical devices [1-7]. They find regular spiritual assistance impacts their well-being [1]. Religion or spirituality is relevant when coping with significant, life-threatening diseases. Patients who get strong spiritual support report higher quality of life [8, 9]. In comparison, spiritual encouragement is correlated with greater well-being and satisfaction, confidence, joy, and appreciation [10]. Analysis indicates that divine measures contribute major quality of life – benefits for either patient who suffered terminal illness or non-terminal illness [5, 7].

Nursing diagnoses acknowledge that the perspectives of health-related service clients frequently conceive of emotional sorrow and justification for personal regeneration [4]. Many nurses and health practitioners feel unprepared, lacking confidence, knowledge, and abilities to understand, recognize, and address patients' spiritual issues [5]. Patients with unmet spiritual needs are at increased risk of further preliminary psychiatric effects, lower quality of life, and diminished spiritual harmony [5]. There are implications for caring if nurses and other health professionals can not satisfy patients' spiritual needs [5]. The study demonstrates that the workload of nurses and their attitudes promotes the emotional needs of patients [11]. Further, because of the overloaded workload, nurses did not provide spiritual care adequately [8, 12] The research suggests is improving spiritual care education and support for nurses [8].

Several trials have shown that patient awareness can significantly enhance therapy conformity [8, 9, 13, 14]. To increase the patients' awareness and knowledge for fulfilling their spiritual needs, nurses need to seek an alternative method. One of the methods that can be offered is video education [15]. A brief video information had been the solution for patients that have a problem with their spiritual needs [8, 14]. The study reported that short video was improved respondents' knowledge [15]. While several studies assess patient awareness of spiritual needs, there is a lack of evidence of video education to improve respondents' knowledge. Further, the literature used to the purpose of this study that describes how brief video information: "Hospitalized patients could comply with their spiritual needs" can improve patients' knowledge?

2. RESEARCH METHOD

A quasi-experimental design: pre-posttest without control group was designed between October – November 2019[16]. This study was conducted in PKU Gamping Hospital in Yogyakarta, Indonesia. A total of 89 respondents from four medical and surgical wards were recruited purposively. A consecutive sample of respondents was selected based on the following inclusion criteria: (1) attached minimal two medical equipment (urine catheter, iv-line, plaster cast, wound dressing, and/or stoma bag) (2) a Muslim, and (3) aged >16 years. Twenty-four respondents were excluded due to the eligibility issue. Two respondents were excluded because their family refused to participate even the respondents willing to. Six respondents were eliminated due to impaired body function (4: hearing impairment, 2: consciousness impairment).Two respondents were removed for surgery effect, three respondents rejected due to language barrier, another three respondents ruled out because they have comorbid factors and eight respondents were eliminated due to unfinished process. Finally, the study had sixty-five respondents were eligible to be respondents.

Since the researcher gained written and verbally informed consent, respondents interviewed (pretest) by questionnaire (15 questions) an hour before any pray time begins. Patients who elect to become respondents should fill/answer the 15 questions (pretest). Once respondents did pretest, they were given an information video (spiritual needs). At least 10 minutes after pray time (pretest), respondents comply for the second test (posttest) with the same questionnaire to collect respondents' knowledge.

The questionnaire was made by researchers that have been evaluated using the validity and reliability process. Video information is produced by own, with 11 min and 26-sec length of duration. Researchers develop the instrument started in January 2019 for recording, analyzing, revising and the last steps is rendering. Involved three experts (one expert in fiqh Kemuhammadiyahan area, one expert in Islamic physician practitioner, uses 17 questions, gained 80.15% relevant), and the other was media information expert, uses 27 items, won 99.07% applicable) for video quality control[17-20].

The validity of the questionnaire used bivariate Pearson product-moment among 30 respondents from other wards with the same criteria; researchers yielded r-value among 15 questions ranged from 0,370 – 0,853, while the reliability of the questionnaire used alpha Cronbach (α= 0.950).

Researchers measure each correct question rewarded one (1) point, and the question will null graded (0) if respondents incorrectly answer the questions. Once the researchers got the respondents' pretest and posttest data, it continues for data analysis to realize respondents' knowledge.Researchers made statistical analysis using SPSS 20. The statistical method used nonparametric analysis (Wilcoxon signed-rank test) since the data were not normally distributed (Kolmogorov-Smirnov)[21]. The Universitas Aisyiyah Yogyakarta ethics committee approved the study. All participants arranged oral or written informed consent in obedience with ethical approval (number: 1156/KEP-UNISA/VI/2019).

