Evaluation of the Japanese Version of the Cancer Survivors’ Unmet Needs Scale

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Received: June 17, 2019; Accepted: August 22, 2019; Published: January 14, 2020

A B S T R A C T

Objective: This study aimed to evaluate the psychometric properties of the Japanese version of the Cancer Survivors’ Unmet Needs (CaSUN-J) scale among cancer survivors in Japan. Methods: The CaSUN-J was developed using standardized translation methodology. Content validity was evaluated by a group of experts, and a pilot test was conducted with a convenience sample of 10 cancer patients. A total of 183 Japanese cancer survivors completed the CaSUN-J. The internal consistency of the scale was examined with Cronbach’s α. Construct validity was examined with correlations with the physical effects, quality of life (QoL), and age. To assess the factorial validity of the CaSUN-J, confirmatory factor analysis (CFA) was performed. Results: The CaSUN-J indicated good readability and high content validity for use as an assessment tool among Japanese cancer survivors. All Cronbach’s α coefficients were above the minimum acceptable criterion of ≥0.70. For construct validity, higher physical effect scores, as well as poorer QoL scores and younger patients, were significantly positively associated with higher levels of needs. CFA indicated that the five-factor structure of the CaSUN-J was a good fit to the data. Conclusions: The CaSUN-J can serve as a valid and reliable tool to evaluate unmet needs among Japanese cancer survivors.

Key words: Cancer survivors, Japanese, psychometric validation, supportive care, unmet needs

Introduction
Cancer incidence is increasing globally.¹ Since early detection and treatment have advanced and the aging population continues to grow, the number of cancer survivors is also increasing.² In Japan, the number of newly-diagnosed cancer patients has increased 2.5 times since 1985,³ whereas the 5-year survival rate of cancer patients was 62.1% in 2006–2008, indicating a 7.8% increase from 1997 to 1999.⁴ ⁵

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Cite this article as: Komatsu H, Yagasaki K, Sato Y, Arao H, Yamamoto S, Hayashida T. Evaluation of the Japanese Version of the Cancer Survivors’ Unmet Needs Scale. Asia Pac J Oncol Nurs 2020;7:167-73.
The increase in cancer survivors has allowed the issues they face to come to the fore. Cancer survivors experience both short- and long-term physical and psychosocial issues. In fact, they have worse mental and physical health-related quality of life (QoL) than population norms. The majority of cancer survivors have one or more unmet needs, and unmet needs are significantly related to psychological morbidity and impaired QoL. In response to these issues, the Institute of Medicine recommended survivorship care plans in 2006. First, an understanding of supportive care needs from a patient’s perspective is essential for the development of patient-centered supportive services. They have a wide range of supportive care needs, from coping with the physical effects of cancer and its treatment to psychological and psychosocial sequelae, including anxiety, depression, and feelings of isolation.

The Cancer Survivors’ Unmet Needs Measure (CaSUN) is a self-report questionnaire specifically developed to assess the supportive care needs of cancer survivors that comprises five domains (existential survivorship, comprehensive cancer care, information, QoL, and relations). Insight into these unmet needs may assist in the development of tailored interventions. The CaSUN has been translated into Dutch, Spanish, and Chinese and has proved to be a valid and reliable assessment tool. Despite being applied to only breast cancer survivors, the validity of the Taiwanese Chinese version was also studied by Fang et al.

In Japan, only a few studies have examined the unmet needs of cancer survivors. All these studies used original scales to measure the unmet needs of cancer survivors; however, the validity and reliability of these scales were not studied. Thus, the growing population of cancer survivors in Japan requires a validated needs assessment tool. This study aimed to evaluate the psychometric properties of the Japanese version of the CaSUN (CaSUN-J) in cancer survivors in Japan.

Methods

This study has two phases. First, the CaSUN was translated from English into Japanese and tested for its content validity. Second, the psychometric properties of CaSUN-J, including internal consistency, construct validity, and criterion-related validity were assessed.

