

Development of the Bengali Version of the Spiritual Needs Questionnaire

Hiroko Shimizu^{1*}, Mabel D Rozario², Arndt Büssing³ and Ai Makishima⁴

¹Professor Emeritus at Kagawa University, Japan

²Former Professor at Bangladesh Medical University, Dhaka, Bangladesh

³Professor, Faculty of Health, Witten/Herdecke University, Germany

⁴Assistant professor, Faculty of Medicine, Asahikawa Medical University, Japan

Abstract

Background: The purpose of this study was to develop a Bengali version of Büssing's 20-item Spiritual Needs Questionnaire (SpNQ; 4-point scale, 0-3) usable by patients and healthcare professionals in Bangladesh.

Methods: The method was a questionnaire survey. The Bengali version of the SpNQ identified 20 items through a standardization procedure. The subjects were 113 Catholic nurses in Bangladesh (ages 21 to 73), mostly women. For analysis, the alpha coefficient was calculated to assess the internal consistency of the factors, and confirmatory factor analysis was performed using the developer's model. Analysis was performed using Microsoft Excel and IBM SPSS Amos 28. The survey was conducted in Dhaka in June 2025.

Results: The mean values (1.48-2.42) for each item were higher than the developer's data. Although the alpha coefficients (0.63-0.72) of the factors were lower than in the development version, the validity of each item was confirmed. Although the goodness of fit (GFI;0.837, CFI;0.849) of the model was lower than in the development version, the use of the model was supported after applying error covariance.

Discussion: The SpNQ scores were high because the survey participants were Catholic nurses who had attended a spiritual care seminar. The low alpha coefficient and model fit index may have been influenced by the fact that the participants were healthy nurses and the small number of cases. Further patient surveys should also be considered.

Conclusion: The 20 items of the SpNQ-20 supported the potential for use in a Bengali version.

Publication History:

Received: April 03, 2026

Accepted: April 23, 2026

Published: April 25, 2026

Keywords:

Spiritual Needs Questionnaire, SpNQ-20, Bengali, Bangladesh

Introduction

In 2002, the World Health Organization (WHO) defined palliative care as providing not only physical, psychological, and social support to patients and their families facing life-threatening illnesses, but also the need to address spiritual needs and pain [1]. Spiritual needs are said to be fundamental to all people, regardless of religious affiliation, and are considered essential needs that arise when individuals face existential anxiety in the face of illness or suffering [2].

Unless these needs are met, patients will not be able to find peace of mind. Therefore, caregivers are required to understand that all patients have a spiritual dimension and meet those needs [3].

Meeting patients' spiritual needs requires understanding them. An interview survey of 221 people with incurable diseases in Bangladesh indicates that psychosocial and mental health issues are a significant burden for these patients. The study also notes that the challenges faced by such patients in non-Western countries influence medical approaches, raising concerns about the applicability of Western spiritual care approaches [4]. In order to understand a patient's spiritual needs, caregivers must first become aware of their own inner spiritual needs. Nurses may also become aware of the spiritual needs that arise during the course of care [5,6].

A 2022 study in Bangladesh aimed to explore the psychological and spiritual needs of healthcare workers. The results showed that younger healthcare workers experienced higher levels of psychological stress than older workers, and doctors experienced higher levels than nurses. This is considered crucial for developing targeted interventions to

support the well-being of palliative care providers [7]. To understand these needs, the spiritual needs questionnaire (SpNQ) was developed [8] and has already been adapted into many languages [9].

The reason it is being developed in so many languages is that whether a particular need is spiritual—that is, whether it constitutes a spiritual need—varies depending on an individual's attitudes and beliefs, underlying worldview, and specific cultural background [10]. Therefore, people in the Bengal region need to be addressed in the Bengali language.

Bengali is the national language of Bangladesh and one of the 22 scheduled languages of India. Bengali is spoken in Bangladesh and in the Indian state of West Bengal. In India, it is the official language of West Bengal and Tripura [11]. According to the World Bank, Bengali speakers in India account for 9% of the population, or approximately 130 million people. With Bangladesh's population at 170 million, Bengali is spoken by approximately 300 million people.