3. RESULT AND DISCUSSION

A. *RESULT*

Table 1 Respondents characteristic

Aspect	Frequency (n)	Percent (%)
Sex		
Male	36	55,4
Female	29	44,6
Marital status		
Married	55	84.52

Not married	10	15,38
Education		
Nope	5	7,7
Elementary school	15	23,1
Junior high school	12	18,5
High school	29	44,6
Diploma	1	1,5
Bachelor	3	4,6
Job		
Unemployment	24	36.9
Private employee	19	29.2
Civil servant	1	1.5
Farmer	1	1.5
Pensioner	2	3.2
Laborer	9	13.8
Entrepreneur	5	7.69
Student	4	6.15
Patients' perception toward nurses for fulfilling spiritual needs		
Did not facilitate	40	61.5
Facilitate for reminding	13	20.0
Facilitate patients' ablution	3	4.7
Facilitate Patients' ablution and praying	9	13.8
Patients' spiritual needs during hospitalized		
No praying	21	32,3
Once a day	3	4,6
Twice a day	2	3,1
Three times a day	3	4,6
Four times a day	2	3,1
Five times a day	30	46,2
Have period (for female)	4	6,2
Attached medical devices		
IV catheter and cast	4	6,2
IV catheter and wound dressing	15	23,1
IV catheter and urine catheter	43	66,2
IV catheter, cast and urine catheter	1	1,5
IV catheter, wound dressing, and urine catheter	2	3,1

Table 2. Respondents' knowledge, after applied spiritual needs video information (n= 65)

Variable		**N**	**Mean Rank**	**Sum of Ranks**	**Posttest - Pretest**
Respondents' knowledge about spiritual needs	Negative Ranks	0(a)	,00	,00	
	Positive Ranks	63(b)	32,00	2016,00	
	Ties	2(c)			
	Total	65			
	Z				6,925(d)
	Asymp. Sig. (2-tailed)				.001

a. Knowledge in posttest < knowledge in pretest
b. Knowledge in posttest > Knowledge in pretest
c. Knowledge in posttest = knowledge in pretest
d. Based on negative ranks

Table 2 shows that 63 respondents experienced knowledge after applied the spiritual needs of video information, while there were two respondents did not any changes after treatment. Based on the statistical analysis, using Wilcoxon, it shows a significant value of 0.01 ($p < 0.05$), and the Z score was -6.925, which means there are significant differences in respondents' knowledge after applied spiritual needs video information.

B. **Discussion**

Nurse's efforts can be in the form of a system based on the role of nurses in fulfilling the needs of clients' self-care, including fulfilling the spiritual needs of patients. Self-care is a nursing theory that emphasizes the individual's ability to fulfill self-care needs independently so that clients can become self-care agents for themselves.[22]

Spirituality is a necessary component for many patients in dealing with illness and is an essential component of quality of life, particularly for those suffering from chronic or terminal illnesses.[6] Their spiritual needs decreased when they were hospitalized.[13] On the other hand, not only in the end-stage illnesses, Riklikiene et al. indicated that non-terminal illness patients were slightly lower in their religious and existential needs.[7] All the patients in this investigation are in line with Riklikiene et al., that they were on the acute condition, with the most attached IV line and urine catheter (66.2%). Some of them have a problem with unmet spiritual needs because of attacked medical devices.

Based on table 1, were more male (36 respondents) than females (29 respondents). They were married at most (84.2%). The age of respondents ranged from 16 to 77 years, and 50 years are age on the midpoint. Most respondents are workers (53.75%), dominated private employees and laborer, 19 and 9 respondents, respectively. Respondents supposed that nurses did not help their spiritual needs during the praying time (61.5 percent). Respondents prayed regularly during hospitalized (46.2 %), and the respondents attached the IV line and urine catheter(s) during hospitalized (66.2%). The spiritual needs of hospitalized respondents have been met, but most of the respondents stated that nurses did not facilitate or help them for praying.[12]

Respondents complain of unmet spiritual issues because of certain factors; they felt dirty and could not take ablution before praying. After watching the video, respondents reported that they achieved beneficial for their spiritual condition. Indeed, researchers did not assess the differences in respondents' knowledge before and after watching the video. However, the research showed a beneficial effect of video education on the main objective of the study. Based on table 2, the respondents know how to pray in exceptional conditions (positive ranks: 63), $\alpha = 0.001$ ($p < 0.05$) after they watched the video. Researchers argued that nurses lack confidence or maybe no more time to facilitate patients' spiritual issues. This study in line with O'Brein et al., states that many nurses and health professionals felt inexperienced, unprepared and lack confidence, expertise, and skills to understand, identify and resolve the spiritual concerns of patients.[5]

