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Proceedings Book

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On 21-22 April, 2016 in International Multidisciplinary Conference (IMUCO 2016) in Antalya many researchers and scholars from multidisciplinary fields came together, led multidisciplinary studies be discussed in an established background by submitting their knowledge and experience.

With this e-book consisting of articles submitted and selected in the conference, it is aimed to reach to worldwide researches and scholars and share knowledge.

Additionally, we would like to thank to all those public and private organizations contributing to our conference, those scholars in charged for regulatory authority, congress secretary and science board, invited speakers and those colleagues participating from multidisciplinary fields with their articles.

Sincerely,

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Chairman of the Conference

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SPIRITUAL CARE NEEDS DETERMINATION SCALE ON PATIENTS ACCORDING TO THE OPINION OF DOCTORS, NURSES AND MIDWIVES: DEVELOPMENT, VALIDITY AND RELIABILITY

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ABSTRACT

The purpose of the article; to make development work the validity and reliability analysis of the 'Spiritual Care Needs Determination Scale' to determine the views of doctors, midwives and nurses about the spiritual care needs of patients who are treated in inpatient institutions.

The scale consisting of 19 substances was applied to 404 Doctors, Nurses and Midwives working in hospitals which are functioning under Denizli Association of Public Hospitals. The Cronbach's Alpha value was found to be 0.970, for the 19 items of Spiritual Care Need Determination scale on Patients. The scale was found to be highly reliable. According to Spearman-Brown approach, the reliability level of the test is 0.922; according to Guttman split-half approach, the reliability level of the test was found to be 0.920. These findings support the rate of Cronbach's Alpha. The explanatory factor analysis was applied to demonstrate the scale of structure validity. As a result of Bartlett test ($p=0.000<0.05$), it is determined that there is a relationship between the variables in the factor analysis. Another hypothesis to be tested Factor analysis is the Kaiser-Meyer Olkin (KMO) test. It is determined that there is a relationship between the variables in the factor analysis in Bartlett test ($p = 0.000 <0.05$). Another hypothesis to be tested factor analysis is Kaiser-Meyer Olkin (KMO) test. In the test result ($KMO = 0.968> 0.60$), it is determined that the sample size is sufficient for applying factor analysis. By selecting the varimax in factor analysis application method, it is provided that the structure of the relationship between factors remains the same. Variable in factor analysis was collected under a single factor which has %65.06 of the total variance. According to the alpha and explained variance value in relation to the reliability, Spiritual Care Needs Determination Scale on Patients was found to be a valid and reliable instrument. The findings related to validity study of Spiritual Care Needs Determination Scale on Patients, the model of single-factor structure consisting of 19 items was tested by Confirmatory Factor Analysis (CFA). The positive factor load was provided on CFA carried out in all 19 items. Modification indices which has Ki-Square value for DFA, over 100 and creates change, were used. t test results are significant for all items ($t>1,96$; $p>0,05$). According to the results of CFA, it was observed that item factor loads are vary between 0.70 and 0.86. According to the results of CFA, values of R-squared (R^2) were observed to vary between 0.50 and 0.73.

According to those results, It may be expressed that Spiritual Care Needs Determination Scale in Patients is a valid and reliable data collection tool to determine the opinions of the doctors, midwives and nurses working in hospitals about Spiritual Care Needs of the patients treated in the inpatient institutions.

Keywords: Spiritual Care, Spiritual Support, Patient, Spirituality.

INTRODUCTION

At the time of illness, patients feel that their life is at risk. Accordingly, patients can become stressed. The patient faces some questions such as , "Am I going to complete the works I have been doing? How will my family survive after me? Why me? Will I be forgotten? Is God punishing me? What's going to happen to me after my death " (Büssing et al.,2005). In such cases, the patients who have spiritual value, can receive support from their faith in coping with their diseases, pain, stress of life and in the healing process. Thus, while continuing the medical treatment, at the same time patients try to resist this life-threatening condition taking strength from their faith and

morale (Aştı et al., 2005). The patient, on the one hand, tries to cope with the disease, on the other hand, may feel more combative and powerful taking advantage of positive, negative spiritual coping strategies. In the studies conducted on this issue, it was determined that socio-economically disadvantaged patients, female patients and elderly patients use spiritual coping ways more frequently (Boscaglia et al., 2005).

When an individuals encounter a sudden, unexpected situation which they do not like; they should be able to learn sometings from these events, find solutions to the problems which have arisen, accept these living conditions and be at peace with themselves. At this point, the individuals must ask the fundamental question" what does this event want to teach me? " (Sharma, 2006). When this awareness is realized, the individuals will understand the value of feelings, thoughts in their life. The acceptance process which helps in coping with the negative effects of an event is possible to realize and face what we have lived through (Lama and Cutler, 2000). The necessary attitude towards the events they live; to learn the lessons and focus what should be learned must be expressed to the people. Thus, we have provided spiritual support. Conversely, focusing on the event and its impacts damage people. The Events faced by people, the living conditions in their lives aim to enrich their lives, to add value, to enhance their experience and to provide their progress morally developing their human characteristics. For this to happen, "learning feature" is a feature that continues until the end of human life (Milan, 1996).

The main cause of the increasing stress coefficient of the person after the experiencing the event is to give attention to the unfavorable situations and accordingly focusing on the negative thoughts. The religious beliefs that People believe are quite effective in turning to positive thoughts. The reason is that, religious beliefs help to resist stress factors that emerged after the events of the tense environment and give the power to endure with such situations. People with strong religious beliefs relax and review the experience that they met more calm and mature manner (Topuz, 2003). Indeed, the positive effects of religious beliefs were observed on the people experienced the 1999 earthquake. The following statements reveales the impact of faith in determining the attitude of a person who experienced the earthquake: “We live in God's property. Therefore, we don’t have difficulty in finding consolation. God gives patience” (Köse and Küçükcan, 2000). To pray for help to the creator of man and to believe that this request will be accepted is more effective to relax and in turning positive thoughts (Peale, 1997).

