



Original article

Applicability of the Self-Evaluation Scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills to general nurses

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Abstract

Objective: Many patients with dementia experience sleep-related problems. However, there is a lack of clarity regarding nursing practices that can address these issues. Thus, we developed a self-assessment scale for nursing practices to improve sleep quality among patients with dementia taking sleep medication and confirmed its validity and reliability. This study aimed to test the validity and reliability of this scale for adaptability to general nurses and test its applicability.

Participants and Methods: The survey included basic attributes and questionnaire items related to nursing practices to improve sleep quality in patients with dementia taking sleeping pills. Data from 477 participants with no missing values in the survey items were used in the analysis. The self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills was based on a three-factor model, and confirmatory factor analysis was performed using structural equation modeling.

Results: Goodness-of-fit indices were satisfactory, supporting the construct validity of the scale. Cronbach's α coefficients for the total score and the three factors of the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills exceeded 0.7.

Conclusion: The development of this scale can improve the quality of nursing practice for patients with dementia who take sleeping pills. Moreover, it can serve as evidence for general nurses to participate in drug treatment and can be considered as basic research for appropriate drug treatment in nursing practice.

Key words: dementia, sleeping pills, nursing evaluation research

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Introduction

In 2019, 57.4 million people suffered from dementia globally; by 2050, this number is predicted to rise to 152.8 million¹. When dementia symptoms worsen, caregivers' financial, social, and health-related costs increase². The

burden of caregiving and the rising cost of dementia pose significant challenges to the global healthcare system³. According to reports, approximately 15% of adults over 65 years of age in Japan, which has a hyper-aged culture, develop dementia⁴. This has become a significant issue for the healthcare system. According to estimates, 24.5% of people with Alzheimer's disease have sleep disturbances, which increase the risk of developing severe dementia⁵. Moreover, currently used drug therapies, including BZ-type sleeping pills, are associated with a high rate of adverse events (further cognitive and physical decline), especially in older patients, making them prone to polypharmacy (multiple drug use) and inappropriate drug prescriptions⁶. This necessitates proper use of sleeping pills. Additionally, even within the clinical capability range, reliance on sleeping medications can cause serious patient discomfort⁷, and the 2018 revision of reimbursement clearly states the intention to taper

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off long-term treatment⁸.

Furthermore, as people age, the sleep-wake pattern is significantly altered by variables such as physical disease⁹, decreased melatonin release, and failure of sleep-related brain circuits. Sleep disruptions are directly associated with various health disorders¹⁰. Owing to their reduced sensation, institutionalization, retreat from social activities, and cognitive impairment, older adults with dementia are more inclined to adopt a lifestyle with little social interaction and few variations in temperature or sound during the day. These issues are believed to make older adults with dementia more susceptible to circadian cycle irregularities¹¹.

Additionally, many patients with dementia experience difficulty sleeping⁵. Pharmacotherapy with psychotropics, notably benzodiazepines and non-benzodiazepines, is used to treat sleep-related disorders. One side effect of these medications is hip fracture, which is more likely to occur in older adults due to age-related reductions in physical performance¹². Although non-pharmacological therapies should often be used to manage sleep issues in patients with dementia, in practice, many drugs are frequently taken concurrently or for extended periods, which may have the unintended side effect of causing additional deterioration in cognitive function¹³. Pharmacotherapy for patients with dementia can be difficult due to polypharmacy and potentially harmful drugs¹⁴.

Doctors and pharmacists began using the five steps of deprescribing and the MATCH-D (a tool for assessing the appropriateness of home dialysis) when providing pharmacotherapy. These frameworks pertain to the principles of appropriate medication use and have been compiled in recent years^{15, 16}.

Moreover, interventions that employ defined standards, such as the Beers Criteria, are significant steps toward ensuring that pharmaceuticals are used appropriately¹⁷. These interventions are typically performed by both physicians and pharmacists.

According to the Clinical Medication Review: A Practice Guide¹⁸, pharmacotherapy is primarily practiced by doctors, pharmacists, and nurses. The proper approach to using medication is to prescribe it with the patient's consent to reduce drug-related problems and the use of needless medications. Nurse practitioners are largely responsible for organizing and facilitating communication between physicians or pharmacists and patients, as well as informing patients about their prescriptions and teaching them its management¹⁹.

Recently, it was discovered that the inability of patients with dementia to explain the pain and subjective symptoms they experience daily to healthcare providers worsens their polypharmacy and use of possibly unsuitable drugs²⁰. To address this issue, nurses assume the lead in managing the daily lives of patients with dementia and provide psycho-

logical care⁹. Although nurses' practices resemble those of physicians and pharmacists in certain respects, they are responsible for multidisciplinary management, education, and continuous medication monitoring following prescriptions. Therefore, there are practices that only nurses can perform for the appropriate use of medications.