Phase I: Translation and content validity

The translation complied with the World Health Organization guidelines on the process of translation and adaptation of instruments. One professional translator independently translated the original scale from English into Japanese. The first Japanese version was checked by a bilingual physician. Back translation was carried out by another professional translator. A panel of seven experts (six nursing researchers and one physician) was convened to identify and resolve discrepancies between the original scale and translated version.

We conducted a pilot test with a convenience sample of 10 cancer patients to evaluate the readability and clarity of CaSUN-J. Each patient was asked if there was anything that was unclear. The scale was then modified in accordance with their recommendations.

Phase II: Psychometric testing of Japanese version of the Cancer Survivors’ Unmet Needs

Participants and procedures

The study sample was drawn from a large multinational study of unmet supportive care needs among cancer survivors. We approached outpatients at oncology departments in three hospitals and the participants of two patient advocacy groups. The outline of the study was briefly explained to the candidates by the attending physician at the outpatient department. The investigator fully explained the study to those who were interested in it. After obtaining written informed consent from the patients, the investigator asked them to complete the questionnaire. For recruitment of candidates in the patient advocacy groups, the investigator explained the outline of the study to patients who attended the patient advocacy meeting and asked those who were eligible and who agreed to participate in the study to complete the questionnaire. We included cancer patients who were 18 years or older; had completed first-line treatment; were not cognitively impaired, and were able to speak and read Japanese. Based on the recommended minimum sample size for confirmatory factor analysis (CFA), we surveyed 183 patients, 5 for each item.

Measures

We collected demographic and clinical data, including age, gender, primary diagnosis, and completed treatment, using a self-administered questionnaire.

Japanese version of the Cancer Survivors’ Unmet Needs

The CaSUN-J contains 35 unmet need items, 6 positive change items, and an open-ended question. Participants were asked to indicate whether the need was met or unmet. The self-perceived strength of the unmet need was marked as weak, moderate, or strong. The total score was the sum of all need items, with higher scores indicating greater unmet needs.

The physical effects subscale of the Cancer Survivors’ Survey of Needs and a measure of overall quality of life

The physical effects subscale of the Cancer Survivors’ Survey of Needs by the Mayo Clinic Cancer Center

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comprises a total of 50 questions covering five domains, including physical, emotional, social, spiritual, and other domains.\textsuperscript{[24,25]} The physical subscale has 19 items scored on a 6-point scale from 0 = no concerns to 5 = extreme concerns on which patients rate their concerns with regard to their physical symptoms (e.g., pain, fatigue, and insomnia) on the day of the survey.

The QoL measure is a single-item linear analog scale to rate QoL during the past week, including the day of the survey, ranging from 0 = as bad as it can be to 10 = as good as it can be. Higher scores thus indicate a higher QoL.

**Ethical approval**

Ethical approval of the study was obtained from the Institutional Review Boards of the Faculty of Nursing and Medical Care, Keio University (No. 239), Keio University School of Medicine (No. 20150219), and Osaka University Hospital (No. 15161). Eligible patients were approached by physicians or nurses at their regular medical appointments or by the study researcher at patient advocacy group meetings. After explaining the overview of the study, we obtained written informed consent from all the participants.

**Data collection**

We collected data from eligible patients in oncology outpatient departments at one university hospital and two general hospitals, as well as two patient advocacy group meetings from October 2015 to January 2016. The hospital patients completed the questionnaires and returned them to the researcher in the outpatient consulting room. Similarly, the patients at the patient advocacy group meetings returned the questionnaires to the researcher as soon as they were completed. All the returned questionnaires were immediately checked by the researcher.

**Statistical analysis**

Statistical analyses were performed using the SAS version 9.4 (SAS Institute, Cary, NC, USA) and LISREL 8.8 (Scientific Software International, Inc.). All comparisons were planned, and the tests were two-sided. Statistical significance was defined as \( P < 0.05 \). Demographic and disease-related characteristics of the participants were analyzed using descriptive statistics.