According to Ross (1994), Radetzky represents the spiritual dimension as 3 types need:

1. Life is the requirement of finding the meaning of suffering and death concepts, and their purpose and power.

2. Live in hope requirement

3. The need of faith and trust towards superior power and other people.

When these requirements are examined individually in the frame of spiritual dimensions; to survive, to accept the life and to live is foremost effective factor of the spirituality. Ross expressed the meaning of life with Walsh and Yura’s identification in an article which was published in 1994. “The Mankind's greatest task is to describe the meaning of life.” Ross’s same article gives place to Stoll’s expression and he emphasized the meaning of life with the following expression “If the person does not need a justification about life, he already began to die”. On the other hand Dickinson (1975), like many other writers, stated that life is a universal feature and the requirements of its meaning should be accepted as the basic life (Uğurlu, 2014). Spiritual care assistant is the person that patients will consult/ talk about their religious and spiritual issues. This person listens to the patient and helps the patient in the meaning process of his/her disease (Topuz, 2014). Eventually, we can say "spirituality is an indispensable element in nursing care" (Uğurlu, 2014).

In this study, Kavas and Kavas’s definition which adresses the spiritual care with a multidisciplinary approach as a separate area of expertise is based. Kavas and Kavas (2014) defines the Spiritual Care as “The spiritual support services presented for the inpatients who demand. It inculcats them spiritually, supports them spiritually and morally, provides guidance to fulfill their worship as much as possible and supports the vital resistance on the condition of avoiding the intervention the medical treatment in any way in hospitals.”

Even though coming into question of the spiritual care works in hospitals is new for our country (Topuz, 2014). The developmental process of the spiritual care concept is still ongoing. The identification and classification process is not yet completed in the health field. Therefore, to evaluate this concept objectively in health education and practices, it is essential to determine the opinion of the doctors, nurses and midwives on spiritual care, there is a need to develope measuring means for this purpose (Ergül and Temel, 2007; Kavas and Kavas, 2014). "Spiritual Care Needs Determination Scale on Patients According to the opinion of Doctors, Nurses and Midwives" was developed to meet this need.

1. Method

This study was conducted with a screening method.

1.1. Statistical Analysis of Data

SPSS 21.0 and LISREL software package was used for statistical analys assessing the results obtained in this study.

Article pool was created by screening the relevant literature. The item 17 of the Scale (Spiritual Support is an important part of Psychosocial Rehabilitation Services of the patients) and the item 19 (I believe that the spiritual Support would eliminate the spiritual deviation/superstition in the patient) were taken from the study "Spiritual Support Perception Scale; Validity, Reliability" developed by Kavas and Kavas (2014). Five-point Likert-type frequency rating scale was used in the scale. The scale consists of following options; Strongly Disagree (0), Disagree (1), Undecided (2), Agree (3), Strongly Agree (4). After the language validity, in order to determine the content (coverage) validity of the scale Expert Opinion used previously on the validity of the language studies was used from the Presentation form. Kendall's W statistic was calculated for the content validity rate on Experts opinion and content validity index and the compatibility of between experts.

It is stated that the sample size in scale development study, the sample size is not less than 100 people, should be at least 5 times larger of the number of the items to be subjected to factor analysis (Tavşancıl, 2002). The scale consisting of 19 items was applied to totally 404 subjects selected randomly (49 doctors, 80 midwives and 275 nurses). As the sample calculation is 19 x 5 = 95 < 404, the adequate sample number for verification analysis has been reached.

Factor Analysis was used to reveal the structure validity of spiritual Care Needs Determination Scale on Patients. Confirmatory factor analysis was used to examine the dimensions of the original scale.

Cronbach's Alpha was used for the general reliability and lower dimensions reliability. The most common method to examine the reliability is Cronbach's Alpha coefficient. Besides, the analysis was supported by the approaches of Spearman-Brown and Guttman split-half. The assessment criteria used in the evaluation of Cronbach's Alpha Coefficient (Özdamar, 2004);

If it is $0{,}00 \leq \alpha < 0{,}40$ the scale is not reliable.

If it is $0{,}40 \leq \alpha < 0{,}60$ the scale is low reliability.

If it is $0{,}60 \leq \alpha < 0{,}80$ the scale is very reliable.

If it is $0{,}80 \leq \alpha < 1{,}00$ the scale is a highly reliable.

To examine the reliability of scale item by time, test-retest applications were analyzed by pairedsamples t-test. It was evaluated that, Results are in the %95 confidence interval and the meaningfulness is two-way on the level of $p < 0.05$.

2. Validity and Reliability Analysis

2.1. Coverage Validation Analysis and Expert Opinions about Spiritual Care Needs Determination Scale on Patients.

2.1.1. Content Validity and Analysis of Expert Opinions

Content validity ratio was developed by Lawsh (1975). Minumum 5 maximum 40 expert opinions are needed in the technique of Lawsh. Each item is evaluated as; "Item measures the target structure " , “Item does not measure the target structure ", “Item measures the target structure but it is unnecessary”. As well as the content validity, expert opinions on similar understanding of the item, suitability to the target group, etc. can be rated.

According to this, content validity ratios are obtained by adding expert opinions about any item (Table 1). Content validity ratios are obtained by one missing of the ratio of the number of experts who indicats "necessary" to the ratio of total number of experts who opine about the item.

