## Development of an One-item Question to Assess Spiritual Well-being in Advanced Cancer Inpatients in South Korea

<u>Sang-Yeon Suh<sup>ab</sup></u>, Youngmin- Park<sup>c</sup>, Sun Hyun Kim<sup>d</sup>, Eon Sook Lee<sup>e</sup>, Jeanno Park<sup>f</sup>, Seok Joon Yoon<sup>g</sup>, Yu Jung Kim<sup>h</sup>, Beodeul Kang<sup>i</sup>, Jung Hye Kwon<sup>j</sup>, Kwonoh Park<sup>k</sup>, Hong-Yup Ahn<sup>l</sup>, David Hui<sup>m</sup>

<sup>a</sup>Department of Family Medicine, Palliative Care Center, Dongguk University Ilsan Hospital, Goyang, South Korea; <sup>b</sup>Department of Medicine, School of Medicine, Dongguk University, Seoul, South Korea; <sup>c</sup>Department of Family Medicine, National Health Insurance Service Ilsan Hospital, Goyang, South Korea; <sup>d</sup>Department of Family Medicine, Family Medicine, Palliative Care Center, Inje University Ilsan Paik Hospital, Goyang, South Korea; <sup>f</sup>Department of Internal Medicine, Bobath Hospital, Seongnam, South Korea; <sup>g</sup>Department of Family Medicine,

School of Medicine, Chungnam National University, Daejeon, South Korea; Department of Internal Medicine, Seoul National University Bundang Hospital, Seongnam, South Korea; Division of Medical Oncology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, South Korea; Department of Internal Medicine, Kangdong Sacred Heart Hospital, Hallym University, Seoul, South Korea; Department of Internal Medicine, Pusan National University Yangsan Hospital, Pusan, South Korea; Department of Statistics, Dongguk University, Seoul, South Korea; Department of Palliative Care and Rehabilitation Medicine, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, United States

Background Spiritual well-being (SWB) is important for patients having life-limiting illness. Functional Assessment of Chronic Illness Therapy-Spirituality 12(FACIT-Sp 12) is commonly used to assess spiritual well-being(SWB). Shortened versions of question would be helpful to assess SWB in emaciated patients. Our goal was to develop an one-item question appropriately in order to assess SWB in advanced cancer inpatients.

This is a cross-sectional, multicenter study involving adult advanced cancer inpatients from 7 palliative care units in South Korea. Candidates of an one-item question were three questions to check; their peacefulness(Are you at peace?), spirituality(Do you think yourself as a spiritual person?) and religiosity(Do you think yourself as a religious person?). Patients answered three questions by self-rating using numeric rating scales(0-10). We collected data on clinicodemographic characteristics and SWB. SWB was measured by FACIT-Sp 12, comprised of 2 subscales (Meaning/Peace and Faith). Pearson's correlation test was conducted to determine the relationship among three questions, the total score of FACIT-Sp 12 and its subscales.

