Relationship Between the Factors of Spirituality and Self-Esteem in Nurses Working in Palliative Care Wards: A Cross-Sectional Study in the Chugoku Region

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Abstract

Background

Spirituality in nurses is considered an important aspect of nursing care today. Often, the palliative care ward environment teaches nurses the philosophies of life of dying patients but can leave them feeling powerless from the impact of facing death, which can place them in a state of crisis. However, there are no existing studies that have examined the relationship between the factors of spirituality and self-esteem in nurses working in palliative care wards. This study thus aimed to investigate the relationship between spirituality and self-esteem and to identify the factors of spirituality in nurses working in a palliative care ward.

Methods

A survey was conducted on 300 nurses working in a palliative care ward in the Chugoku Region[1]. This study is a cross-sectional study using an anonymous self-administered questionnaire. Higa's spirituality rating scale A (SRS-A) and a self-esteem scale was used. Data were analyzed using the Mann–Whitney U test and Spearman's rank correlation.

Results

The nurses surveyed and analyzed had long experience as nurses and all demonstrated motivation in palliative care and were highly interested in spirituality. Among SRS-A subscales, they scored highest for "motivation (M = 9.41 ± 2.04)," and they were strongly affected by items "I want to fulfill my dreams and wishes" about self-realization and "I can choose the way I live." There were significant differences in transfer to the palliative care ward (self-requested or ordered) ($p < 0.01$) and whether they had training ($p < 0.05$). Moreover, there was a positive correlation between spiritual and self-esteem ($r = .518$, $p < 0.01$).

Conclusions

The survey outcomes suggested that the important factors of spirituality intrinsic to nurses working in palliative care wards were a sense of purpose and will to envision self-realization; motivation, which is the source of energy; self-esteem, which increases self-affirmation and self-acceptance; and "educational support," which translates "experience" into experiential knowledge. Nurses working in palliative care words possess the viewpoints on mortality and life developed through a wealth of experiences in palliative care. Educational support should aim to allow nurses to integrate their experiential knowledge with theoretical knowledge.

[1] Chugoku Region: a region of Japan located in the western part of Honshu with area 31,921.87 km^2, population = 7,251,351, and 30 facilities with palliative care wards (as of June 1, 2020).

Background

Spirituality was added in the revised definitions of health by the World Health Organization (WHO) in 1998 [1]. In addition to the conventional dimensions of health, i.e., physical, psychological, and social well-being, spiritual well-being has been investigated [2]. To understand the human through the spiritual facet, which is one of the universal facets of humanity, we must understand the fundamental component of spirituality [3]. However, spirituality is a concept that was born out of religious backgrounds from various Western countries and is recognized as a vague nuance because religious concepts are not easily accepted in Japan and because the concept of spirituality is abstract and subjective [3]. Therefore, many researchers have reported the difficulty of the concepts of spirituality in Japan; indeed, a consensus of the word's definition has not been reached. Despite this situation, several researchers have attempted to describe the concepts of spirituality held by the Japanese. Kubotera (2000) refers to spirituality as the function of seeking a new place of being in a greater existence in searching for a meaning of life or purpose within oneself [4]. Takahashi et al. (2004) describes the essence of spirituality as the interiority of humans themselves at the foundation of human existence, such as fear of death, the meaning of life, or search for god, and is at the origin common to all mankind [5, 6]. Higa (2008) describes "spirituality" as the mindset and morale in seeking something and becoming involved with it, and a concept of feeling or having thoughts about oneself or some situation or event [7–9]. There are five aspects to this spirituality, which are "self-awareness," which refers to self-esteem or self-acceptance; "sense of significance," which refers to one's raison d'être; "motivation," which is related to one's dreams and personal objectives; "faith" on connections with nature and ancestors; and "values," which pertains to values and views of life [7–9]. Moreover, the introduction of palliative care in Japan goes back to 1981 when hospice care and palliative medicine began to take root and freeing cancer patients from pain, quality of life (QOL) became an important topic of interest [10]. It is nurses' duty to stand by and support the patient's life at all times and to provide nursing care as their closest advocate. In particular, in the terminal care setting, understanding spirituality is essential for holistic understanding of pain and suffering. Knowledge of spirituality is thus indispensable for nurses and is taught in fundamental nursing education. In particular, nurses working in palliative care wards are known to have higher awareness of spirituality; however, their awareness is not yet sufficient [3]. Previous studies have suggested the effectiveness of increasing spirituality to strengthen nurses' abilities to cope with stress, or their sense of coherence (SOC) in their investigations on the relationship between spirituality and stress [11–13]. One of these studies has further revealed that the spirituality of nurses working in oncology nursing is associated with beliefs, years of experience in oncology nursing, and position (in the palliative care ward [11]. Moreover, spirituality was reported to be the factor that had the greatest influence on spiritual care [14]. Spirituality in nursing education is covered in lectures and practicums in terminal nursing theory in nursing school education and in terminal care theory [15–17]. Nursing students' spirituality increased after their practicum in palliative care, which is deeply linked with spirituality and that this was attributed to increases in Higa's concepts of "self-awareness," which is composed of "self-approval" and "self-acceptance"; "faith," which is related to connectedness with nature and ancestors; and "motivation," which is related to future dreams and goals [18]. Nurses in palliative care wards were characterized by self-requested transfer to the palliative care ward and interest in terminal care, which were associated with nurses' attitudes in terminal care [19]. Moreover, Japanese and foreign studies both report that nurses in hospice and palliative care have high