Equation 1 Content Validity Rate.

$$CVR = \frac{N_G}{N/2} - 1$$

NG refers to the number of experts who says "necessary," about the item. N refers the total number of experts stating views on the item. According to Equation 1; CVR=0 when about half of the experts opine about the item as"necessary" , CVR >0 when more then half of the experts opine about the item as"necessary" , CVR <0 when more then half of the experts do not opine about the item as"necessary". If CVR value is negative or 0, such items are eliminated in the first place. Statistical criteria and significance are tested for the items which have positive CVR values. To test the statistically significance of the obtained CVR, for content validity scales, cumulative normal distribution were used in the relavant literature previously. In terms of easy calculation, the minimum value of Content Validity Criteria at the significance level of p = 0.05 was converted to the table by Veneziano and Hooper (1997). According to this, the minimum values for the number of specialists also give the statistical significance of the item.

Table 10: α=0,05 The Minimum Values for Content Validation Criteria on the Level of Significance*

Number of Experts	Minimum Value		Number of Experts	Minumum Value
5	0.99		13	0.54
6	0.99		14	0.51
7	0.99		15	0.49
8	0.78		20	0.42
9	0.75		25	0.37
10	0.62		30	0.33
11	0.59		35	0.31
12	0.56		40+	0.29

* Source: Veneziano L. ve Hooper J. , “A methodforquantifyingcontentvalidity of health-relatedquestionnaires”. 1997: AmericanJournal of HealthBehavior, 21(1):67-70.

Even though Lawsh technique is the most common techniques used in the content of validity, other techniques have been developed. Davis technic (1992) is rating the expert opinions in-four as (a) "eligible" (b) "the item should be revised slightly," (c) "the item should be revised seriously" and (d) "not eligible". In this technique, "The content validity index" is obtained by the number of experts who tick (a) and (b) divided by the total number of experts and this 0.80 value is considered as a measure of value instead of comparing to a statistical measure (Gözüm and Aksayan, 2003).

Content Validity criteria (100 % > 99 %) for all items was achieved. Content Validity Index for all items (100% > 80%) was achieved (Table 2).

Table 11: Expert Opinions

Item No	Item	Inappropriate	A bit Appropriate (Required Item Revision)	Quite appropriate (appropriate but necessary minor changes)	Extremely appropriate	Total Number of Experts	The number of experts who says "necessary,"	Content Validity criteria	Content Validity Index
1	I believe that Spiritual beliefs helps to relax the patient in stressful situations.				6	6	6	100 %	100 %
2	I believe that patients, in the treatment process, receive morale support from spiritual faith.				6	6	6	100 %	100 %
3	I believe that Spiritual support, allows patients to be at peace with the current situation.			1	5	6	6	100 %	100 %
4	Patients turn to prayer and worship for spiritual support.			2	4	6	6	100 %	100 %
5	I believe that Spiritual practices help to relax the patient in stressful situations.				6	6	6	100 %	100 %
6	I believe that spiritual support reduce medical fears in patients.			1	5	6	6	100 %	100 %
7	I think that spiritual beliefs will help in coping with the challenges of the disease.				6	6	6	100 %	100 %
8	I think that the patients live according their religious beliefs for spiritual support.				6	6	6	100 %	100 %
9	I believe that spiritual support ensures patients staying positive towards life.				6	6	6	100 %	100 %

10	I believe that Patients need to know, the convenience provided by the religion in worship.				6	6	6	100 %	100 %
11	To pray for them increases the patient's recovery hope and supports the treatment process.				6	6	6	100 %	100 %
12	I believe that spiritual support give power to the patients in patience the pain associated with the disease.				6	6	6	100 %	100 %
13	I believe that spiritual support will gain a sense that belief is next to the patient.				6	6	6	100 %	100 %
14	I believe that morale support will help spiritual healing in patients.				6	6	6	100 %	100 %
15	I believe that to pray for them makes patients relieve spiritually.				6	6	6	100 %	100 %
16	I believe that patient need spiritual morale support during treatment.				6	6	6	100 %	100 %
17	Spiritual support is an important part of psychosocial rehabilitation services for patients.				6	6	6	100 %	100 %
18	I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.				6	6	6	100 %	100 %
19	I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.				6	6	6	100 %	100 %

Table 12: The Compliance of Expert Opinions

	N	Average	S.s	Min.	Max.	Kendall's W	p
Expert 1	19	3,95	0,23	3	4	0,058	0,352
Expert 2	19	3,95	0,23	3	4		
Expert 3	19	4	0	4	4		
Expert 4	19	4	0	4	4		
Expert 5	19	4	0	4	4		
Expert 6	19	3,90	0,32	3	4		

Kendall's W statistic was calculated to examine the conformity between the experts. It was found that there is a conformity among the experts (Kendall's W = 0,058; p=0,352>0,05).

2.2. The test related to Spiritual Care Needs determination Scale on Patients – Test-Retest Analysis

Table 13: Spiritual Care Needs Determination Scale on Patients – Test-Retest Analysis(n=30)

	Test		Retest		t	p
	Ort	Ss	Ort	Ss		
1. I believe that Spiritual beliefs helps to relax the patient in stressful situations.	3,330	0,661	3,070	1,311	0,955	0,348
2. I believe that patients, in the treatment process, receive morale support from spiritual faith.	3,300	0,651	2,900	1,269	1,461	0,155
3. I believe that Spiritual support, allows patients to be at peace with the current situation.	3,200	0,714	2,970	1,098	0,893	0,379
4. Patients turn to prayer and worship for spiritual support.	3,100	0,712	2,770	1,104	1,262	0,217
5. I believe that Spiritual practices help to relax the patient in stressful situations.	3,170	0,699	2,970	1,033	0,783	0,440
6. I believe that spiritual support reduce medical fears in patients.	2,970	0,669	2,700	1,149	0,955	0,348
7. I think that spiritual beliefs will help in coping with the challenges of the disease.	3,230	0,568	2,970	1,066	1,034	0,310
8. I think that the patients live according their religious beliefs for spiritual support.	3,130	0,681	2,730	1,081	1,508	0,142