A panel of seven experts (six nursing researchers and one physician) described the appropriateness and bias of the contents of the translated version. Based on these free descriptions, a debriefing was held with several panel experts to determine by consensus the proper expressions to be used on the questionnaire. Subsequently, we conducted a pilot test with a convenience sample of ten cancer patients to evaluate the readability and clarity of CaSUN-J. The researchers in this study examined the face validity of the CaSUN-J based on the descriptions concerning unclarity of the words and sentences in questions and response options and reached a consensus.

The reliability of the CaSUN-J was assessed by testing its internal consistency. The internal consistency was measured using Cronbach’s \( \alpha \) coefficient for the total scale and each subscale, where a value of Cronbach’s \( \alpha > 0.70 \) was deemed acceptable.\textsuperscript{[26]} Construct validity of the CaSUN-J was assessed by the hypothesis approach. It was anticipated that higher levels of unmet needs would be positively associated with greater physical effects and poorer QoL and would have a weak significant negative correlation with age. To test these approaches, Pearson’s correlation coefficients were analyzed to determine the associations of the CaSUN-J with physical effects, QoL, and age.

CFA was performed using LISREL 8.8 software to more precisely test the configuration of the factor structures of the Japanese version of the CaSUN and determine whether the proposed factor structures adequately fit the data. We used multiple fit indices to evaluate model-data fit, including the Chi-squared statistic \( \chi^2 \) (\( \chi^2/df \)) \(< 3.0\), standardized root mean square residual (SRMR) values \(< 0.08\), and comparative fit indices (CFI) values \( \geq 0.90 \).\textsuperscript{[27,28]}

**Results**

**Phase I: Translation and content validity**

**Content validity**

The CaSUN-J was generally easy to understand and reflected accurately the unmet supportive care needs of cancer survivors in the context of health care in Japan. There was a comment that only one item was a bit difficult to understand: “I need help to explore my spiritual belief…” (Item 34). The panel decided to conduct a pilot test with a sample of Japanese cancer survivors without changing the expression, and subsequently discussed it again in view of the results. We conducted a pilot test with a sample of ten Japanese cancer survivors. The overall acceptability and comprehensibility were found to be good, and no item was excluded. No participants mentioned that the expression in Item 34 was difficult to understand, and therefore retained it unchanged. In the item on fertility (Item 13), however, the term “fertility” was indicated as difficult to understand, and therefore, it was supplemented with an explanation: “fertility (the ability to conceive children).”

The CaSUN-J indicated good readability for use as an assessment instrument among Japanese cancer survivors. On average, it took approximately 15 min to complete the CaSUN-J. Furthermore, feedback and comments from respondents indicate a perceived need for the CaSUN-J as
a tool to assess the needs of Japanese cancer survivors. The cancer survivors who participated in the pilot test commented that the items in the CaSUN-J are important and valuable: “Cancer survivors are increasing, and they may have diverse problems. I am sure that this study will give them a certain sense of fulfillment.” “This (unmet needs) survey represents my conditions well,” “(The unmet needs are) not only applicable to me. Other people also feel the same way.” In addition, the cancer survivors desperately want healthcare providers to understand these unmet needs: “In my mind, I know how to live from now on, but I cannot keep up mentally and physically. I encourage myself with feelings that other people never understand.”

**Phase II: Psychometric testing of Japanese version of the Cancer Survivors’ Unmet Needs**

**Participant characteristics**

In total, 183 patients participated in the study. Of these, 168 submitted completed questionnaires (91.8%). Demographic and disease-related characteristics of the participants are shown in Table 1. The mean age of the participants was 61.4 (standard deviation [SD] = 11.5); the majority were female (66.7%) and almost half of the participants were diagnosed with breast cancer (47.7%). The mean total score of the CaSUN was 0.9 (SD = 0.8). The mean scores for the physical effects and the QoL were 1.2 (SD = 0.8) and 6.8 (SD = 2.0), respectively.

**Construct validity**

Table 2 shows the correlations between the CaSUN-J total scores and the psychological variables. Higher physical effects scores, as well as poorer QoL scores and lower patient ages, were significantly positively associated with higher levels of need.