levels of awareness in spirituality and skills in spiritual care [20, 21]. However, Japanese nurses in palliative care are characterized by difficulties and agony in terminal care, the unbearable pain of caregiving for the dying, and the challenges of being involved with bereavement [22]. The palliative care ward environment provides multiple opportunities for learning about life through interactions with dying people. Furthermore, it can involve a crisis-like situation through helplessness experienced through the impact of facing death [23]. Spirituality and Rosenberg's notion of self-esteem are the driving forces necessary that can take a lack of motivation in nurses to the next actions or steps. Rosenberg's notion of self-esteem mentioned here does not refer to sense of superiority in comparison to others but refers to self-acceptance that involves both positive and negative attitudes toward the self [24]. In particular, for nurses in the palliative care ward who often come across opportunities where they must confront death, nurses' self-esteem is an important factor that supports their spirituality. However, there are no existing studies that have investigated the relationships between the factors of spirituality and nurses' self-esteem in nurses working in the palliative care ward. Therefore, it is necessary to conduct a study that focuses on spirituality in nurses working in palliative care wards. Investigating the relationship between spirituality and self-esteem and the factors of spirituality intrinsic to nurses should provide documentation and evidence to help palliative care ward nurses to become more conscious of their spirituality and to improve their self-approval and self-acceptance.

Methods

Aim

This study aimed to explain the relationship between spirituality and self-esteem, and to investigate the factors of spirituality in Japanese nurses working in a palliative care ward.

Planning and setting

Research methods comprised a cross-sectional survey with an anonymous, self-administered questionnaire. Request for participation was composed of 30 facilities in the Chugoku Region with palliative care wards, and data from300 nurses working in the 19 facilities that agreed to participate were analyzed. The adequate sample size was calculated by the following equation: n=N/((E/Z)^2*(N-1)/(P*(1-P))+1) Assuming a 480 population and 95% reliability, inaccuracy of 5% and calculating for a 67% of the expected population mean, valid responses from 199 participants would be required. Data were collected through the self-administered questionnaires, which were distributed and collected by mail, in the survey period of September 2019 to March 2020. The details of the survey were as follows:

(1) Basic attributes:

Age, gender, years of experience in nursing, years of experience in palliative care, experience of bereaving a family member, transfer to the palliative care ward (self-requested or ordered), training related to spirituality, concerns related to spirituality, and nursing education background.

(2) Spirituality measurement scale: Spirituality Rating Scale-A (SRS-A):

SRS-A is composed of five subscales: motivation, faith, sense of significance, self-awareness and values, and is a self-administered 15-item, 5-point spirituality measurement scale developed by Higa (2008 version) [7, 8]. Higa's SRS-A was selected for this study because the SRS-A has been tested for sufficient reliability with an α coefficient of 0.82 because there are 15 questions, which is reasonable and is relatively less burdensome for the respondent to complete, and is therefore convenient for the clinical setting as well. The scale developer's permission has been obtained to use this measurement scale.