9. I believe that spiritual support ensures patients staying positive towards life.	3,270	0,521	2,930	1,015	1,439	0,161
10. I believe that Patients need to know, the convenience provided by the religion in worship.	3,230	0,568	2,800	1,064	1,750	0,091
11. To pray for them increases the patient's recovery hope and supports the treatment process.	3,170	0,648	2,800	1,157	1,363	0,183
12. I believe that spiritual support give power to the patients in patience the pain associated with the disease.	3,270	0,640	2,830	1,020	1,898	0,068
13. I believe that spiritual support will gain a sense that belief is next to the patient.	3,200	0,551	2,830	1,020	1,578	0,125
14. I believe that morale support will help spiritual healing in patients.	3,170	0,531	2,900	0,960	1,161	0,255
15. I believe that to pray for them makes patients relieve spiritually.	3,130	0,571	2,870	1,042	1,137	0,265
16. I believe that patient need spiritual morale support during treatment.	3,170	0,592	3,030	1,033	0,538	0,595
17. Spiritual support is an important part of psychosocial rehabilitation services for patients.	3,130	0,629	3,030	0,999	0,423	0,676
18. I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.	3,200	0,484	2,900	1,062	1,273	0,213
19. I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.	2,970	0,718	2,800	1,031	0,656	0,517

For all items, test - retest reliability was maintained on the t test implemented for 19 items of spiritual care needs in patients ($p>0,05$).

2.3 Reliability Analysis Related to the Spiritual Care Needs Determination Scale on Patients

Table 14: Cronbach's Alpha

Cronbach's Alpha	**The Number of Item**
0,970	19

Cronbach's alpha value was found to be 0.970 for 19 items of spiritual care needs on patients. The scale was highly reliable.

Table 6: Item Analysis

	The Scale Average when the İtem is Deleted	**The Scale Variance When the İtem is Deleted**	**Corrected İtem Full Correlation**	**Cronbach Alfa When the İtem is Deleted**
1. I believe that Spiritual beliefs helps to relax the patient in stressful situations.	52,89	179,456	0,752	0,968
2. I believe that patients, in the treatment process, receive morale support from spiritual faith.	52,91	180,690	0,740	0,969
3. I believe that Spiritual support, allows patients to be at peace with the current situation.	53,00	178,596	0,800	0,968
4. Patients turn to prayer and worship for spiritual support.	53,13	180,934	0,703	0,969
5. I believe that Spiritual practices help to relax the patient in stressful situations.	53,02	179,245	0,795	0,968
6. I believe that spiritual support reduce medical fears in patients.	53,31	177,947	0,750	0,969
7. I think that spiritual beliefs will help in coping with the challenges of the disease.	53,05	178,977	0,812	0,968
8. I think that the patients live according their religious beliefs for spiritual support.	53,14	179,479	0,762	0,968
9. I believe that spiritual support ensures patients staying positive towards life.	53,04	179,257	0,804	0,968
10. I believe that Patients need to know, the convenience provided by the religion in worship.	53,00	181,035	0,760	0,968
11. To pray for them increases the patient's recovery hope and supports the treatment process.	53,10	177,287	0,815	0,968
12. I believe that spiritual support give power to the patients in patience the pain associated with the disease.	53,10	177,320	0,796	0,968

13. I believe that spiritual support will gain a sense that belief is next to the patient.	53,15	177,761	0,813	0,968
14. I believe that morale support will help spiritual healing in patients.	53,01	179,767	0,830	0,968
15. I believe that to pray for them makes patients relieve spiritually.	53,08	179,450	0,778	0,968
16. I believe that patient need spiritual morale support during treatment.	52,88	181,913	0,763	0,968
17. Spiritual support is an important part of psychosocial rehabilitation services for patients.	53,01	179,618	0,794	0,968
18. I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.	53,03	179,679	0,818	0,968
19. I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.	53,19	178,987	0,758	0,968

When total correlation of the item is examed, it was found to be over %70 for all compounds. when Cronbach's alpha values of the spiritual care needs detection scale in patients are examed with deleted item; It was found no exceeding the general Cronbach's alpha values for any item. There was no need to remove item on the item analysis stage.

Table 15: Split Half Test

Cronbach's Alpha	Part 1	Value	,946
		N of Items	10[a]
	Part 2	Value	,953
		N of Items	9[b]
	Total N of Items		19
CorrelationBetween Forms			,855
Spearman-Brown Coefficient	EqualLength		,922
	UnequalLength		,922
GuttmanSplit-HalfCoefficient			,920

One of the reliability method is dividing the two halves of the test. According to Spearman-Brown approach, the level of the test reliability is 0.922. According to GuttmanSplit-Half approach, the level of the test reliability is 0,920. This finding supports the Cronbach's Alpha value.