Furthermore, Bakar et al. found that respondents have difficulty fulfilling spiritual needs due to impaired movement and nurses did not have time to facilitate them [23]. Mundakir et al.,[11] affirm that unmet spiritual needs among patients happened because nurses had a high workload. Nurses not only taking care of the patients but also should write a lot of nursing care in each patients' medical records and performs delegation from the physician.[24] The condition of respondents with the illness and attached medical devices has been associated with various limitations in carrying out daily activities. These various limitations are then associated with the deterioration of the quality of life of the individual concerned. Quality of life is a broad concept and in a complex way influenced by the physical, psychological, level of independence, social relationships of individuals and their relationships with various important aspects of the environment.[1, 5-7]

Over the next few years, video-based technologies will expand rapidly. Videos have become the primary resource for people to obtain knowledge.[20] Several health systems are looking for ways to meet patients' spiritual needs, and patient education may play a significant role in these efforts, given the importance of compliance with their behaviors or previous experience [17]. However, several respondents (61.5%, n=65) argued that the healthcare provider did not facilitate or educate them: "how to pray in case patients attacked medical devices". The findings from the study add to our knowledge and provide support to the literature that video can help the healthcare team to reduce their workload in the field. [4, 11, 17, 24-26] Moreover, education videos provide an alternative to offer a structured summary of information to patients [20]. Using audio-visual equipment in hospitals, enabling nurses to provide better on-the-job patient care aimed at unresolved knowledge gaps and unique issues [14]

The involvement of health workers including nurses in fulfilling the client's self-care needs can be done by providing knowledge in the form of education to clients. Health education carried out by

nurses is a process that is planned to influence or invite other people such as patients, groups or communities to carry out healthy life behaviors.[27]

Consistent with the literature, this study found that a brief video substantially increased patient understanding of the hospitalization spiritual needs [20]. Using video as an instructional tool should strengthen learning and promote knowledge building; therefore, respondents gain benefits after watching video [28]. Furthermore, the video education effect implies that it is not enough to develop with media platforms; it is also essential to analyze the educational experience [28]. Moreover, the instructional video on the spiritual needs of patients can be used to stimulate the respondent to control their emotions and feelings and to acquire the information required to provide effective treatment for these conditions during daily pray time [28].

Education has been commonly carried out by nurses as one of the interventions given to clients, but education is still carried out conventionally using media in the form of leaflets, booklets and flip charts while health education using audio-visual media such as videos is still rarely used, especially education about fluid restriction. Education that is often given by nurses to solve client problems focuses more on physical aspects, even though nurses also have the responsibility to provide education on other aspects including psychological and spiritual[29].

Our findings, respondents who watched the video showed higher satisfaction with their praying knowledge. High satisfaction relates to their habit that most of the respondents have been praying regularly (46.2 %). However, satisfaction levels may affect respondents' behavior for praying on time, feeling comfortable, and relaxing [7]. Prayer may not have a significant influence on psychological well-being; their secure commitment to God is attributed to an increase in enthusiasm, but not self-esteem or life satisfaction[30].

The effect of video information may concern factors: age and respondents itself. The study yielded data 50 years of respondents on average. It means respondents are mature enough to have adequate experience for their religiosity. In line with Haris and Kristianti, experience taking top factors influences the knowledge' respondents [31]. At the age of 50 years, respondents were experienced. Their maturity gained from their culture and environment that could for maintaining his or her religious [31]. The health education efforts provided must include the client's psychosocial, spiritual and cultural values.[32,33] Therefore, education with a spiritual approach is felt to be very important

4. CONCLUSION

Efforts to create spiritual support for the impaired population should be increased, explored and provided in a way that offers the most benefit to patients who attached medical equipment and the benefits of their caregivers. When researchers describe the video to the respondents, they seem to accept spiritual encouragement and excitement. It suggests that clear and precise intervention in education at the time of admission to the hospital might lead to a higher acceptance of the spiritual treatment of video education. This study fills the gap in increased spiritual support for patients and indicates that specific approaches may lead to higher rates of acceptance of such valuable services. This awareness could help hospice organizations increase the level of care they provide by increasing the rate of acceptance of the spiritual support offered by the hospital.