Figure 1 shows the results of the CFA. Standardized factor loadings ranged from 0.45-0.93 and error variances from 0.23 to 0.89. On the whole, the model indicated a good fit to the data with $\chi^2$/df = 1.62, CFI = 0.94, SRMR = 0.074 and RMSEA = 0.116 (90% confidence interval 0.107–0.124).

**Internal consistency**

Cronbach’s $\alpha$ for the total CaSUN was 0.96, and 0.96, 0.84, 0.87, 0.80, and 0.78, respectively, for the subscales of existential survivorship, comprehensive cancer care, information, QoL, and relationship domains. All Cronbach’s $\alpha$ coefficients were above the minimum acceptable criterion of $\geq 0.7$.

**Discussion**

The CaSUN-J indicated good feasibility for use as an assessment tool among Japanese cancer survivors with high acceptability and comprehensibility. Since the translation of the CaSUN-J complied with the World Health Organization guidelines on the process of translation and adaptation of instruments to ensure conceptual equivalence to the original CaSUN, it was easy to answer the questions within a short time. The items on the CaSUN-J were important and valuable for Japanese cancer survivors, as shown in the participants’ comments.

Reliability was indicated by the fact that Cronbach’s $\alpha$ coefficients for the total scale and subscales of the CaSUN-J were all $>0.70$, suggesting high internal consistency. These values were equivalent to those of the original CaSUN version by Hodgkinson et al. and the Spanish, Dutch, and Chinese versions. The high internal consistency of CaSUN in different language contexts, including this study, constitutes evidence of its strong reliability.

The hypotheses related to construct validity were supported. Unmet needs were significantly correlated with physical effects, QoL, and age. The relationship between higher levels of unmet needs and poorer QoL was reported in previous studies in other language versions of the CaSUN whereas that between unmet needs and physical effects was not studied. Our qualitative studies

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**Table 1: Demographic and disease-related characteristics (n = 168)**

| Characteristics                  | n (%)          |
|----------------------------------|----------------|
| Age, mean (SD)                   | 61.4 (11.5)    |
| Female                           | 112 (66.7)     |
| Type of primary cancer           |                |
| Breast cancer                    | 80 (47.6)      |
| Upper gastroenterological cancer | 22 (13.1)      |
| Prostate cancer                  | 17 (10.1)      |
| Colon cancer                     | 15 (8.9)       |
| Malignant lymphoma               | 10 (6.0)       |
| Gynecology cancer                | 9 (5.4)        |
| Lung cancer                      | 8 (4.8)        |
| Other types of cancer            | 6 (3.6)        |
| Unknown                          | 1 (0.6)        |
| CaSUN total, mean (SD)           | 31.6 (26.8)    |
| Physical effects total, mean (SD)| 23.1 (15.9)    |
| QoL, mean (SD)                   | 6.8 (2.0)      |

SD: Standard deviation, QoL: Quality of life, CaSUN-J: Japanese version of the Cancer Survivors’ Unmet Needs

| Variable          | Total score of CaSUN-J (n = 143) | $P$  |
|-------------------|-----------------------------------|------|
| Age               | −0.192**                         | 0.023|
| QoL               | −0.241***                        | 0.004|
| Physical effects  | 0.508**                          | 0.000|

*P<0.05, **P<0.01. Pearson correlation coefficient. Age, QoL, physical effects. QoL: Quality of life. CaSUN-J: Japanese version of the Cancer Survivors’ Unmet Needs.
Factor 1: ES
Factor 2: CCC
Factor 3: Inf
Factor 4: QoL
Factor 5: Rel

Chi-Square=550.88, df=340, P = 0.00000, RMSEA = 0.116

Figure 1: Confirmatory factor analysis of CaSUN-J. ES: Existential survivorship, CCC: Comprehensive cancer care, Inf: Information, QoL: Quality of life, Rel: Relationships, CaSUN-J: Traditional Japanese version of Cancer Survivors’ Unmet Need Scale
revealed that cancer survivors suffer from serious physical effects, including hand-foot syndrome and skin toxicities, and have unmet needs related to physical effects. Molassiotis et al. also reported that a high strength of needs was significantly related to higher symptom experience for all physical symptoms in a study of unmet needs among Asian cancer survivors. These studies have provided strong support for the construct validity of the CaSUN-J.