In the future, generalists and general department nurses, rather than specialists, must objectively index and evaluate their nursing practices for patients with dementia while retaining the authority to prescribe medications²¹. With an emphasis on the proper administration of medication, these objective instruments are especially important in nursing practice to improve sleep quality in patients with dementia.

A study on the present level of care competency and attitudes toward patients with dementia has been conducted²², and a knowledge evaluation scale for patients with dementia has been developed in recent years²³. Furthermore, despite some studies reporting knowledge and intervention education on sleep problems in patients with dementia, other studies have shown a lack of the practical nursing skills required to care for patients with dementia²⁴. Therefore, a scale is necessary to evaluate the nursing practices of patients with dementia. Through a survey of psychiatric nurses, we developed a self-evaluation scale for nursing practices to improve sleep quality in patients with dementia taking sleeping pills²⁵. This study aimed to further examine the validity and reliability of the scale and test its applicability to general nurses.

The use of this scale can improve the quality of nursing practice for patients with dementia who take sleeping pills, provide evidence that general nurses participate in drug treatment, and can be positioned as a basic study of nursing practice for appropriate drug use.

Participants and Methods

In this study, quantitative survey questions were used for evaluation.

Participants

This study was conducted using nonprobability sampling. The participants were nurses who had no experience in psychiatric wards but had experience caring for patients with dementia who take sleeping pills at any of the 343 hospitals with dementia treatment centers (as of June 2021) across Japan. Nursing managers at the facilities that agreed to participate were asked to recommend nurses who could answer the questionnaire.

It is recommended that the sample size be ten times the number of indicators included in a single-factor analysis²⁶. Therefore, we estimated the number of participants using this criterion.

Data collection method

Data were collected in two stages. The study was approved by the target facility, after which survey forms were distributed to eligible participants. First, we sent a survey request document and facility collaboration acceptance form to nurse managers at all facilities. Nurse managers were provided with the following instructions: (i) return the consent form if they consented to participate in this study and (ii) provide the total number of nurses who would participate in the survey.

Next, facilities that returned the collaboration acceptance form were mailed an appropriate number of research explanation documents and survey forms. The survey form comprised an anonymous self-administered questionnaire. Each participant was asked to mail a survey form after completion. The survey was conducted between June and July, 2021.

Survey content

1) Questions on the participants' background included sex, age, years of nursing experience, years of experience at a dementia care center, and whether they had nursing experience in a psychiatric ward.

2) Based on the concept of "deprescribing" and Benner's theoretical background on nursing practice competencies, the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills was designed for psychiatric nurses. It comprises three factors and 16 items, including promoting daytime activities, providing a high-quality sleep environment through the appropriate use of medication, and considering adverse events, and was assessed for validity and reliability.

The self-evaluation scale of problem-solving-oriented behavior in nursing practice comprehensively evaluates the nursing competencies of all nursing professionals in five domains (exploring and identifying patients' problems by organizing and utilizing their data, alternating medication behavior to solve and reduce patients' problems, reducing their symptoms, maintaining daily living functions, personalizing care, facilitating interactions to solve patients' problems, providing psychological support to help patients overcome their problems, and conducting self-evaluation to solve patients' problems). It has been used as an external criterion in the development of nursing practice evaluation scales in Japan. Higher scores indicate a higher quality of daily nursing practice. Nurses caring for patients with dementia referred to the scale when making decisions regarding the practices required in the field. According to this scale, individuals engaged in nursing work must be capable of autonomous decision-making, informed by professional knowledge and skills, and integrate correct nursing practices. We selected this scale to test its criterion validity because, in many situations, nurses must make decisions when providing nursing care to patients with dementia.

Statistical analysis

Valid responses included those with no missing data for 16 questions regarding nursing practices for patients with dementia taking sleeping pills. To verify criterion validity, correlations between the total score on the newly developed scale and self-evaluation scale of problem-solving-oriented behavior in nursing practice and the nurses' ethical behavior scale were calculated using Spearman's rank correlation coefficients. To test reliability, Cronbach's α coefficients were calculated for the overall scale and each sub-factor to confirm internal consistency. Statistical analyses were performed using the SPSS Statistics (version 28; IBM Corp., Armonk, NY, USA). The significance level was set at $P < 5\%$ for all analyses.

Ethical considerations

This study was approved by the Ethics Review Committee of the first author's institution. The research explanation clearly stated the study purpose and method and the voluntary nature of participation (that there would be no disadvantages to non-participation or withdrawal and that personal information would be protected). Facility approval was obtained in writing and returning a response was considered consent for the questionnaire survey.

Results

Number of responses analyzed and participants

Consent for collaboration was obtained from 90 of the 343 facilities (consent rate, 26.2%). A total of 479 participants with no experience in psychiatric wards were included in the analysis (valid response rate, 95.4%).