5. ACKNOWLEDGMENT

The authors are grateful to: Research, Publication and Community Service of Universitas Muhammadiyah Yogyakarta (LP3M UMY) that supporting financial for this study. Shanti Wardaningsih, S.Kp., M.Kep. Sp. Kep. J., Ph.D, that permits to do research. Head of Medical and Surgical Ward, PKU Gamping Hospital: Rubianto, S.Kep., Ns. as nursing head in Az Zahra Ward, Datik Nurlaili, S.Kep., Ns. as nursing head in Ar Royan Ward, Yuni Pratiwi as nursing head in Al Kautsar Ward, Febriani Asriningsih, S.Kep., Ns., as nursing head in At Tinn ward.

6. REFERENCES

[1] J. T. Soroka, L. A. Collins, G. Creech, G. R. Kutcher, K. R. Menne, and B. L. Petzel, "Spiritual Care at the End of Life: Does Educational Intervention Focused on a Broad Definition of Spirituality Increase Utilization of Chaplain Spiritual Support in Hospice?," *Journal of palliative medicine,* vol. 22, no. 8, pp. 939-944, 2019.

[2] Y. Zhang, R. Yash Pal, W. S. W. Tam, A. Lee, M. Ong, and L. H. Tiew, "Spiritual perspectives of emergency medicine doctors and nurses in caring for end-of-life patients: A mixed-method study," International Emergency Nursing, vol. 37, pp. 13-22, 2018/03/01/ 2018.

[3] J. M. Currier et al., "Spiritual struggles and mental health outcomes in a spiritually integrated inpatient program," Journal of Affective Disorders, vol. 249, pp. 127-135, 2019/04/15/ 2019.

[4] N. S. Linda, D. R. Phetlhu, and H. C. Klopper, "Nurse Educators' Understanding of Spirituality and Spiritual Care in Nursing: A South African Perspective (Part 1)," International Journal of Africa Nursing Sciences, p. 100187, 2019/12/31/ 2019.

[5] M. R. O'Brien, K. Kinloch, K. E. Groves, and B. A. Jack, "Meeting patients' spiritual needs during end-of-life care: A qualitative study of nurses' and healthcare professionals' perceptions of spiritual care training," Journal of Clinical Nursing, vol. 28, no. 1-2, pp. 182-189, 2019.

[6] A. Salman and Y. H. Lee, "Spiritual practices and effects of spiritual well-being and depression on elders' self-perceived health," Appl Nurs Res, vol. 48, pp. 68-74, Aug 2019.

[7] O. Riklikienė, J. Tomkevičiūtė, L. Spirgienė, Ž. Valiulienė, and A. Büssing, "Spiritual needs and their association with indicators of quality of life among non-terminally ill cancer patients: Cross-sectional survey," European Journal of Oncology Nursing, vol. 44, p. 101681, 2020/02/01/ 2020.

[8] E. J. Taylor, I. Mamier, P. Ricci-Allegra, and J. Foith, "Self-reported frequency of nurse-provided spiritual care," Applied Nursing Research, vol. 35, pp. 30-35, 2017/06/01/ 2017.

[9] B. Afsar, Y. Badir, and U. S. Kiani, "Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion," Journal of Environmental Psychology, vol. 45, pp. 79-88, 2016/03/01/ 2016.

[10] M. Bradshaw and B. V. Kent, "Prayer, attachment to God, and changes in psychological well-being in later life," Journal of aging and health, vol. 30, no. 5, pp. 667-691, 2018.

[11] M. Mundakir, P. Erna, and A. Siti, "Workload Relationship With The Attitude Of Nurse In Fulfill The Patient's Spiritual Needs In The Siti Khodijah Sepanjang Hospital," in 8th International Nursing Conference on Education, Practice and Research Development in Nursing (INC 2017), 2017, pp. 185-188: Atlantis Press.

[12] H. Fahni, A. Yanti, B. P. Fajar, J. A. Wahyuni, and M. Afandi, "Pemenuhan kebutuhan spiritual pasien terpasang alat medis: persepsi pasien," (in id), Jurnal Keperawatan Volume, vol. 12, no. No 1, pp. Hal 79 - 84, 2020.

[13] S. Monod, M. Brennan, T. E. Rochat, E. Martin, S. Rochat, and C. J. Büla, "Instruments Measuring Spirituality in Clinical Research: A Systematic Review," J Gen Intern Med, vol. 26, no. 11, pp. 1345–1357, 2011.

[14] B. L. Marini et al., "The Effects of an Informational Video on Patient Knowledge, Satisfaction and Compliance with Venous Thromboembolism Prophylaxis: A Pilot Study," Patient Education and Counseling, 2014.

[15] C. Conceição, J. Pedro, and M. V. Martins, "Effectiveness of a video intervention on fertility knowledge among university students: a randomised pre-test/post-test study," The European Journal of Contraception & Reproductive Health Care, vol. 22, no. 2, pp. 107-113, 2017/03/04 2017.