***Corresponding Author:** Dr. Hiroko Shimizu, Professor Emeritus at Kagawa University, Takamatsu City, Kagawa Prefecture 760-8521, Japan

Citation: Shimizu H, Rozario MD, Büssing A, Makishima A (2026) Development of the Bengali Version of the Spiritual Needs Questionnaire. Int J Nurs Clin Pract 13: 439. doi: <https://doi.org/10.15344/2394-4978/2026/439>

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Regarding religion in Bangladesh, approximately 90% of the population is Muslim, while the remainder follows Hinduism, Buddhism, and Christianity. In the West Bengal region, 58% of the population is Hindu, 27% is Muslim, and the rest follow Sikhism, Buddhism, and other religions. Bangladesh has one of the highest poverty rates in the world, and as of 2025, the monthly salary for nurses in public hospitals was approximately \$200. This was lower than the average nurse salary in several countries in South Africa.

Bangladesh is affected by poverty caused by natural disasters, such as flooding from the Padma River and droughts resulting from dams in India [12]. When assessing the spiritual needs of people in such regions, Bengali assessment items are necessary. Therefore, we decided to explore the standardization of Bengali version based on the English version by Büssing et al.

Research Objective

The goal is to develop a Bengali version based on the English edition of SpNQ.

Method

The study participants consisted of 113 Bengali-speaking nurses in Bangladesh. By gender, there were 2 men, 78 women, and 33 who did not specify their gender. Ages ranged from 21 to 73 years, with a mean age of 42.45 ± 17.46 years; 35 participants did not specify their age. Their length of service ranged from 3 months to 46 years, with a mean of 16.59 ± 15.14 years. The high number of missing entries was attributed to fact that the survey was conducted during a training session, and participants may have simply forgotten to provide this information. The majority of the participants were Catholic.

Survey Instruments

The questionnaire was translated into Bengali by two researchers who are native Bengali speakers and fluent in English, using Büssing's 20-item SpNQ scale, to create a provisional Bengali version. This provisional Bengali version was then back-translated by two native English speakers who understand Bengali, and no items required revision. Furthermore, the developer reviewed this translation and back-translation, and the resulting version was adopted as the official Bengali version.

The questionnaire can be used either as a diagnostic tool with 27 items, or as a 20-item research instrument (SpNQ-20) which was tested so far in people with chronic diseases and healthy persons. It differentiates four main factors, i.e., Religious needs (Cronbach's alpha = .87 to .92), Existential needs (Cronbach's alpha = .74 to .82), Inner Peace needs (Cronbach's alpha = .73 to .82) and Generativity needs (Cronbach's alpha = .71 to .74).

Participants rate whether they currently have the respective needs (yes / no), and how strong they were to them, using a 4-point scale from disagreement to agreement (0 - not at all; 1 - somewhat; 2 - strong; 3 - very strong).

Survey Method

The survey was conducted using a self-administered questionnaire. Eighteen respondents completed the survey online, and 95 in person.

The survey was administered during a spiritual care training session, following an explanation of the conceptual framework of the SpNQ scale. The survey instructions were provided in Bengali.

Analysis Method

The analysis was conducted using statistical methods. The data were entered into the developer's scale model, and confirmatory factor analysis was performed to assess validity and calculate the fit indices. Reliability was assessed by calculating the alpha coefficient. The statistical software used was IBM Amos 28.

Survey period

The survey was conducted on June, 2025 in Dhaka, Bangladesh.

Ethical Considerations

Ethical Considerations were addressed by conducting the survey during a spiritual care training session; anonymous data, for which consent had been obtained from the respondents, was collected by a third party after the training concluded and provided to the analyst.

Result

The mean scores for the factors, as well as the means and standard deviations for each item, are shown in Table 1. The mean scores for the first factor among Bangladeshi respondents were 2.24 (2.02-2.43), for the second factor 1.94 (1.48-2.26), for the third factor 2.14 (1.63-2.39), and for the fourth factor 2.14 (1.77-2.43; Table 1).

The variability of responses for each item ranged from 0.89 to 1.09. Item means ranged from 1.48 to 2.42.

The Cronbach's alpha coefficients for the four factors were 0.72 for Factor 1, 0.63 for Factor 2, 0.67 for Factor 3, and 0.65 for Factor 4, indicating lower reliability than in Büssing's patient samples [8]. However, when individual items within each factor were excluded, none of the resulting Cronbach's alpha coefficients exceeded the factor's alpha coefficient.