Participant background

The participants included 432 women (90.2%) and 45 men (9.8%). The most common age group was 20–29 years old (184 participants; 38.6%). Participants had an average 12.71 years of nursing experience (standard deviation: 9.9) (Table 1).

Item analysis

No ceiling or floor effects were found for any item, and a poor analysis confirmed a significant difference in all items. The first factor was "promotion of daytime activities", which included practices related to the effective introduction of rehabilitation, such as daytime activity programs and occupational therapy. Factor 2 was "providing a quality sleep environment with appropriate medication" by adjusting the environment of the patient's room and providing medication guidance to prepare the patient for quality sleep while using sleep medication. Factor 3 was "consideration of adverse events", which included nursing practices directly related to the use of sleep medications, such as responding to symp-

toms of sleep disturbances and clinical reasoning about the side effects of sleep medications. The mean score for the overall scale was 52.2 points (standard deviation: 7.4), while that for each factor ranged from 12.6 to 24.9 points (standard deviation: 2.5–3.7 points).

Reliability

To test reliability, Cronbach's α coefficients were calculated for the overall scale and each sub-factor to confirm internal consistency. Cronbach's α coefficient for the to-

tal score of the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills was 0.770. Additionally, for the three factors, the values were 0.667, 0.589, and 0.576, respectively, demonstrating internal consistency and confirming the reliability of the scale. Considering these results, we deemed the new scale valid and reliable for the self-evaluation of nursing practices to improve sleep quality among patients with dementia taking sleeping pills. The distribution of participants' responses to the 16 items on the scale is shown in Table 2. A confirmatory factorial analysis of the construct validity of the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills, in terms of the factor structure of the assumed three-factor model, showed a good fit, with CFI=0.768 and RMSEA=0.079 (Figure 1). Focusing on the associations between variables, those assumed in the factor structure model showed almost all statistically significant associations. The pass coefficients were ranged from 0.28–0.71 from the first factor—"promoting daytime activities"—to the observed variables, 0.35–0.62 from the second factor—"providing a high-quality sleep environment through the appropriate use of medication"—to the observed variables, and 0.36–0.61 from the third factor—"considering adverse events"—to the observed variables.

Table 1 Participants' attributes (N=477)

Demographic		N (%)
Sex	Female	432 (90.2)
	Male	45 (9.8)
	No response	2 (0.4)
Age (years)	20–29	184 (38.6)
	30–39	122 (25.4)
	40–49	117 (24.4)
	50–59	52 (10.9)
	≥60	4 (0.8)

Items may not add up to 100% because they have been rounded to the nearest decimal place.

Table 2 Answer for the distribution of the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills (N=477)

Item	Never true	Usually not true	Not sure	Usually true	Always true
Factor 1 Promoting daytime activities: Cronbach's α=0.667					
1 I incorporate content that patients are interested in into their daily activity program	23 (4.8)	62 (12.9)	198 (41.3)	166 (34.7)	30 (6.2)
2 I incorporate reality orientation therapy (e.g., asking the date or current location)	15 (3.1)	8 (1.7)	59 (12.3)	224 (46.8)	173 (36.1)
3 If a patient shows refusal to participate in their daytime activity program, I respect what they are comfortable with and do not force them	4 (0.8)	11 (2.2)	108 (2.3)	294 (61.4)	62 (1.3)
4 I do physical exercises and tasks together with patients to help them get out of bed during the day	11 (2.2)	40 (8.6)	131 (27.3)	247 (51.6)	50 (10.4)
5 I establish a circadian rhythm using indoor electric lights and sunlight	6 (1.3)	5 (1.0)	31 (6.5)	229 (47.8)	208 (43.4)
6 I get information about patients' participation in occupational therapy from the occupational therapist	38 (7.9)	91 (19.0)	138 (28.8)	178 (37.1)	34 (7.1)
7 I set up opportunities for interaction with other patients aside from their roommates	98 (20.5)	113 (23.6)	155 (32.4)	95 (19.8)	18 (3.8)
Factor 2 Providing a high-quality sleep environment through appropriate use of medication: Cronbach's α=0.589					
8 I set up opportunities for patients to participate in medication management as much as possible (e.g., setting out the following day's medications)	74 (15.4)	70 (14.6)	123 (25.7)	171 (35.7)	41 (8.6)
9 I encourage patients to change into comfortable clothing (e.g., a nightgown) before bed	91 (19.0)	94 (19.6)	149 (31.1)	101 (21.1)	44 (9.2)
10 I incorporate interventions that help patients fall asleep (e.g., aromatherapy, massage) starting in the evening	187 (39.0)	175 (36.5)	84 (17.5)	29 (6.1)	4 (0.8)
11 I place familiar objects, such as calendars and pictures, around the bed to ensure a peaceful and recuperative environment	11 (2.3)	34 (7.1)	98 (20.5)	244 (50.9)	92 (19.2)
12 I get information regarding medication instructions given to patients from the pharmacist	33 (6.9)	91 (19.0)	152 (31.7)	164 (34.2)	39 (8.1)
Factor 3 Considering adverse events: Cronbach's α=0.576					
13 I monitor for abnormal sensations (e.g., itching) in the legs as a medication side effect	86 (18.0)	163 (34.0)	145 (30.3)	76 (15.9)	9 (1.9)
14 I monitor for anxiety symptoms before bed that make it difficult to sleep	6 (1.3)	36 (7.5)	92 (19.2)	280 (58.5)	65 (13.6)
15 When delirium occurs, I infer that sleeping pills are the cause	23 (4.8)	65 (13.6)	252 (52.6)	117 (24.4)	22 (4.6)
16 I check whether patients understand the reason for taking sleeping pills	27 (5.6)	89 (18.6)	161 (33.6)	167 (34.9)	35 (7.3)
Overall scale Cronbach's α					0.770