[16] J. W. Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. USA: SAGE Publications, Inc., 2014.

[17] J. Guo, B. Song, P. Zhang, M. Ma, W. Luo, and J. lv, "Affective video content analysis based on multimodal data fusion in heterogeneous networks," Information Fusion, vol. 51, pp. 224-232, 2019/11/01/ 2019.

[18] G. Horsman, "Reconstructing cached video stream content:- Part 2," Digital Investigation, vol. 31, p. 200893, 2019/12/01/ 2019.

[19] L. Shang, D. Zhang, M. Wang, S. Lai, and D. Wang, "Towards reliable online clickbait video detection: A content-agnostic approach," Knowledge-Based Systems, vol. 182, p. 104851, 2019/10/15/ 2019.
[20] D. Menziletoglu, A. Y. Guler, and B. K. Isik, "Are YouTube videos related to dental implant useful for patient education?," Journal of Stomatology, Oral and Maxillofacial Surgery, 2020/02/08/ 2020.
[21] D. Sopiyudin, Statistik untuk Kedokteran dan Kesehatan: Deskriptif,. Bivariat, dan Multivariat. Jakarta: Salemba Medika, 2011.
[22] A. Ter Maten, "The concept of 'self'," (in eng), Nurs Manag (Harrow), vol. 23, no. 7, p. 17, Nov 1 2016.
[23] A. Bakar, N. D. Kurniawati, and L. Hidayati, "ISLAMIC NURSING PROCESS IN FULFILLING SPIRITUAL NEED (PRAYER) OF IMMOBILIZED PATIENTS," Complementary N Issue and Updates, p. 119, 2014.
[24] D. W. P. Sari, R. Issroviatiningrum, and R. S. Soraya, "Hubungan antara pelayanan keperawatan berbasis spiritual dengan kepuasan kerja perawat," Jurnal Riset Kesehatan, vol. 8, no. 01, pp. 54 - 59, 2019.
[25] L. M. Vitorino et al., "Spiritual/religious coping and depressive symptoms in informal caregivers of hospitalized older adults," Geriatric Nursing, vol. 39, no. 1, pp. 48-53, 2018/01/01/ 2018.
[26] N. Azizah, "KETRAMPILAN KEMAMPUAN BIMBINGAN ROHANI ISLAM UNTUK MENINGKATKAN KUALITAS MAHASISWA," At-Taqaddum; Volume 11, Nomor 2, Tahun 2019, 2019.
[27] E. F. Teston, D. N. Spigolon, E. Maran, A. L. Santos, L. M. Matsuda, and S. S. Marcon, "Nurses' perspective on health education in Diabetes Mellitus Care," (in engpor), Rev Bras Enferm, vol. 71, no. suppl 6, pp. 2735-2742, 2018.
[28] J. C. Rodrigues, T. P. S. Miranda, F. L. Fulquini, C. Guilherme, S. Caldeira, and E. Campos de Carvalho, "Construction and Evaluation of an Educational Video: Nursing Assessment and Intervention of Patients' Spiritual Needs," Religions, vol. 11, no. 9, p. 460, 2020.
[29] F. F. Rahman, S. Noorbaya, F. Haris, and H. Johan, "Health Communication Model Based on Character Education to Improve University Student Achievement in Midwifery," in Proceedings of the 2020 8th International Conference on Information and Education Technology, 2020, pp. 226-230.
[30] M. Ardan, F. F. Rahman, and G. B. J. J. o. C. R. Geroda, "The influence of physical distance to student anxiety on COVID-19, Indonesia," vol. 7, no. 17, pp. 1126-1132, 2020.
[31] F. Haris and L. Y. Kristianti, "The Correlation between The Knowledge Level of Diabetes Management toward The Preprandial Glucose Levels," IJNP (Indonesian Journal of Nursing Practices), vol. 4, no. 1, pp. 21-27, 2020.
[32] R. M. Godoy Serpa da Fonseca, D. Aparecida Barbosa, and E. Yoshikawa Egry, "Formation in Social Responsibility of Nursing Professionals: a Brazilian Perspective," (in eng), *Invest Educ Enferm*, vol. 36, no. 2, May 2018.
[33] Rahman, F. F., Lin, K. and Hamka (2020) "The Psychological Well-Being of Newly-Arrived Indonesian Students in Taiwan", *Journal of International Students*, 10(S3), pp. 44-57. doi: 10.32674/jis.v10iS(2).2713.