2.4. Validity Analysis related to Spiritual Care Needs Determination Scale on Patients

2.4.1. Explanatory Factor Analysis related to Spiritual Care Needs Determination Scale on Patients

"Cronbach's alpha" which is the internal consistency coefficient is calculated to calculate the reliability of the 19. item on Spiritual Care Needs Determination Scale on Patients. The general reliability of the scale was found very high as alpha = 0.970. The explanatory (exploratory) factor analysis was applied to demonstrate the structure validity of the scale. Factor analysis helps to be more easily understood the relationships between concepts within the data set by the researchers, discovering the basic factors (the structure of the relationship) of data set consisting of many variables (http://www.istatistikanaliz.com/faktor_analizi.asp, Accessed: 05/10/2015). In order to test the factor analysis, it is expected to be a relationship between the variables included in the factor analysis as a result of Bartlett test which is one of the presuppositions. When Bartlett case value is $p < 0.05$, it is considered to be a relationship between variables (Büyüköztürk, 2009). It is determined that there is a relationship between the variables in the factor analysis in Bartlett test ($p = 0.000 < 0.05$). Another hypothesis to be tested factor analysis is Kaiser-Meyer Olkin(KMO) test. KMO value is a value indicating the size of example (observation) is adequate, for measured variables. When KMO value is greater than 0.60, it is considered to be adequate number of samples (Büyüköztürk, 2009). In the test result (KMO = 0.968> 0.60), it is determined that the sample size is sufficient for applying factor analysis. By selecting the varimax in Factor analysis application method, it is provided that the structure of the relationship between factors remains the same. Variable in factor analysis was collected under a single factor which has %65.06 of the total variance. According to the alpha and explained variance value in relation to the reliability, Spiritual Care Needs Determination Scale on Patients was found to be a valid and reliable instrument. The factors Structure of the scale is shown below.

Tablo 8: The Factor Structure of the Spiritual Care Needs Determination Scale on Patients

Size	**Item**	**Factor Load**	**Explained variance**	**Cronbach's Alpha**
Spiritual Care Needs Determination on Patients (eigenvalues=12.361)	14. I believe that morale support will help spiritual healing in patients.	0,854	65,060	0,970
	18. I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.	0,842		
	11. To pray for them increases the patient's recovery hope and supports the treatment process.	0,837		
	13. I believe that spiritual support will gain a sense that belief is next to the patient.	0,837		
	7. I think that spiritual beliefs will help in coping with the challenges of the disease.	0,833		
	9. I believe that spiritual support ensures patients staying positive towards life.	0,826		

	17. Spiritual support is an important part of psychosocial rehabilitation services for patients.	0,821		
	3. I believe that Spiritual support allows patients to be at peace with the current situation.	0,820		
	12. I believe that spiritual support give power to the patients in patience the pain associated with the disease.	0,820		
	5. I believe that Spiritual practices help to relax the patient in stressful situations.	0,817		
	15. I believe that to pray for them makes patients relieve spiritually.	0,807		
	16. I believe that patient need spiritual morale support during treatment.	0,792		
	10. I believe that Patients need to know, the convenience provided by the religion in worship.	0,787		
	8. I think that the patients live according their religious beliefs for spiritual support.	0,786		
	19. I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.	0,786		
	1. I believe that Spiritual beliefs helps to relax the patient in stressful situations.	0,777		
	6. I believe that spiritual support reduce medical fears in patients.	0,776		
	2. I believe that patients, in the treatment process, receive morale support from spiritual faith.	0,765		
	4. Patients turn to prayer and worship for spiritual support.	0,732		
Total Variance %65.06				

2.4.2 Confirmatory Factor Analysis on Spiritual Care Needs Determination Scale on Patients

The findings relating to validity studies of Spiritual Care Needs Determination Scale on Patients with 19 items single-Factor structure have tested by CFA. The positive factor load was provided in Confirmatory Factor Analysis carried out on 19 items (CFA). Thus, The Fit indexes obtained as a result of 19 items and the CFA for testing of a latent variable is as follows; Goodness of Fit Index = GFI, Adjusted Goodness of Fit Index=AGFI, Comparative Fit Index=CFI, Normed Fit Index=NFI, Non-normed Fit Index=NNFI, Root-Mean-SquareError of Approximation=RMSEA, and Standardized Root Mean Square Residual=S-RMR were examed and and Ki-square value ($\chi 2$ = 912.36, N = 404, sd= 151, $\chi 2$ / df = 6.04, p = 0.000) was found to be significant. The fit index value was found as RMSEA=0,13, GFI=0,76, CFI=0,89, AGFI=0,70, NFI=0,88, NNFI=0,88, SRMR=0,049.

Table 16: The Goodness of Fit Criteria

Fit criteria	Good fit	Acceptable Limits	Results of Goodness of Fit	Result
Ki-square	0<Ki- square <2sd	2sd<Ki- square <3sd	Ki- square = 912,36 > 3sd=453	poor fit
p value	0.05<p< 1.00	0.01 < p <0.05	0,0000	-
Ki-square /sd	0<Ki- square /sd<2	2<Ki- square /sd<3	Ki- square /sd = 912,36/151 =6,04	poor fit
RMSEA	0<RMSEA<0.05	0.05<RMSEA<0.08	0,13 (%90 CI= 0,12 ; 0,14)	poor fit
p value	0.10<p<1.00	0.05<p<1.00	0,00	-
SRMR	0 <SRMR <0.05	0.05 <SRMR <0.10	0,049	Good fit
NFI	0.95 <NFI <1.00	0.90 <NFI <0.95	0,88	poor fit
NNFI	0.97 <NNFI <1.00	0.95< NNFI <0.97	0,88	poor fit
CFI	0.97 <CFI <1.00	0.95< CFI <0.97	0,89	poor fit
GFI	0.95 <GFI <1.00	0.90< GFI <0.95	0,76	poor fit
RFI	0.90 <AGFI <1.00	0.85< AGFI <0.90	0,86	poor fit
AGFI	0.95 <RFI <1.00	0.90< RFI <0.95	0,70	poor fit