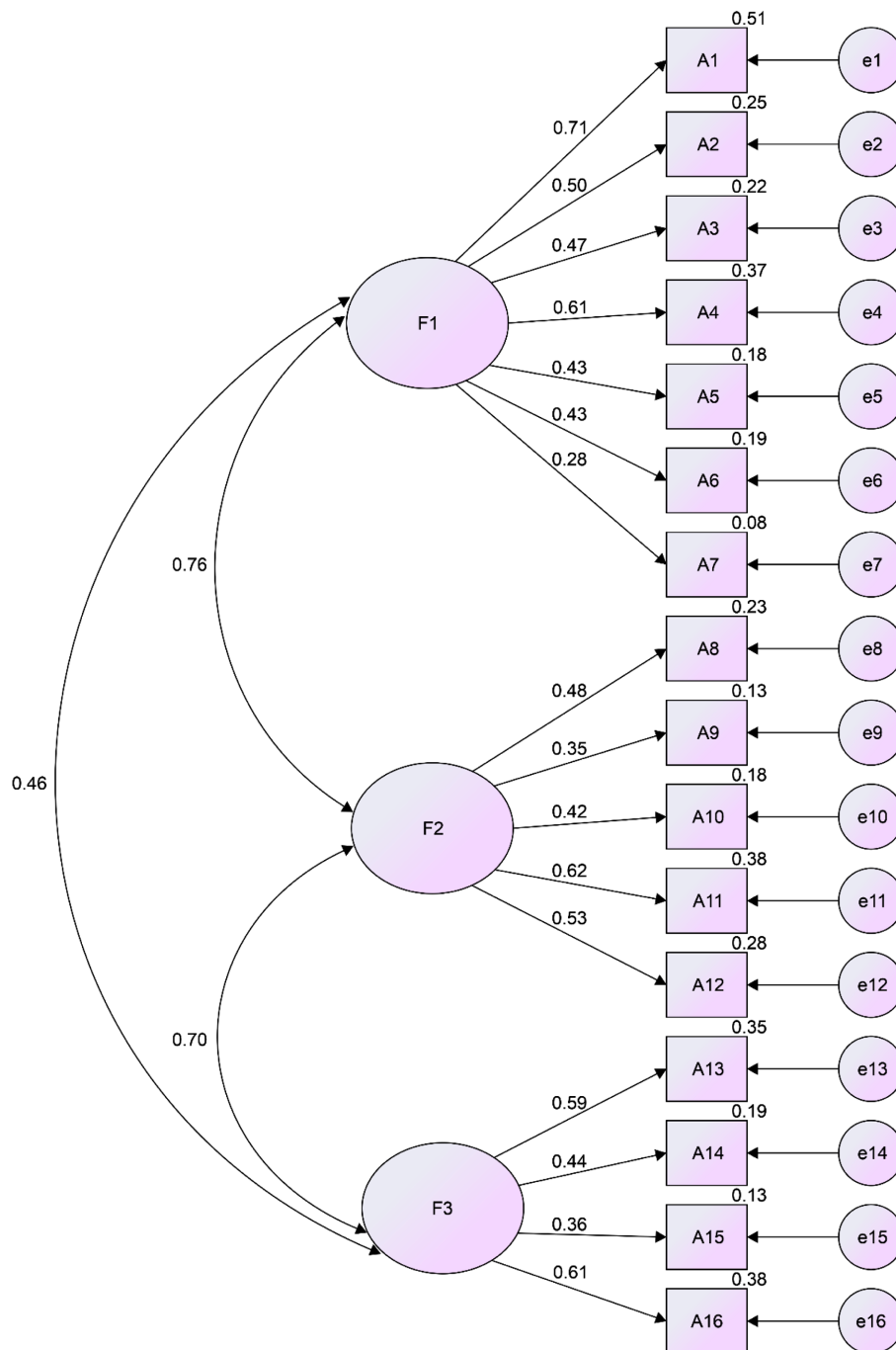


Figure 1 Construct validity from the aspect of the factor structure of the self-evaluation scale of nursing practices for improving sleep quality among patients with dementia taking sleeping pills.