Furthermore, the results of the CFA support the structure of the CaSUN-J as reasonable and congruent with the original English version. Although the five-factor model was confirmed, Item 18 (accessible hospital parking) had the lowest factor loading (0.45) and the largest residual error (0.89). A similar result was obtained for the Chinese version of the CaSUN. As Xing et al. pointed out, the public transport system is also well developed in Japan, and patients do not always have to drive to the hospital. The item of “accessible hospital parking” may need to be reconsidered in future studies.

**Limitations**

There are several methodological limitations of this study. First, because this was a cross-sectional designed study, test–retest reliability and criteria validity were not examined. Second, although the CFA supported the original model of the scale, we should be cautious of the fact that their certain items had low factor loadings and large residual errors.

**Conclusion**

This study confirmed that CaSUN-J can serve as a valid and reliable tool to evaluate unmet needs among Japanese cancer survivors. CaSUN-J has the potential to identify the most beneficial interventions for individual cancer survivors.

**Acknowledgments**

The authors are grateful to Dr. Raymond Chan, Dr. Alex Molassiotis, and Dr. Patsy Yates for their valuable advice and comments.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jamal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin 2018;68:394-424.

2. Miller KD, Siegel RL, Lin CC, Mariotto AB, Kramer JL, Rowland JH, et al. Cancer treatment and survivorship statistics, 2016. CA Cancer J Clin 2016;66:271-89.

3. Foundation for Promotion of Cancer Research. Cancer Statistics in Japan-2018. Available from: https://ganjoho.jp/reg_stat/statistics/stat/summary.html. [Last accessed on 2019 May 30].

4. Center for Cancer Control and Information Services, National Cancer Center. Monitoring of Cancer Incidence in Japan – Survival 2006-2008 Report. Center for Cancer Control and Information Services, National Cancer Center; 2016. Available from: https://ganjoho.jp/reg_stat/statistics/dl/index.html#survival. [Last accessed on 2019 May 30].

5. Matsuda T, Ajiki W, Marugame T, Ioka A, Tsukuma H, Sobue T, et al. Population-based survival of cancer patients diagnosed between 1993 and 1999 in Japan: A chronological and international comparative study. Jpn J Clin Oncol 2011;41:40-51.

6. Pachman DR, Barton DL, Swetz KM, Loprinzi CL. Troublesome symptoms in cancer survivors: Fatigue, insomnia, neuropathy, and pain. J Clin Oncol 2012;30:3687-96.

7. Moser EC, Meunier F. Cancer survivorship: A positive side-effect of more successful cancer treatment. EJC Suppl 2014;12:1-4.

8. Gordon LG, Merollini KM, Lowe A, Chan RJ. A systematic review of financial toxicity among cancer survivors: We can't pay the co-pay. Patient 2017;10:295-309.

9. Weaver KE, Forsythe LP, Reeve BB, Alfano CM, Rodriguez JL, Sabatino SA, et al. Mental and physical health-related quality of life among U.S. Cancer survivors: Population estimates from the 2010 national health interview survey. Cancer Epidemiol Biomarkers Prev 2012;21:2108-17.

10. Smith AB, King M, Butow P, Luckett T, Grimison P, Toner GC, et al. The prevalence and correlates of supportive care needs in testicular cancer survivors: A cross-sectional study. Psychooncology 2013;22:2557-64.

11. Hewitt M, Ganz PA, editors. Institute of Medicine, National Research Council, From Cancer Patient to Cancer Survivor – Lost in Transition: An American Society of Clinical Oncology and Institute of Medicine Symposium. Institute of Medicine; 2006. p. 196. Available from: http://www.nap.edu/catalog/11613.html. [Last accessed on 2019 May 01].