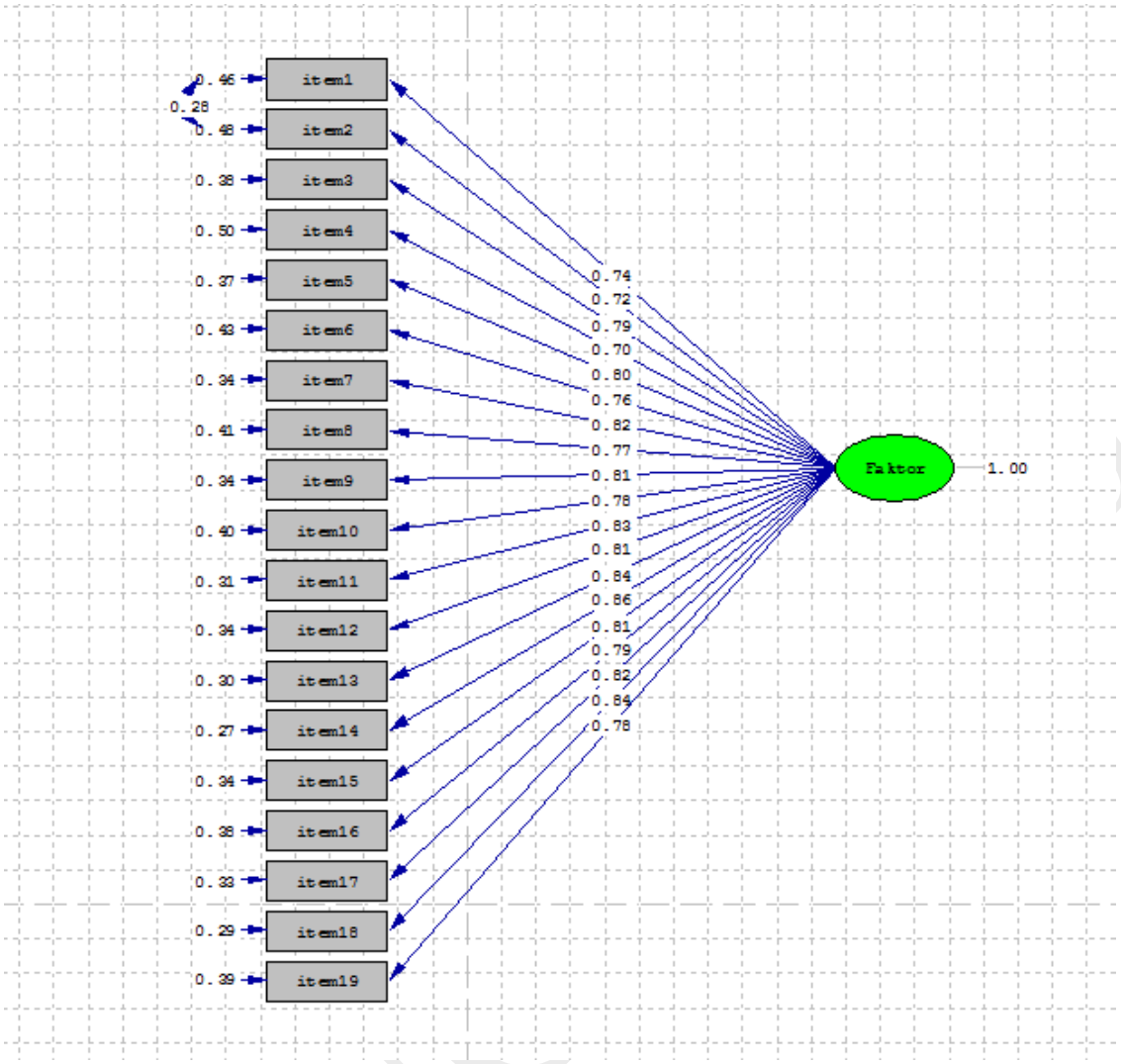

Figure 1: CFA Factor loadings of Spiritual Care Needs Determination Scale on Patients

Modification indices which has Ki-Square value for CFA, over 100 and creating change, were used. It is found that the following items "1. I believe that Spiritual beliefs helps to relax the patient in stressful situations.", " 2. I believe that patients, in the treatment process, receive morale support from spiritual faith." are very similar questions and close to each other theoretically.