Discussion

This study aimed to test the validity and reliability of a self-evaluation scale of nursing practices to improve sleep quality among patients with dementia taking sleeping pills for its adaptability to general nurses and test the applicability of the scale.

Participant attributes and data suitability

The 477 participants analyzed in this study represented a wide age distribution and numerous clinical experiences, ranging from newcomers to seasoned professionals, making them useful samples for statistical analysis. Statistical analysis can be used to evaluate the appropriateness of a theoretically formulated model based on the goodness of fit of

a sample. It is considered a more rigorous analysis method that dispels arbitrariness and ambiguity compared to exploratory factor analysis used in the past.

Significance and applications of the scale

Non-pharmaceutical therapies are crucial because of the high sensitivity of patients with dementia to medications. Thus, these nursing procedures can enhance sleep quality and help decrease hypnotic prescriptions and overuse.

Consequently, multidisciplinary cooperation is crucial for the daytime activities covered by this scale factor. Owing to reduced cognitive function, patients with dementia find it difficult to communicate their wishes. Therefore, activities should be planned according to the patient's comfort level, allowing the patient to engage without exerting excessive effort. Moreover, non-pharmacological interventions are effective in improving symptoms in patients with dementia²⁷⁾, especially behavioral and psychological symptoms, suggesting that this perspective is important for general nurses. Furthermore, a new finding of this study is the addition of the perspective of collaboration among other professionals in these interventions.

In addition to non-pharmacological approaches, patients with dementia who are currently taking sleeping pills should be encouraged to participate in medication management and inform pharmacists about the status of their medication instructions. This is crucial to guarantee proper medication administration and uphold an ethical standpoint. This suggests that nurses can serve as bridges between patients and pharmacists.

The adverse events included in this nursing practice could occur in patients with dementia taking sleeping pills. Patients with dementia are particularly vulnerable to the adverse effects of medication; however, the use of sleeping pills is inevitable. Although the importance of paying attention to adverse events has been discussed in polypharmacy, it is even more important when dealing with patients with dementia, who have a limited capacity to express their thoughts. Thus, appropriate management of sleeping pills by general nurses working with patients with dementia is important.

To implement these practices, nurses must be aware of the significance of using medications appropriately, and monitor patients based on their understanding of the effects and side effects of sleeping pills. Such protocols are essential to ensure the safety of patients with dementia who use sleeping pills; however, none have guided nursing practices focused on pharmacotherapy. Therefore, we believe that the results of this study are significant.

Safe and effective use of sleeping pills in combination with non-pharmacological therapies is important for improving sleep quality in nursing practice. Ensuring that patients with dementia receive adequate sleep, and basing

nursing practices on this viewpoint, could help reduce the excessive use of sleeping pills, which could eventually lead to depression. Although physicians and pharmacists are primarily responsible for the appropriate use of medications, our results indicate that general nurses can contribute to the appropriate use of hypnotics in patients with dementia.

As dementia rates are predicted to increase, improving nursing practices is critical for improving sleep quality in patients with dementia taking sleeping pills. The development of this scale is significant because it allows general nurses to objectively self-evaluate their practices to enhance the sleep quality of patients with dementia who take sleeping pills, identify issues from the results, and improve their nursing practices.

Furthermore, this scale can be used by general nurses without psychiatric experience to reflect on their nursing practices and create educational programs for nurses who care for patients with dementia daily, contributing to improved nursing care for patients with dementia. Finally, the constructs of this scale were applicable to general nurses.

Research limitations and future directions

The survey was designed for general nurses, and did not include items describing the type, severity, or stage of dementia. Furthermore, there was no mention of physical complications or specific symptoms of insomnia (e.g., difficulty falling asleep or nighttime awakening). Future research should include a symptom-specific perspective on dementia. Moreover, additional research is necessary to confirm the test-retest reliability of the scale, determine whether the nursing practices found in this study can improve sleep quality in patients with dementia, support the appropriate use of sleep medication, and create a scale that can be used to evaluate third-party capacity.

Conclusion

In this study, the reliability and validity of the scale were examined based on a theoretical background. The results showed that the scale had a good fit, construct validity from the aspect of the factor structure model was statistically supported, and a scale with conceptual unidimensionality was developed. In future, the scale developed in this study could be used to empirically examine the impact of nursing practices and other factors. Furthermore, it is necessary to examine organizational initiatives to promote nursing practice positions for patients with dementia on sleeping pills and link these to the outcomes of the nursing profession.

Conflict of interest: The authors declare that they have no conflicts of interest.

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Consent for publication: Not applicable.