The model fit was insufficient. An acceptable model required error covariances different from those of the English version, and the its fit indices were as follows: Goodness-of-Fit Index (GFI) = 0.837, Adjusted Goodness-of-Fit Index (AGFI) = 0.788, Tucker-Lewis Index (TLI) = 0.823, Comparative Fit Index (CFI) = 0.849, Root Mean Square Error of Approximation (RMSEA) = 0.066. χ^2 was 240.231, $p < 0.001$, with 162 degrees of freedom.

The covariance among latent variables ranged from 0.44 to 0.85. The path coefficients of the observed variables, which represent the explanatory power of the latent variables, ranged from 0.42 to 0.74 for the first factor, 0.35 to 0.78 for the second factor, 0.49 to 0.73 for the third factor, and 0.50 to 0.75 for the fourth factor. Depending on the item, the explanatory power of each observed variable for the latent variables could not be considered sufficient.

The error covariance was 0.27 between the errors of Q1 and Q2, 0.37 between the errors of Q11 and Q12, and -0.36 between the errors of Q19 and Q20. (Figure1).

Table 1. Bengali version of the Spiritual Needs Questionnaire (SpNQ) for Adults 20.

পর্যবেক্ষক ব্যক্তির নিজস্ব এবং অনন্য দৃষ্টিভঙ্গি থাকে। তাই নিম্নলিখিত বিবৃতিগুলি আপনার কেষ্টের পরয়োজ্য নাও হতে পারে। অনুগ্রহ করে এখানে যে বিবৃতিগুলি পাবেন তা মনোযোগ সহকারে পড়ুন এবং তারপরে পরতি লাইনে একটি সংখ্যা বৃত্তাকারে বৃত্তাকারে নির্দেশ করুন যে পরতিটি আপনার এবং আপনার বর্তমান পরিস্থিতির জন্য কতটা সত্য। যখন আপনার একটি নির্দিষ্ট পরয়োজন ("হ্যাঁ") থাকে, তখন এটি কতটা শক্তিশালী তা নির্দেশ করুন। অনন্যায়, "না" বিকল্পটি বৃত্তাকারে করুন। দয়া করে যতটা সম্ভব সৎ এবং সত্য বলুন: কোন 'সঠিক' বা 'ভুল' উত্তর নেই।