(3) Self-esteem measurement scale:

The Japanese version of Rosenberg's 10-item, 5-point self-esteem measurement scale (1965) translated by Yamamoto et al. (1982) was used [24]. Rosenberg's self-esteem measurement scale signifies self-acceptance, defined as a measurement of both positive and negative feelings about oneself [24]. It was selected for this study because it has been tested for reliability, the questionnaire is composed of only 10 items, and poses little burden on the participants, is commonly used, and provides an indicator of self-acceptance.

(4) Methods and analytical procedures

(i) Methods of analysis:

Statistical software IBM SPSS Statistics 24 for Windows was used. Reliability of the measurement scale was checked by Cronbach's α coefficient. The SRS-A is assessed on a five-point scale of "Completely disagree, Somewhat agree, Moderately agree, Strongly agree, and Very strongly agree," where 1 point was given to a question answered with "Completely disagree" and 5 points for "Very strongly agree." Total scores are in the range of 15 and 75 points. Unanswered questionnaires would receive a 0 point; higher total assessment scores represent higher levels of spirituality [7, 8]. SRS-A scores were assessed such that scores of 75-60 points on Higa's five-level scores were classified as extremely high, 59-50 points as high, 49-40 points as moderate, 39-30 as low, and 29-0 points as extremely low levels of spirituality [7, 8]. Validity of the SRS-A measurement scale: In Higa's study, the SRS-A scale had a Cronbach's α coefficient of 0.82; in our study, it was 0.85 and the Cronbach's α coefficients for the subscales of "motivation," "faith," "sense of significance," "self-awareness," and "values" were 0.83, 0.86, 0.78, 0.81, and 0.80, respectively. Since an α coefficient of 0.7–0.8 or greater is generally considered good for general use and validity of the measurement scale and its subscales were confirmed. In the assessment of the self-esteem scale, each item answered by "Agree" was allotted 5 points and those answered by "Disagree" were allotted 1 point, and the scores for the 10 items were added. However, for reverse items, those given 5 points would receive 1 point, those allotted 4 points would be allotted 2 points, those receiving 3 would stay 3 points, those given 2 points would be allotted 4 points, and those allocated 1 point would be allotted 5 points. The possible range for scores is between 15 and 50 points, where higher points represent higher self-esteem. Unanswered questionnaires were given 0 points [24]. The test for validity of the self-esteem measurement scale resulted in a Cronbach's α coefficient of 0.83, indicating validity.

Data analysis

Analytical procedures:

Basic attributes and self-esteem, SRS-A and mean subscale scores were collected as descriptive statistics. Factors that influence SRS-A were analyzed by the Mann–Whitney U test and Leven's test for equal variances. Correlations between the SRS-A, self-esteem, age, years of experience in nursing, and years of experience in palliative care were tested by the Spearman's rank correlation coefficient. $P < 0.05$ was considered to be statistically coefficient. Collected data with blanks and unclear answers were considered as missing values and were excluded.

Results

The questionnaire form was distributed by post to 300 nurses working in palliative care wards and answered questionnaires were received from 203 nurses (collection rate: 67.7%). Of these, 3 with missing data were excluded, leaving 200 (effective response rate: 66.7%) to be included in the analysis.

(1) Basic attributes and self-esteem, average SRS-A and subscale scores

(i) Demographic characteristics of the participants

Participants' basic attributes are presented in Table 1. Participants' mean age was 42.9 ± 9.5 years and they had a mean of 18.1 ± 9.5 years of experience in nursing, and 5.0 ± 4.0 years of experience in palliative care. The majority of participants were women and 179 (89.5%) had experienced bereavement of a family member. Note that 176 (88.0%), were interested in spirituality, and 82 (16%) identified as belonging to a specific religion. In terms of nursing education backgrounds, 157 (78.5%) were graduates of nursing schools.

Table 1
Demographic characteristics of the participants

		n = 200			
Items		Mean ± SD			
Age: Years		42.9 ± 9.5			
Years of experience in nursing		18.1 ± 9.5			
Years of experience in palliative care		5.0 ± 4.0			
Items		n (%)	Chi-squared		p-value
Gender	Men	7 (3.5)			
	Women	193 (96.5)	172.98	0.000	***
Experience of bereavement:	Yes	179 (89.5)			
	No	21 (10.5)	124.82	0.000	***
Reason for department transfer	Order	85 (42.5)			
	Self-requested	115 (57.5)	4.50	0.034	*
Religion	Yes	32 (16.0)			
	No	168 (84.0)	92.48	0.000	***
Training	Yes	112 (56.0)			
	No	88 (44.0)	2.88	0.000	n.s

Chi-squared test. SD: standard deviation *p < 0.05, **p < 0.01, ***p < 0.001

Participants' basic attributes are presented in Table 1.