Data availability statement: The datasets generated

and/or analyzed in the current study are available from the corresponding author upon reasonable request.

Author contributions: Y.I. designed the study, main conceptual ideas, and the outline for proofs. N.F., T.F., and Y.F. contributed significantly to data analysis and interpretation, and to the preparation of the manuscript. All authors have approved the final version of the manuscript for publication.

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References

1. Global dementia cases forecasted to triple by 2050. https://www.alz.org/aaic/downloads2021/Global_Prevalence_plus_younger_onset_and_US_mortality.pdf Accessed August 26, 2022.
2. Kabir ZN, Leung AYM, Grundberg Å, *et al.* Care of family caregivers of persons with dementia (CaFCa) through a tailor-made mobile app: study protocol of a complex intervention study. *BMC Geriatr* 2020; 20: 305. [Medline] [CrossRef]
3. Velandia PP, Miller-Petrie MK, Chen C, *et al.* Global and regional spending on dementia care from 2000–2019 and expected future health spending scenarios from 2020–2050: an economic modelling exercise. *EClinicalMedicine* 2022; 45: 101337. [Medline] [CrossRef]
4. Annual Health, Labour and Welfare Report 2015. Ministry of Health, Labour and Welfare 2015. <https://www.mhlw.go.jp/english/wp/wp-hw9/index.html>.
5. Moran M, Lynch CA, Walsh C, *et al.* Sleep disturbance in mild to moderate Alzheimer's disease. *Sleep Med* 2005; 6: 347–352. [Medline] [CrossRef]
6. Novaes PH, da Cruz DT, Lucchetti ALG, *et al.* The "iatrogenic triad": polypharmacy, drug-drug interactions, and potentially inappropriate medications in older adults. *Int J Clin Pharm* 2017; 39: 818–825. [Medline] [CrossRef]
7. Ooms S, Ju YE. Treatment of sleep disorders in dementia. *Curr Treat Options Neurol* 2016; 18: 40. [Medline] [CrossRef]
8. koreishanoyakuhintekiseishiyonoshishin [Guidelines for the proper use of medicines for the elderly] Ministry of Health, Labour and Welfare 2018. https://www.mhlw.go.jp/content/11121000/kourei-tekisei_web.pdf (in Japanese)
9. McDonald EM, Caslangen J. Benzodiazepine use and falls in older adults: is it worth the risk? *Res Gerontol Nurs* 2019; 12: 214–216. [Medline] [CrossRef]
10. Woods DL, Phillips LR, Martin JL. Biological basis for sleep disturbance and behavioral symptoms in dementia: a biobehavioral model. *Res Gerontol Nurs* 2011; 4: 281–293. [Medline] [CrossRef]
11. McCurry SM, Reynolds CF, Ancoli-Israel S, *et al.* Treatment of sleep disturbance in Alzheimer's disease. *Sleep Med Rev* 2000; 4: 603–628. [Medline] [CrossRef]
12. Donnelly K, Bracchi R, Hewitt J, *et al.* Benzodiazepines, Z-drugs and the risk of hip fracture: a systematic review and meta-analysis. *PLoS One* 2017; 12: e0174730. [Medline] [CrossRef]
13. O'Mahony D, O'Sullivan D, Byrne S, *et al.* STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing* 2015; 44: 213–218. [Medline] [CrossRef]
14. Pottie K, Thompson W, Davies S, *et al.* Deprescribing benzodiazepine receptor agonists: evidence-based clinical practice guideline. *Can Fam Physician* 2018; 64: 339–351. [Medline]
15. Campanelli CM. American Geriatrics Society updated beers criteria for potentially inappropriate medication use in older adults: the American Geriatrics Society 2012 beers criteria update expert panel. *J Am Geriatr Soc* 2015; 63: 2227–2246.
16. Scott IA, Hilmer SN, Reeve E, *et al.* Reducing inappropriate polypharmacy: the process of deprescribing. *JAMA Intern Med* 2015; 175: 827–834. [Medline] [CrossRef]
17. Tannenbaum C, Martin P, Tamblin R, *et al.* Reduction of inappropriate benzodiazepine prescriptions among older adults through direct patient education: the EMPOWER cluster randomized trial. *JAMA Intern Med* 2014; 174: 890–898. [Medline] [CrossRef]
18. Clinical medication review—a practice guide. <https://www.coursehero.com/file/119342024/345759510-MedicationReview-PracticeGuide2011pdf/> Accessed August 26, 2022.
19. Bosch-Lenders D, van den Akker M, Stoffers HE, *et al.* [How much do patients and health professionals (really) know? The surplus value of a home visit to the patient with polypharmacy by the practice nurse, to support medication reviews in primary care]. *Tijdschr Gerontol Geriatr* 2013; 44: 72–80 (in Dutch). [Medline] [CrossRef]
20. Lader M. Benzodiazepine harm: how can it be reduced? *Br J Clin Pharmacol* 2014; 77: 295–301. [Medline] [CrossRef]
21. Frazier SC. Health outcomes and polypharmacy in elderly individuals: an integrated literature review. *J Gerontol Nurs* 2005; 31: 4–11. [Medline] [CrossRef]
22. Yang YY, Hsiao CH, Chang YJ, *et al.* Exploring dementia care competence of nurses working in acute care settings. *J Clin Nurs* 2022; 13–14: 1972–1982. [Medline]
23. Akyol MA, Gönen Şentürk S, Akpınar Söylemez B, *et al.* Assessment of Dementia Knowledge Scale for the nursing profession and the general population:

- cross-cultural adaptation and psychometric validation. *Dement Geriatr Cogn Disord* 2021; 50: 170–177. [\[Medline\]](#) [\[CrossRef\]](#)
24. Evripidou M, Charalambous A, Middleton N, *et al.* Nurses' knowledge and attitudes about dementia care: systematic literature review. *Perspect Psychiatr Care* 2019; 55: 48–60. [\[Medline\]](#) [\[CrossRef\]](#)
 25. Iwamoto Y, Fujino N, Furuno T, *et al.* Development of a self-evaluation scale of nursing practices for improving sleep quality among dementia patients taking sleeping pills. *Nursing Practice Today*. 2023; 10: 32–43.
 26. Hair JF, Black WC, Babin BJ, *et al.* Confirmatory factor analysis. *Multivariate data analysis*. Pearson Education, Inc., Upper Saddle River, 2010; 600: 638.
 27. Legere LE, McNeill S, Schindel Martin L, *et al.* Nonpharmacological approaches for behavioural and psychological symptoms of dementia in older adults: a systematic review of reviews. *J Clin Nurs* 2018; 27: e1360–e1376. [\[Medline\]](#) [\[CrossRef\]](#)

Appendix

Questionnaire survey items

1. あなた自身のことについてお聞かせください。
当てはまるものに○をつけ、()の中には直接記載してください。

1)性別:

- ①女性 ②男性

2)年齢:

- ①20～29歳 ②30～39歳 ③40～49歳 ④50～59歳 ⑤60歳以上

3)最終学歴:

- ①大学 ②短期大学 ③専門学校 ④大学院(修士) ⑤大学院(博士)
⑥その他()

4)看護師以外の認定資格がある(複数回答可):

- ①認定看護師(分野:) ②専門看護師(分野:)
③介護支援専門員 ④その他() ⑤認定資格なし

5)看護師経験年数(これまでの全ての看護師経験年数):

()年

6)精神科病棟における勤務経験:

- ①経験あり()年 ②経験なし

7)老人保健福祉施設の勤務経験:

- ①経験あり()年 ②経験なし

8)認知症疾患医療センターでの経験年数:

- ①経験あり()年 ②経験なし

9)現在の職位

- ①スタッフ看護師 ②看護師長 ③副看護師長・主任
④その他()

2. あなたが日々関わっている認知症患者（以下、患者）の睡眠薬服用に関する看護実践について、最も当てはまる頻度の数字に○をつけてください。
（5：いつもそうだ ～ 1：いつもそうではない）

	いつもそうだ	たいていそうだ	どちらともいえない	たいていそうではない	いつもそうではない
1. 睡眠薬を服用している理由を、患者が理解しているか確認している	5	4	3	2	1
2. 薬剤の副作用による下肢の知覚異常(むずむずする等)の有無を観察している	5	4	3	2	1
3. せん妄が出現した際、その要因は睡眠薬であると推論している	5	4	3	2	1
4. 睡眠を困難にする就寝前の不安症状の有無を、観察している	5	4	3	2	1
5. 睡眠の質を高めるために、寝具の種類や枕の高さを適切に調整している	5	4	3	2	1
6. フィジカルアセスメントや血液データなどの客観的な情報を活用して、身体の不調の有無を観察している	5	4	3	2	1
7. 夜間のふらつきが出現した際、その要因は睡眠薬であると推論している	5	4	3	2	1
8. 不眠が続く場合は、主治医と共に睡眠薬の調整を検討している	5	4	3	2	1
9. 作業療法士から、患者の作業療法への参加状況について情報を得ている	5	4	3	2	1
10. 薬剤師から、患者に実施した薬剤指導に関する情報を得ている	5	4	3	2	1
11. 夜間の不眠がある場合には、頓服薬の服用を提案している	5	4	3	2	1
12. 入院前の睡眠薬の服薬時刻に合わせて配薬している	5	4	3	2	1
13. 睡眠薬の服用を拒む場合は、無理に服用を促さず、患者なりの理由を尊重している	5	4	3	2	1
14. カレンダーや写真など、なじみのものをベッド周囲に配置し、安心して療養できる環境を整えている	5	4	3	2	1
15. アロマセラピーやマッサージなど、入眠につながる介入を夕方以降に取り入れている	5	4	3	2	1
16. 就寝前には、寝衣などの楽な服装への更衣を促している	5	4	3	2	1
17. 就寝前4時間はカフェインの摂取を控えるように伝えている	5	4	3	2	1
18. モーニングケアを実施することで、1日の生活リズムを整えている	5	4	3	2	1
19. 室内の電灯や日光を活用して、サーカディアンリズム(概日リズム)を整えている	5	4	3	2	1