| Item number/ factor name | item/ আইটেম | m | SD | Factor Means | Chronbach's a coefficient | | |
|---|--|------|------|-----------------|------------------------------|------|------|
| F1 Religious Needs; ফ্যাক্টর ১ ধর্মীয় চাহিদা | | | | | | | |
| Q13N18 | During the last time, did you have had the needs to pray with someone. | 2.30 | 0.92 | 2.24 | 0.72 | | |
| ১৩. (N১৮) | বিগত সময়ে আপনার কি কারো সাথে পরার্থনা করার পরয়োজন হয়েছে? | | | | | | |
| Q14N19 | During the last time, did you have had the needs that someone prays for you. | 2.14 | 1.03 | | | | |
| ১৪. (N১৯) | বিগত সময়ে, আপনার কি এমন পরয়োজন হয়েছে যে কেউ আপনার জন্য পরার্থনা করবে? | | | | | | |
| Q15N20 | During the last time, did you have had the needs to pray for yourself. | 2.42 | 0.91 | | | | |
| ১৫. (N২০) | বিগত সময়ে আপনার কি নিজের জন্য পরার্থনা করার পরয়োজন হয়েছে? | | | | | | |
| Q16N21 | During the last time, did you have had the needs to participate at a religious ceremony (i.e., service). | 2.23 | 0.89 | | | | |
| ১৬. (N২১) | বিগত সময়ে, আপনার কি কোনও ধর্মীয় অনুষ্ঠানে অংশগ্রহণ করার পরয়োজন হয়েছে (যেমন, সেবা)? | | | | | | |
| Q17N22 | During the last time, did you have had the needs to read religious/spiritual books. | 2.02 | 1.02 | | | | |
| ১৭. (N২২) | বিগত সময়ে আপনার কি ধর্মীয়/আধ্যাত্মিক বই পড়ার পরয়োজন হয়েছে? | | | | | | |
| Q18N23 | During the last time, did you have had the needs to turn to a higher presence (i.e., God, Allah, Angels) | 2.34 | 1.01 | | | | |
| ১৮. (N২৩) | বিগত সময়ে, আপনার কি উচ্চতর কোনো শক্তির উপস্থিতিতে ফিরে যাওয়ার পরয়োজন হয়েছে (যেমন, ঈশ্বর, আল্লাহ, ফেরেশতা)? | | | | | | |
| F2 Existential Needs; ফ্যাক্টর ২ অস্তিত্বগত চাহিদা | | | | | | | |
| Q2N5 | During the last time, did you have had the needs to dissolve open aspects of your life. | 1.48 | 1.09 | 1.94 | 0.63 | | |
| পরশ্ন ২:৫ | বিগত সময়ে, আপনার কি জীবনের খোলা দিকগুলি বিলীন করার পরয়োজন ছিল? | | | | | | |
| Q6N10 | During the last time, did you have had the needs to find meaning in illness and/or suffering. | 2.08 | 0.91 | | | | |
| পরশ্ন ৬ উত্তর ১০ | বিগত সময়ে আপনার কি অসুস্থতা এবং/অথবা কষ্টের অর্থ খুঁজে বের করার পরয়োজন ছিল? | | | | | | |
| Q7N11 | During the last time, did you have had the needs to talk about the question of meaning in life | 1.94 | 1.10 | | | | |
| পরশ্ন ৭ উত্তর ১১ | বিগত সময়ে, আপনার কি জীবনের অর্থ সম্পর্কে পরশ্ন করার পরয়োজনীয়তা অনুভব করেছিলেন?? | | | | | | |
| Q8N12 | During the last time, did you have had the needs to talk about the possibility of life after death. | 1.70 | 1.08 | | | | |
| পরশ্ন ৮ উত্তর ১২ | বিগত সময়ে আপনার কি মৃত্যুর পরে জীবনের সম্ভাবনা সম্পর্কে কথা বলার পরয়োজন ছিল? | | | | | | |