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		n = 200			
Interest in spirituality	Yes	176 (88.0)			
	No	24 (12.0)	115.52	0.000	***
Nursing education background	Nursing college (senmongakko)	157 (78.5)			
	Nursing junior college (tanki daigaku)	14 (7.0)			
	University nursing program or higher	29 (14.5)	185.29	0.000	***
Chi-squared test. SD: standard deviation *p < 0.05, **p < 0.01, ***p < 0.001					
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(ii) Average scores of the SRS-A and self-esteem scale

Mean scores for the SRS-A and self-esteem scale are shown in Table 2. The mean and median scores for the SRS-A were 42.93 (± 9.19) and 43.00 points, respectively. The mean and median scores for self-esteem was 31.25 (± 6.05) and 31.00 points, respectively. The Shapiro–Wilk test was performed for test of normality, and the graph of SRS-A showed a normal distribution at $p \geqq .05$; however, the graph of self-esteem did not follow a normal distribution at $p < .05$.

Table 2 SRS-A and self-esteem scale scores (n = 200)

Scale	Scoring (points)		Scores (range) (points)	Mean (points)	Standard Deviation (points)	Median (points)
SRS-A (points)	(1–5 points) ×15 items	15–75	21–73	42.93	9.19	43.00
Self-esteem (points)	(1–5 points) ×10 items	10–50	12–49	31.25	6.05	31.00

Mean scores for the SRS-A and self-esteem scale are shown in Table 2. The mean and median scores for the SRS-A were 42.93 (± 9.19) and 43.00 points, respectively. The mean and median scores for self-esteem were 31.25 (± 6.05) and 31.00 points, respectively. The Shapiro–Wilk test was performed as the

test of normality, and the graph of SRS-A showed a normal distribution at $p \geq 0.05$; however, the graph of self-esteem did not follow a normal distribution at $p < 0.05$.

(iii) Five-level classification of scores for the SRS-A

Five-level classification scores for the SRS-A are shown in Table 3. In terms of numbers of participants per five-level classification of scores, there were 85 (42.5%) who were “moderate,” 58 (29%) who were “low,” 35 (17.5%) who were “high,” 13 (6.5%) who were “extremely low,” and 9 (4.5%) who were “extremely high.”

Table 3
Five-level classification of scores for the SRS-A
(n = 200)

Five-level assessment of SRS-A		n (%)
Extremely high	[75–60 points]	9 (4.5)
High	[59–50 points]	35 (17.5)
Moderate	[49–40 points]	85 (42.5)
Low	[39–30 points]	58 (29.0)
Extremely low	[29–0 points]	13 (6.5)

(2) Higa’s 5-grade evaluation criteria

Five-level classification scores for the SRS-A are shown in Table 3. In terms of numbers of participants per five-level classification of scores, 85 (42.5%) were “moderate,” 58 (29%) were “low,” 35 (17.5%) were “high,” and 13 (6.5%) were “extremely low.”

(3) Mean scores for individual items and subscales of the SRS-A

Mean scores for individual items and subscales of the SRS-A are shown in Table 4. Mean scores for the subscales of the SRS-A were as follows: 9.41 out of 15 maximum points for “motivation,” among which the item “I want to fulfill my dreams and wishes” about self-realization and “I can choose the way I live,” in which participants achieved high scores, scoring 3 or higher points out of 5 maximum points. Next, participants scored 8.97 points for “faith,” the item about believing that they have sought deeply for meanings in connections with nature and ancestors, among which they scored 3 points or higher for the item, “I believe that there is a connection between my ancestors, (future generation), and me.” The lowest scores were reported in the subscale concept of “self-awareness” for which they scored 7.82 points, and the item “My ideal self and actual self are matching,” for which they scored 2.33 points.