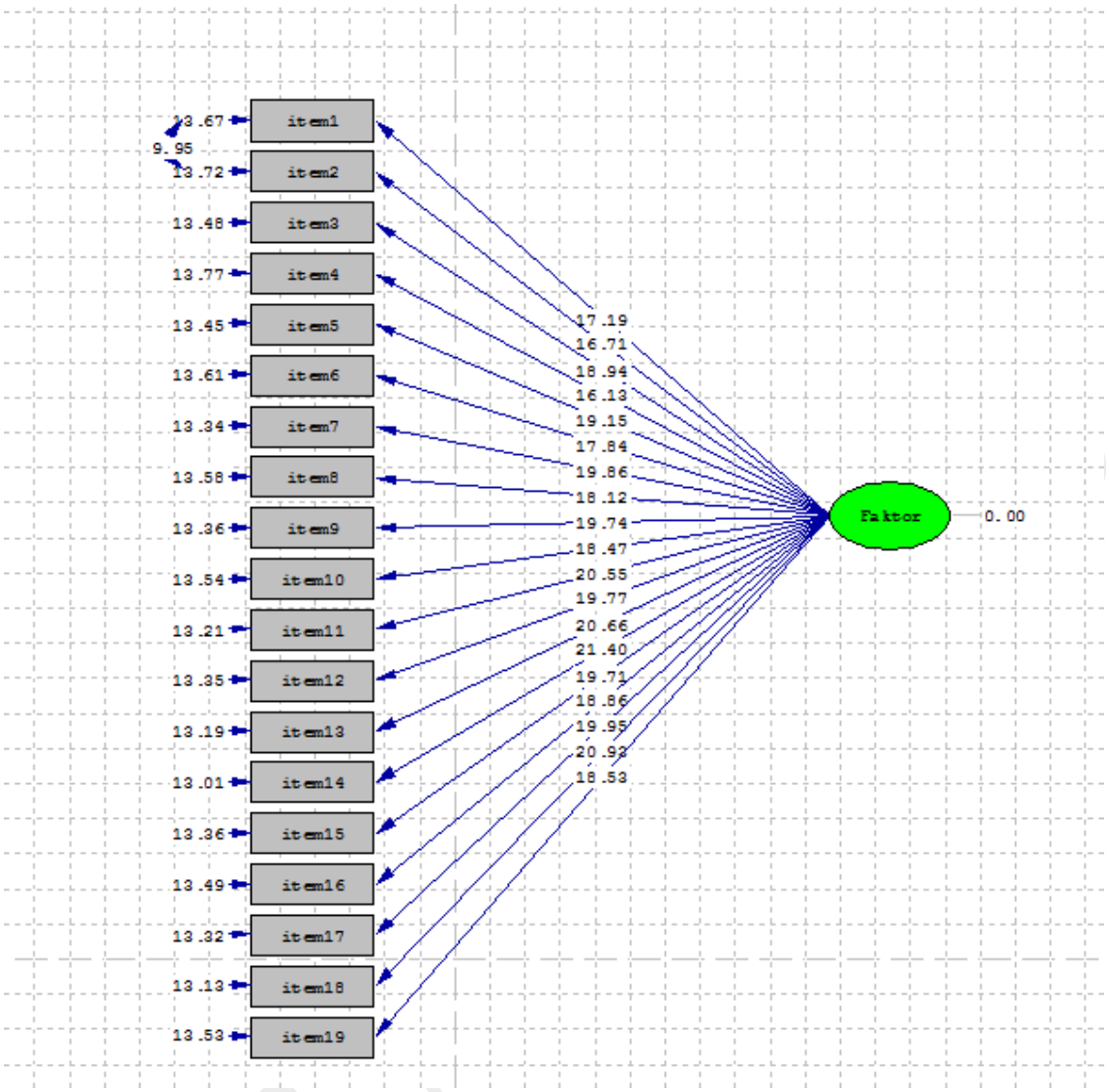

Figure 2: CFA t tests of Spiritual Care Needs Determination Scale on Patients

t test results are significant for all items (t>1,96; p>0,05).

Table 17: Factor Loads obtained by CFA and described Variances of Spiritual Care Needs Determination Scale on Patients

Item	Factor Loads	R^2
1. I believe that Spiritual beliefs helps to relax the patient in stressful situations.	0,74	0,54
2. I believe that patients, in the treatment process, receive morale support from spiritual faith.	0,72	0,52
3. I believe that Spiritual support allows patients to be at peace with the current situation.	0,79	0,62
4. Patients turn to prayer and worship for spiritual support.	0,70	0,50
5. I believe that Spiritual practices help to relax the patient in stressful situations.	0,80	0,63

6. I believe that spiritual support reduce medical fears in patients.	0,76	0,57
7. I think that spiritual beliefs will help in coping with the challenges of the disease.	0,82	0,66
8. I think that the patients live according their religious beliefs for spiritual support.	0,77	0,59
9. I believe that spiritual support ensures patients staying positive towards life.	0,81	0,66
10. I believe that Patients need to know, the convenience provided by the religion in worship.	0,78	0,60
11. To pray for them increases the patient's recovery hope and supports the treatment process.	0,83	0,69
12. I believe that spiritual support give power to the patients in patience the pain associated with the disease.	0,81	0,66
13. I believe that spiritual support will gain a sense that belief is next to the patient.	0,84	0,70
14. I believe that morale support will help spiritual healing in patients.	0,86	0,73
15. I believe that to pray for them makes patients relieve spiritually	0,81	0,66
16. I believe that patient need spiritual morale support during treatment.	0,79	0,62
17. Spiritual support is an important part of psychosocial rehabilitation services for patients.	0,82	0,67
18. I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.	0,84	0,71
19. I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.	0,78	0,61

According to the results of DFA, item factor loads were observed to vary between 0.70 and 0.86. According to the result of DFA, R Square (R2) values were observed to vary between 0.50 and 0.73.

CONCLUSION

Spiritual Care is defined as “The spiritual support services presented for the inpatients who demand. It inculcats the patients spiritually, supports them spiritually and morally, provides guidance to fulfill their worship as much as possible and supports the vital resistance on the condition of avoiding the intervention the medical treatment in any way in hospitals.”

It was found that there are very few researches on spiritual care in our country. To meet the need of data collection tool of Researchers who are interested in this field and to fill the gap in this field, “Spiritual Care Needs Determination Scale” was developed to determine the views of the doctors, nurses and midwives working in the inpatient institutions. When assessing the results obtained in this study, SPSS 21.0 and LISREL software package were used for statistical analysis.

Firstly, Article pool was created by scanning the relevant literature in the study. After the language validity, in order to determine the content (coverage) validity of the scale, “Expert Opinion Presentation form” which was applied on the validity of the language studies previously was used. Kendall's W statistic was calculated for the content validity rate on Experts opinion and content validity index and the compatibility between experts. The scale consisting of 19 items was applied to 404 subjects (49 doctors, 80 midwives and 275 nurses) selected randomly. Explanatory Factor Analysis was used to uncover the construct validity of Spiritual Care Needs

Determination Scale on Patients. Confirmatory Factor Analysis was used to examine the size of the original scale. Cronbach's Alpha was used for the general reliability and lower dimensions reliability. The most common method to examine the reliability is Cronbach's Alpha coefficient. Besides, the analysis were supported by the approach of Spearman-Brown and Guttman split-half. To examine the reliability of scale item by time, test-retest applications were analyzed by pairedsamples t-test. Results which are in the confidence interval of 95% and the meaningfulness which is p <0.05 level evaluated in two-way. Content Validity criteria (100% > 99%) for all items was achieved. Content Validity Index for all items (100% > 80%) was achieved. Kendall's W statistic was calculated to examine the conformity between the experts. It was found that there is a conformity among the experts. (Kendall's W = 0,058; p=0,352>0,05).