| Q11N16 | During the last time, did you have had the needs to forgive someone from a distinct period of your life. | 2.23 | 0.92 | | | | |
| পরশ্ন ১১ উত্তর ১৬ | বিগত সময়ে, আপনার কি জীবনের একটি নির্দিষ্ট সময়ের কাউকে ক্ষমা করার পরয়োজন ছিল? | | | | | | |
| Q12N17 | During the last time, did you have had the needs to be forgiven. | 2.26 | 0.92 | | | | |
| পরশ্ন ১২ উত্তর ১৭ | বিগত সময়ে আপনার কি ক্ষমা পাওয়ার পরয়োজন ছিল? | | | | | | |
| F3 Inner Peace Needs; ফ্যাক্টর ৩ অভ্যন্তরীণ শান্তির চাহিদা | | | | | | | |
| Q1N2 | During the last time, did you have had the needs to talk with someone about fears and worries. | 1.63 | 1.09 | 2.14 | 0.67 | | |
| পরশ্ন ১ উত্তর ২ | বিগত সময়ে, আপনার কি কারো সাথে ভয় এবং উদ্বেগ নিয়ে কথা বলার পরয়োজন হয়েছিল? | | | | | | |
| Q4N7 | During the last time, did you have had the needs to dwell at a place of quietness and peace. | 2.31 | 0.98 | | | | |
| পরশ্ন ৪:৭ | বিগত সময়ে, আপনার কি নিস্তব্ধতা এবং শান্তির জায়গায় থাকার পরয়োজন হয়েছিল? | | | | | | |
| Q5N8 | During the last time, did you have had the needs to find inner peace | 2.25 | 1.01 | | | | |
| পরশ্ন ৫:৮ | বিগত সময়ে, আপনার কি অভ্যন্তরীণ শান্তি খুঁজে পাওয়ার পরয়োজন ছিল? | | | | | | |
| Q3N6 | During the last time, did you have had the needs to plunge into beauty of nature. | 2.29 | 0.89 | | | | |
| পরশ্ন ৩, ৬ | বিগত সময়ে, আপনার কি প্রকৃতির সৌন্দর্যে ডুবে যাওয়ার পরয়োজন হয়েছিল? | | | | | | |
| F4 Giving/Generativity Needs; ফ্যাক্টর ৪ দান/উৎপাদনশীলতার চাহিদা | | | | | | | |
| Q9N14 | During the last time, did you have had the needs to give away something from yourself. | 1.77 | 1.00 | | | 2.14 | 0.65 |
| পরশ্ন ৯ উত্তর ১৪ | বিগত সময়ে কি আপনি নিজের কিছু দিয়ে দেয়ার পরয়োজনীয়তা অনুভব করেছিলেন? | | | | | | |
| Q10N15 | During the last time, did you have had the needs to give solace to someone. | 2.29 | 0.93 | | | | |
| পরশ্ন ১০, উত্তর ১৫ | বিগত সময়ে আপনার কি কাউকে সান্ত্বনা দেওয়ার পরয়োজন ছিল? | | | | | | |
| Q19N26 | During the last time, did you have had the needs to pass own life experiences to others. | 2.07 | 0.96 | | | | |
| পরশ্ন ১৯ উত্তর ২৬ | বিগত সময়ে আপনার কি নিজের জীবনের অভিজ্ঞতা অন্যদের কাছে পৌঁছে দেওয়ার পরয়োজন ছিল? | | | | | | |
| Q20N27 | During the last time, did you have had the needs to be assured that your life was meaningful and of value. | 2.42 | 0.93 | | | | |
| পরশ্ন ২০ উত্তর ২৭ | বিগত সময়ে আপনার কি নিশ্চিত হওয়ার পরয়োজন ছিল যে আপনার জীবন অর্থপূর্ণ এবং মূল্যবান? | | | | | | |
| *Q: Question number, N: Development item number; পরশ্ন: পরশ্ন নম্বর, ন: উন্নয়ন আইটেম নম্বর | | | | | | | |