Table 4
Mean scores of the SRS-A scale items and subscales (n = 200)

Subscales	Mean score Range (0–15 points)	Standard deviation	SRS-A items *How much do you agree with the following statements?*	Mean score 0–5.00
Motivation	9.41	2.04	I want to fulfill my dreams and wishes	3.29
			I can decide (choose) the way I live	3.16
			I have a purpose and goals	2.96
Faith	8.97	2.77	There is a connection between my ancestors (future generation), and me	3.31
			There is a connection between nature (the universe), and me	2.84
			My life is guided by supernatural (imperceptible) powers	2.83
Sense of significance	8.59	2.26	I have been doing things that are meaningful for myself	2.91
			I am needed by others because I fulfill some kind of role	2.89
			I have been doing the most of what I should do or can accomplish	2.79
Values	8.17	2.32	I am living along my personal principles	2.85
			I have a stable view of life with regards to values and means	2.68
			I believe my attitude about my life and perceptions of situations and events are fine as they are	2.64
Self-awareness	7.82	2.23	I can accept my current personal situation	2.87
			I like myself and can assess myself positively	2.62
			My ideal self and actual self are matching	2.33

Mean scores for individual items and subscales of the SRS-A are shown in Table 4. Mean scores for the subscales of the SRS-A were as follows: 9.41 of 15 maximum points for “motivation,” among which the item “I want to fulfill my dreams and wishes” about self-realization and “I can choose the way I live,” in which participants achieved high scores, scoring ≥3 of 5 maximum points. Next, participants scored 8.97 points for “faith,” the item regarding the belief that they have sought deeply for meanings in connections with nature and ancestors, among which they scored ≥3 points for the item, “I believe that there is a connection between my ancestors, (future generation), and me.” The lowest scores were reported in the subscale concept of “self-awareness” for which they scored 7.82 points, and the item “My ideal self and actual self are matching,” for which they scored 2.33 points.

(4) Comparison of the presence of bereavement experience, department transfer (self-requested or ordered), religion, training, and interest

Experience of bereavement, training, religion, interest, department transfer (self-requested or ordered) are compared using the Mann–Whitney U test, as presented in Table 5. Significant differences were observed in the relationships between SRS-A and self-requested or ordered department transfer, training experience, and interest ($p < 0.01$, $p < 0.05$, $p < 0.05$). There were no significant differences in terms of bereavement experiences and religion. However, there was a significant difference in the correlation between self-esteem and transfer, and in self-esteem and religion.

Table 5
Comparison of presence of bereavement experience, department transfer, religion, training and interest (n = 200)

		n (%)	SRS-A (points)	p-value (two-sided)	Self-esteem (points)	p-value (two-sided)
Bereavement experience	Yes	179 (89.5)	42.65		31.02	
	No	21 (10.5)	45.24	.558 n.s	33.19	0.123 n.s
Department transfer	Self-requested	115 (57.5)	44.53		32.17	
	Ordered	85 (42.5)	40.75	0.003**	30.01	0.005**
Religion	Yes	32 (16.0)	44.59		33.56	
	No	168 (84.0)	42.61	0.152 n.s	30.81	0.014*
Training	Yes	112 (56.0)	44.06		31.68	
	No	88 (44.0)	41.48	0.037*	30.70	0.214 n.s
Interest	Yes	176 (88.0)	43.48		31.27	
	No	24 (12.0)	38.88	0.37*	31.08	0.578 n.s

Mann-Whitney *U* test *p < 0.05, **p < 0.01, ***p < 0.001

The experiences of bereavement, training, religion, interest, department transfer (self-requested or ordered) are compared using the Mann–Whitney U test, as presented in Table 5. Significant differences were observed in the relationships between SRS-A and self-requested or ordered department transfer, training experience, and interest ($p < 0.01$, $p < 0.05$, $p < 0.05$). There were no significant differences in terms of bereavement experiences and religion. However, there was a significant difference in the correlation between self-esteem and transfer, and between self-esteem and religion.

(5) Correlations between SRS-A, self-esteem, age, years of experience in nursing, and years of experience in palliative care

The correlations between SRS-A, self-esteem, age, years of experience in nursing, and years of experience in palliative care are shown in Table 6. There was a positive correlation between SRS-A and self-esteem (r

= 0.518; p < 0.01). There was a mild correlation between SRS-A and age (r = 0.225; p < 0.01). That is, as a factor of spirituality, demonstrating that self-esteem seems to influence spirituality mutually and that self-esteem increases as spirituality increases. There was no correlation between SRS-A and years of experience in nursing or years of experience in palliative care.