For all items test - retest reliability was maintained on the t test implemented for 19 items of spiritual care needs in patients (p>0,05). Cronbach's alpha value was found to be 0.970 for 19 items of spiritual care needs on patients. It was determined that the scale was highly reliable.

When item total correlation of spiritual care needs on patients is examed, it was found to be over %70 for all compounds. when Cronbach's alpha values of the spiritual care needs detecrmination scale on patients are examed with deleted item; It was found no exceeding the general Cronbach's alpha values for any item, there was no need to remove item on the item analysis stage.

One of the reliability method is dividing the two halves of the test. According to Spearman-Brown approach, the level of the test reliability is 0.922. According to GuttmanSplit-Half approach, the level of the test reliability is 0,920. This finding supports the Cronbach's Alpha value.

"Cronbach's alpha" which is the internal consistency coefficient is calculated to calculate the reliability of the 19. item on Spiritual Care Needs Determination Scale on Patients. The general reliability of the scale was found very high as alpha = 0.970. The explanatory (exploratory) factor analysis was applied to demonstrate the structure validity of the scale. In order to test the factor analysis,it is expected to be a relationship between the variables included in the factor analysis as a result of Bartlett test which is one of the presuppositions. It is determined that there is relationship between the variables in the factor analysis in Bartlett test (p = 0.000 <0.05). Another hypothesis to be tested factor analysis is Kaiser-Meyer Olkin (KMO) test. In the test result (KMO = 0.968> 0.60), it is determined that the sample size is sufficient for applying factor analysis. By selecting the varimax in factor analysis application method, it is provided that the structure of the relationship between factors remains the same. Variable in factor analysis was collected under a single factor which has %65.06 of the total variance. According to the alpha and explained variance value in relation to the reliability, Spiritual Care Needs Determination Scale on Patients was found to be a valid and reliable instrument.

The findings related to validity study of Spiritual Care Needs Determination Scale on Patients, the model of single-factor structure consisting of 19 items was tested by Confirmatory Factor Analysis (CFA). The positive factor load was provided on CFA carried out in all 19 items. Modification indices which have Ki-Square value for CFA and creates changes over 100 were used. t test results are significant for all substances (t>1,96; p>0,05). According to the results of CFA, it was observed that item factor loads are vary between 0.70 and 0.86. According to the results of CFA, values of R-squared (R2) were observed to vary between 0.50 and 0.73.

It may be expressed that Spiritual Care Needs Determination Scale on Patients is a valid and reliable data collection tool which determine the perceptions of the doctors, midwives and nurses working in hospitals. According to findings obtained, the measurement tool developed for this study may eliminate a significant deficiency in the relevant field and be a measurement tool that can be used in future studies.

4. RECOMMENDATIONS

1. Spiritual Care Needs Determination Scale on Patients which was developed under this work is an effective data collection tool which determines Spiritual Care Needs of the patients according to the opinions of the doctors, midwives and nurses
2. We recommend to test the validity and reliability of this developed scale with larger samples and repeated measures.

3. We recommend to test the validity and reliability of this scale in inpatient institutions of different religions and cultures in different countries with repeated measurements.

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APPENDIX:1.

Spiritual Care Needs Determination Scale on Patients According to the opinion of Doctors, Nurses and Midwives

Directive The Spiritual Care is the spiritual support services presented for the inpatients who demand. It inculcates the patients spiritually, supports them spiritually and morally, provides guidance to fulfill their worship as much as possible and supports the vital resistance on the condition of avoiding the intervention the medical treatment in any way in hospitals. This scale was prepared to determine the views of doctors, midwives and nurses about "the Spiritual Care Need of Patients". Please use the rating given in the next column, mark X the option that best suits you.		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Answer the following items according to your observation on patients.		**0**	**1**	**2**	**3**	**4**
1	I believe that Spiritual beliefs helps to relax the patient in stressful situations.					
2	I believe that patients, in the treatment process, receive morale support from spiritual faith.					
3	I believe that Spiritual support allows patients to be at peace with the current situation.					
4	Patients turn to prayer and worship for spiritual support.					
5	I believe that Spiritual practices help to relax the patient in stressful situations.					
6	I believe that spiritual support reduce medical fears in patients.					
7	I think that spiritual beliefs will help in coping with the challenges of the disease.					
8	I think that the patients live according their religious beliefs for spiritual support .					
9	I believe that spiritual support ensures patients staying positive towards life.					
10	I believe that Patients need to know the convenience provided by the religion in worship.					
11	To pray for them increases the patient's recovery hope and supports the treatment process.					

12	I believe that spiritual support give power to the patients in patience the pain associated with the disease.					
13	I believe that spiritual support will gain a sense that belief is next to the patient.					
14	I believe that morale support will help spiritual healing in patients.					
15	I believe that to pray for them makes patients relieve spiritually.					
16	I believe that patient need spiritual morale support during treatment.					
17	Spiritual support is an important part of psychosocial rehabilitation services for patients.					
18	I believe that Spiritual support will ensure to be peace with their iner (spiritual) world.					
19	I believe that Spiritual support will eliminate spiritual deviation (superstitions) in patients.					