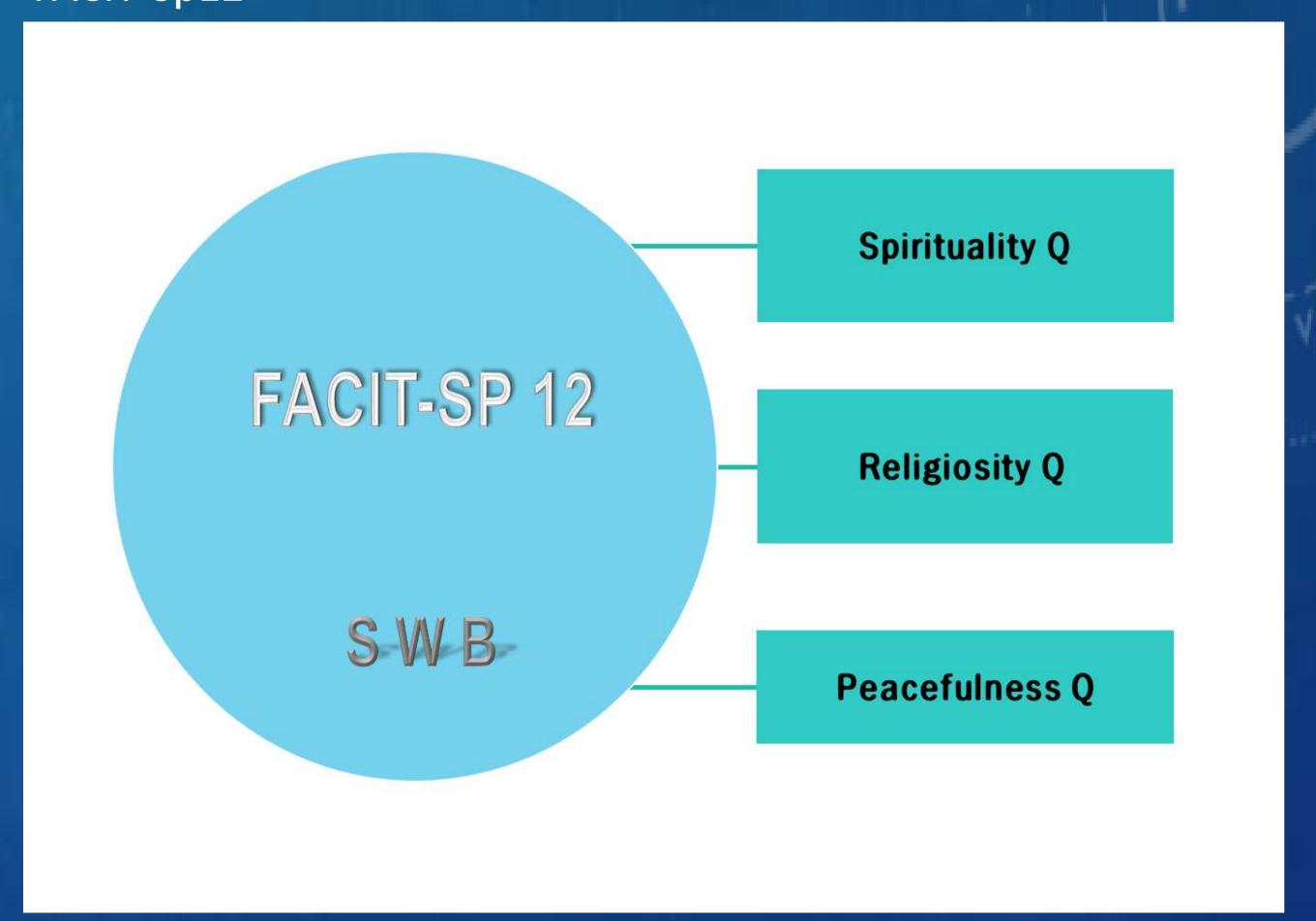
**Results** A total number of 194 patients were enrolled in the study. A good correlation was observed in the questions of spirituality(r = 0.732, P < 0.01) and religiosity(r = 0.708, P < 0.01) with a total score of FACIT-Sp 12. Question of peacefulness showed a moderate correlation with a total score of FACIT-Sp 12(r = 0.505, P < 0.01). The faith subscale showed a good correlation with the questions of spirituality(r = 0.790, P < 0.01) and religiosity(r = 0.758, P < 0.01). All three questions had a moderate correlation with the meaning/peace subscale.

**Conclusion** The questions of spirituality and religiosity showed better convergence validity than the question of peacefulness. Therefore, we recommend the questions of spirituality or religiosity as an one-item question to assess SWB in advanced cancer inpatients.

Table 1. Correlations of One Item Questions between FACIT-Sp12 (n=194)

(n=194)			
One Item Questions	FACIT-Sp12	Pearson's correlation coefficient	P-value
Peacefulness Q	Total Score	0.505	< 0.001
	Meaning/Peace	0.577	< 0.001
	Faith	0.334	< 0.001
Spirituality Q	Total Score	0.732	< 0.001
	Meaning/Peace	0.475	< 0.001
	Faith	0.790	< 0.001
	Total Score	0.708	< 0.001
	Meaning/Peace	0.466	< 0.001
	Faith	0.758	< 0.001

Figure 1. Diagram of Relationship between One Item Questions and FACIT-Sp12



P-values were obtained by Pearson's correlation.

FACIT-Sp 12: Functional assessment of chronic illness therapy-spirituality 12; Total score: Spiritual wellbeing was measured by total sum of FACIT-Sp 12; Meaning/peace: sum of Q1 through Q8; Faith: sum of Q9 through Q12.

Peacefulness Q: Are you at peace?; Sprituality Q: Do you consider yourself as a spiritual person?; Religiosity Q: Do you consider yourself as a religious person?

FACIT-Sp 12: Functional assessment of chronic illness therapy-spirituality 12 SWB: Spiritual well-being

Sprituality Q: Do you consider yourself as a spiritual person?; Religiosity Q: Do you consider yourself as a religious person?; Peacefulness Q: Are you at peace?