Table 6
Correlations between SRS-A and self-esteem, age, years of experience in nursing and palliative care (n = 200)

	SRS-A	Self-esteem	Age	Years of experience in nursing	Years of experience in palliative care
SRS-A	1.000**				
Self-esteem	0.518**	1.000**			
Age	0.225**	0.154*	1.000**		
Years of experience in nursing	0.155	00.120**	.800**	1.000**	
Years of experience in palliative care	0.049	00.055**	0.330**	0.394**	1.000**
Spearman's rank correlation coefficient *p < 0.05, **p < 0.01, ***p < 0.001					

Discussion

The basic attributes of nurses working in palliative care wards, the participants of this study, seemed to suggest strong motivation and rich life experiences, based on their years of nursing experience. Their motivation is represented in the high numbers of participants who were transferred to the palliative care out of their wishes and who were interested in spirituality, which seems to be reflected in their devotion to the palliative care ward. Moreover, ~ 90% of participants had experienced bereaving a close family member, which suggests that their personal experiences have deepened their capacity for empathy in coming to terms with the death of a patient, and their readiness and resolution for handling the event. These results seem to suggest that nurses working in palliative care wards possess individual nurses' philosophical view point and views of mortality and life to provide nursing care that seeks to minimize suffering of the dying. Shimamori et al. (2019) state that "death" experienced by nurses in their professional lives and experiences of death of close ones in their personal lives are both important for their development as nurses and influence their views of nursing and of mortality, as well as are experiences that can even influence their outlooks on life [23]. That is, nurses working in a palliative care ward are motivated their interests in nursing care, which led to voluntary actions such as further training or education and they possess the spirituality that supports these endeavors. Note that ~ 80% of participants were graduates of nursing schools, which accurately represents the current status of

fundamental education in nursing in Japan, thus considering the mean age and years of experience in the nurses working in a palliative care ward. Formal nursing education began in Japan with the nationally standardized Nursing Regulations in 1885, and nursing education in four-year universities started in 1952. In fundamental nursing education, the topic of spirituality is touched in lectures, seminars, and practicum in the subjects of terminal nursing theory, geriatric nursing and spiritual care [15, 16]. However, there are limited opportunities for continuing education on spirituality for nurses once they have graduated from nursing school. Therefore, the SRS-A scores obtained by the participants in this survey are believed to reflect knowledge obtained through nurses' clinical experience. Education support to help nurses gain these experiences and develop is required. The mean SRS-A score in the participants in this study was moderate on a Five-level assessment. Their moderate scores were similar to nurses working with terminal cancer patients or and visiting care nurses from previous studies [11, 14, 25]. To improve their spirituality, experience itself is not enough; it is only when their motivation and experience translates into spirituality that their spirituality can be increased. Ooeki (2007) described that in interest in spirituality or years of experience alone do not increase awareness of spirituality, but clinically adapted education is necessary to increase awareness of spirituality [26]. Similarly, an important factor may be to take nurses' practical knowledge achieved through their rich experience and to link that to theoretical knowledge. As factors of spirituality, the SRS-A measurement scale outcomes suggested the importance of "motivation" as one of the most important subscale concepts. Among its sub-items, nurses seemed to have "(desires to) fulfill (one's) dreams and wishes" and "ability to choose how (one) lives." This may suggest that nurses' GOL can be increased to reach self-realization by selecting one's ideal lifestyle within the context of one's lifecycle, thereby leading to increased spirituality in nurses. Next, "faith" related to one's connections with nature and ancestors is likely to manifest feelings to ancestors, and stabilizing one's emotions through reliance on one's relationships with the ancestors. However, there seems to be little acceptance of items on connections with nature or the universe. This may be attributed to the low number of nurses who identified with a specific religion and may reflect the characteristics of views of religion in Japan, which does not refer to specific organized religions, but to revering religion through daily rites and rituals. Therefore, nurses working in palliative care wards probably possess individual views and values pertaining to religion. Furthermore, it is difficult to say that "(nurses') ideal self and actual self," one of the subitems of subscale concept "self-awareness," are truly "matching." The large gap between the ideal and actual self is the result to the assessment of whether respondents are able to self-criticize, and is a sign of maturity that respondents are willing to improve the self more [27]. Moreover, the greater the gap between the ideal and actual self, the greater individuals are likely to exhibit 1) attempts to approach the ideal (i.e., efforts to approach one's ideal state), 2) bargaining the ideal (i.e., lowering the standards of ideal self to make it more achievable), and 3) conflict (i.e., struggling to find a method to resolve this gap), and the more they are likely to focus their attention on seeking to settle this gap [28]. This mismatch between the two selves should be investigated in more detail to identify its impacts on nurses' motivation or spirituality. Finally, there was a positive correlation between spirituality and self-esteem. This finding seems to indicate a mutual influence between spirituality and self-esteem. Therefore, spirituality is an important element for nurses' sensibility to their patients' pain; furthermore, the effective transfer of spirituality to their care provides the opportunity for the nurse to become aware of her self-efficacy,