12. Lo WT, Yates P, Chan RJ. Unmet supportive care needs and symptom burden in Taiwanese cancer survivors who have completed primary treatment. Eur J Oncol Nurs 2018;35:79-84.

13. Harrison JD, Young JM, Price MA, Butow PN, Solomon MJ. What are the unmet supportive care needs of people with cancer? A systematic review. Support Care Cancer 2009;17:1117-28.

14. Hodgkinson K, Butow P, Hunt GE, Pendlebury S, Hobbs KM, Lo SK, et al. The development and evaluation of a measure to assess cancer survivors’ unmet supportive care needs: The CaSUN (Cancer survivors’ unmet needs measure). Psychooncology 2007;16:796-804.

15. Keeman MC, Bolman CAW, Mesters I, Willems RA, Kanera IM, Lechner L. Psychometric properties of the Dutch extended version of the CaSUN. Psychooncology 2013;22:2557-64.

16. Martinez Tyson D, Medina-Ramirez P, Vázquez-Otero C, Gwede CK, Babilonia MB, McMillan SC. Initial evaluation of the validity and reliability of the culturally adapted Spanish CaSUN (S-CaSUN). J Cancer Surviv 2018;12:509-16.
17. Xing W, So WK, Choi KC, Wong CL, Tong M, Choy YP, et al. Translation and psychometric testing of cancer survivors’ unmet needs, Chinese version. Asia Pac J Clin Oncol 2019;15:e142-e146.
18. Fang SY, Cheng HR, Lin CY. Validation of the modified Chinese cancer survivor’s unmet needs (CaSUN-C) for women with breast cancer. Psychooncology 2018;27:236-42.
19. Umezawa S, Fujisawa D, Fujimori M, Ogawa A, Matsushima E, Miyashita M, et al. Prevalence, associated factors and source of support concerning supportive care needs among Japanese cancer survivors. Psychooncology 2015;24:635-42.
20. Miyashita M, Ohno S, Kataoka A, Tokunaga E, Masuda N, Shien T, et al. Unmet information needs and quality of life in young breast cancer survivors in Japan. Cancer Nurs 2015;38:E1-11.
21. World Health Organization. Process of Translation and Adaptation of Instruments. World Health Organization; 2016. Available from: http://www.who.int/substance_abuse/research_tools/translation/en/. [Last accessed on 2019 May 01].
22. Molassiotis A, Yates P, Li Q, So WK, Pongthavornkamol K, Pittayapan P, et al. Mapping unmet supportive care needs, quality-of-life perceptions and current symptoms in cancer survivors across the Asia-Pacific region: Results from the international STEP study. Ann Oncol 2017;28:2552-8.
23. Thompson B. Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications. Washington, DC, US: American Psychological Association; 2004.
24. Ness S, Kokal J, Fée-Schroeder K, Novotny P, Satele D, Barton D. Concerns across the survivorship trajectory: Results from a survey of cancer survivors. Oncol Nurs Forum 2013;40:35-42.
25. Schlairet M, Heddon MA, Griffis M. Piloting a needs assessment to guide development of a survivorship program for a community cancer center. Oncol Nurs Forum 2010;37:501-8.
26. Bland JM, Altman DG. Cronbach's alpha. BMJ 1997;314:572.
27. Schreiber JB. Reporting structural equation modeling and confirmatory factor analysis results: A review. J Educ Res 2006;99:323-37.
28. Hair JF Jr., Black WC, Babin BJ, Anderson RE. Multivariate Data Analysis. Pearson New International Edition. 7th ed. Harlow: Pearson Education Limited; 2014.
29. Komatsu H, Yagasaki K, Hirata K, Hamamoto Y. Unmet needs of cancer patients with chemotherapy-related hand-foot syndrome and targeted therapy-related hand-foot skin reaction: A qualitative study. Eur J Oncol Nurs 2019;38:65-9.
30. Yagasaki K, Takahashi H, Ouchi T, Yamagami J, Hamamoto Y, Amagai M, et al. Patient voice on management of facial dermatological adverse events with targeted therapies: A qualitative study. J Patient Rep Outcomes 2019;3:27.