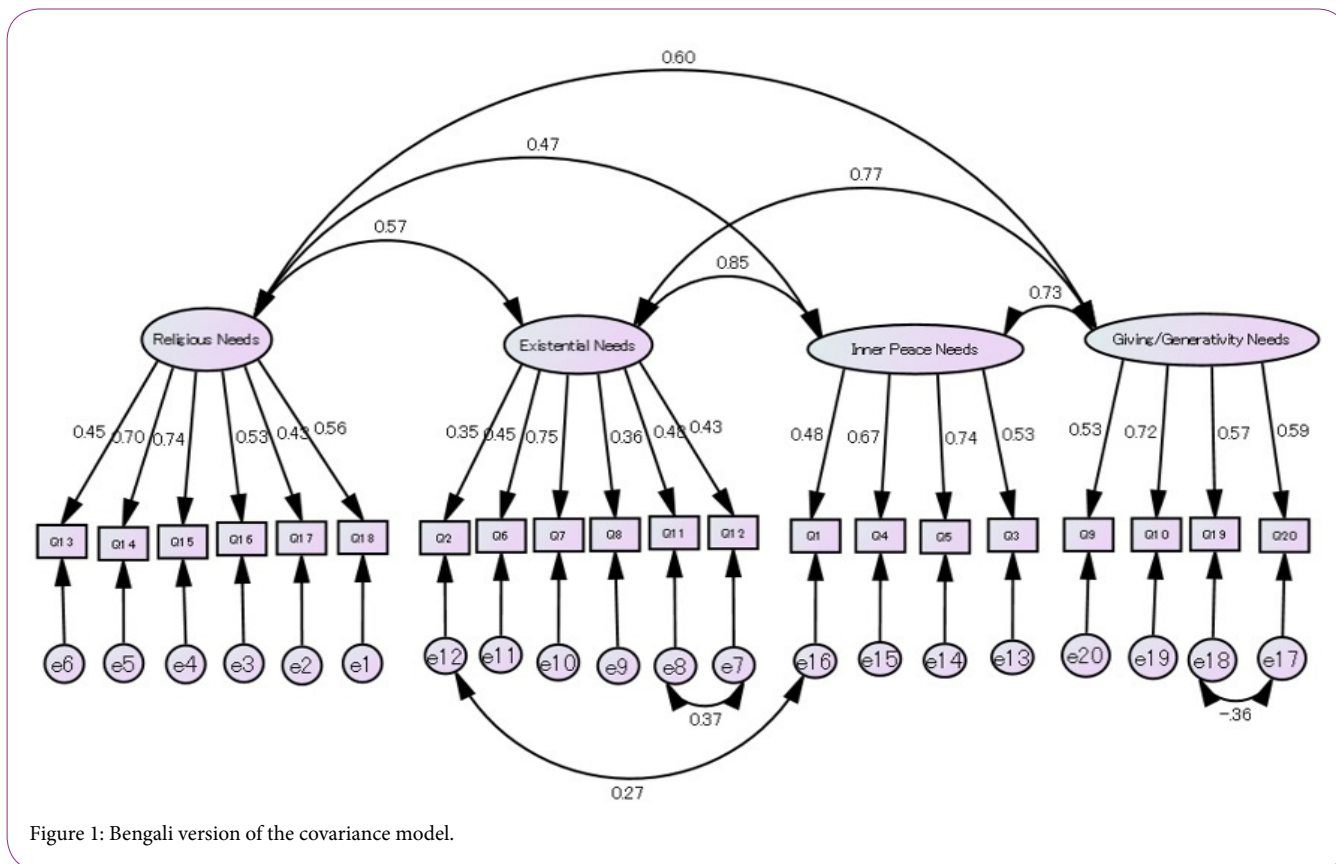


Figure 1: Bengali version of the covariance model.

Discussion

Incidentally, the item mean scores were higher than those in the German and Japanese surveys. Since the respondents in this survey were nurses, they likely had a greater understanding of spirituality than the general public; furthermore, the fact that most were Catholic may have contributed to their heightened spiritual awareness. This likely contributed to the particularly high scores on the first factor [9]. Additionally, nurses' salaries in Bangladesh are lower than those in Southern Africa, and the status of women within the country is relatively low. These social conditions may have contributed to the high average scores on the third and fourth factors. Therefore, future studies in Bangladesh should include comparisons with surveys of healthy citizens and sick individuals.

The factor Cronbach's alpha coefficients were also lower than those of the development version. Specifically, the alpha coefficients for this study and the development version were $0.72 < 0.87-0.92$, $0.63 < 0.74-0.82$, $0.67 < 0.73-0.82$, and $0.65 < 0.71-0.74$. However, since the alpha coefficient for the individual items when excluded from their respective factors did not exceed the factor alpha coefficients, all items can be considered valid. Therefore, it can be said that this model adequately explains the Bangladeshi version of the scale.

The analysis of Bengali version respected the factor structure of the developer's model and assessed its fit. To achieve the best fit for that model, three error variances were required: Q1 and Q2, Q11 and Q12, and Q19 and Q20. Even so, the fit was not sufficient. Since the developers' sample consisted of more than 2,000 cases [13], the small sample size of 113 cases of healthy nurses in the present study may have been a contributing factor.

However, since the GFI measure of fit indicates explanatory power, a value of 0.837 can be considered acceptable in terms of explanatory power. Furthermore, since $GFI \geq AGFI$ is satisfied, the model can be considered acceptable.

Although the developer, SpNQ, offers a simplified version of the questionnaire, the Bengali translator deemed the version with more descriptive questions to be more appropriate. This study has shown the potential for SpNQ to be used by healthcare professionals, but since SpNQ can also be applied to patients, it is necessary to conduct patient surveys in Bangladesh to explain its applicability to patients [10].

Conclusion

The Bengali version uses a scale based on the development model and adopted the 20 items in Table 1 as valid questions. In Bangladesh, there is a need for approaches to addressing patients' suffering, and it is hoped that this scale will be used to provide spiritual support to healthcare workers.

Acknowledgments

This survey data was collected with the cooperation of the Bangladesh Catholic Nurses Guild. We express our sincere gratitude to those who cooperated. And we would like to thank the Bengali translators who assisted with the translation.

Author Contributions

Hiroko Shimizu was responsible for the planning, research, analysis, and writing of this paper.

Mabel D Rozario was responsible for the research and Bengali translation.

Arndt Büssing, as the developer, was responsible for the validity and logical validity of the back-translation.

Ai Makishima was responsible for checking the text.

Conflict of Interest

The authors declare no conflict of interest regarding the publication of the article.

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