thereby increasing her self-esteem. This seems to correspond to Kawabata's remark (2011) of the requirement to offer support in the workplace to "encourage self-affirmation and self-acceptance and foster sound views of life, principles and attitudes in nurses" [11]. However, the lack of correlation between spirituality and the number of years of nursing or palliative care experience has made it clear that experience alone does not lead to improving spirituality. In other words, recognizing one's own self-efficacy and getting a higher self-esteem through one's experiences is one of the crucial factors of spirituality. Therefore, the factors of spirituality needed in nurses are motivation, self-esteem, training and education support, and promoting these factors should lead to improving nurses' spirituality.

Conclusions

The factors of spirituality in nurses working in Japanese palliative care wards led to the following conclusions.

1. The important factors of spirituality included motivation, which represents sense of purpose and driving force for envisioning self-realization, "self-esteem" that boosts self-approval and self-acceptance, and "educational support" that helps guide experiences into experiential knowledge. There was a positive correlation between nurses' spirituality and self-esteem, i.e., spirituality is an important element for sensibility to patients' pain.
2. The positive correlation likely represents nurses' recognition of their own self-efficacy, which in turn increases their self-esteem.
3. Nurses working in palliative care words possess the viewpoints on nursing, mortality, and life developed through a wealth of experiences in palliative care. Educational support should aim to allow nurses to integrate their experiential knowledge with theoretical knowledge, and their work environment should promote their motivation and self-esteem to increase the spirituality of nurses.

Limitations Of The Study And Challenges

This study surveyed nurses working in palliative care wards in the Chugoku Region almost exhaustively. However, spirituality of nurses I influenced by their individual viewpoints on mortality, values, and culture. Thus, the results of the study cannot be generalized and warrants future studies on a larger sample covering a larger area. Moreover, gender differences were not analyzed in this study because the majority of participants in this study were women. Future investigations should expound on the present survey by testing other factors such as religion, culture, and details of training and education.

Declarations

Ethics approval and consent to participate

This study was approved by the Hiroshima Bunka Gakuen Graduate School of Nursing/School of Nursing Ethics Committee (Approval no. 1905). The approval of the Administrator and Director of the facility was obtained after explaining the purpose and ethical concerns related to this study in writing. Survey

participants were explained the free and voluntary nature of participation in this study, and were ensure the confidentiality of their personal (and facility) information. Moreover, the participants were explained that declining to participate or withdraw from the study at any point would not result in any disbenefits in writing to obtain their informed consent. The results and data from the survey were only used for the purposes of this study, and the methods of analysis ensured the protection of personal and facility information and that data entered would be destroyed after completion of the study. A completed returned questionnaire form was interpreted as their consent.

Regarding the method of disclosing the research results, the author has reported accurate data, filled in the request text of the research survey, and has obtained consent. Furthermore, at the time of presentation, the author has ensured anonymity so that individuals and facilities will not be identified, not used initials, strictly adhered to only obtaining personal information, and taken care not to disadvantage the concerned participant.

Availability of data and materials

The datasets generated during and/or analyzed during the current study are not publicly available because it includes information on the facility and personal information that must be protected.

Competing interests

The authors declare that they have no competing interests.

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Authors’ contributions

NK, SH, and MY planned the study. NK performed statistical analysis of the entered data, and NK, SH, and MY interpreted the results together. NK drafted the first version of the manuscript, and SH and MY made critical revisions. The final version was approved by all the authors.

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Additional Files

File Name: Additional File 1

Title of the file: Survey on Spirituality in Nurses Working in Palliative Care Wards

File Name: Additional File 2

Title of the file: Strobe checklist

Supplementary Files

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- Questionnaire.docx
- Questionnaire.docx
- STROBEchecklistv4combined3.docx
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