	いつもそうだ	たいていそうだ	どちらともいえない	たいていそうではない	いつもそうではない
20. 今居る場所や日付を質問するなど、リアリティオリエンテーション(現実見当識訓練)を取り入れている	5	4	3	2	1
21. 日中の活動プログラムは、患者が興味を持てる内容を取り入れている	5	4	3	2	1
22. 日中の眠気や午睡が出現した際、その要因は睡眠薬であると推論している	5	4	3	2	1
23. 日中に離床できるように、一緒に身体運動や作業を行っている	5	4	3	2	1
24. 日中の活動プログラムの参加に拒否を示した場合は、無理強いせずに患者のペースを尊重している	5	4	3	2	1
25. 同室者以外の他患者とも交流を持つ機会を設けている	5	4	3	2	1
26. 患者が意識的にリラックスできるよう、深呼吸法などを一緒に行っている	5	4	3	2	1
27. 服薬の際は、「これは〇〇の効果のあるお薬です」など、睡眠薬の効果を踏まえた説明を行うようにしている	5	4	3	2	1
28. 翌日分の薬のセッティングなど、患者が可能な範囲で服薬管理に参加できる機会を設けている	5	4	3	2	1
29. 睡眠や日中の活動状況から、睡眠薬の効果を評価している	5	4	3	2	1

3. あなたは、患者さんの日常生活を援助するとき、以下の行動をどの程度とっていますか。最もあてはまる数字に○をつけてください。

(5:いつも行っている ~ 1:あまり行っていない)

	いつも行っている	ほとんど行っている	たびたび行っている	時々行っている	あまり行っていない
1. 家族や同僚から得た情報と観察した患者の情報を照らし合わせる	5	4	3	2	1
2. 治療方針を考慮した上で、患者の要望を満たすように援助方法を決定する	5	4	3	2	1
3. 患者に生じる問題を予測しながら援助する	5	4	3	2	1
4. 事前に把握した情報を活かして援助方法を工夫する	5	4	3	2	1
5. 家族の意見を取り入れながら援助方法を工夫する	5	4	3	2	1
6. 患者自身が運動機能を発揮できるように日常生活を援助する	5	4	3	2	1
7. 治療が円滑に進むように配慮しながら日常生活援助を行う	5	4	3	2	1
8. 患者の知覚機能を刺激しながら日常生活を援助する	5	4	3	2	1
9. 患者が入院生活になじめるように配慮しながら日常生活援助を行う	5	4	3	2	1
10. 日常生活援助が患者の症状悪化の原因とならないようにする	5	4	3	2	1
11. 同席している家族にも援助の方法や内容を説明する	5	4	3	2	1
12. 援助を実施する直前には患者や家族の意思を確認する	5	4	3	2	1
13. 患者が理解しやすい言葉や表現を使って説明する	5	4	3	2	1
14. 患者の発達段階を意識しながら話しかける方法や内容を選ぶ	5	4	3	2	1
15. 非言語的コミュニケーションも活用して意思を伝える	5	4	3	2	1
16. 問題に取り組む患者の姿勢に関心を示す	5	4	3	2	1
17. 問題をのりこえようとする患者の意欲を認める	5	4	3	2	1
18. 意図的に患者の話す内容に耳を傾ける	5	4	3	2	1
19. 患者の苦痛や恐怖に対し、いたわる態度を示す	5	4	3	2	1
20. 患者が穏やかな気持ちになれるような工夫をする	5	4	3	2	1
21. 患者の反応に手応えを感じる場合、その理由を検討する	5	4	3	2	1
22. 援助方法が患者にあっていたかどうかを検討する	5	4	3	2	1
23. 初めて出会った問題への対応方法を評価する	5	4	3	2	1
24. 問題解決が困難な原因を明らかにする	5	4	3	2	1
25. 援助の効果を示す患者の言葉を観察する	5	4	3	2	1

4. あなたの倫理的行動に関してお聞かせください。

下の質問を読み、最もあてはまる数字に○をつけてください。

(5：非常にあてはまる ～ 1：全くあてはまらない)

	非常にあてはまる	まあまああてはまる	どちらともいえない	あまりあてはまらない	全くあてはまらない
1. 自分の好みで患者に対するケアに差が生じることがある	5	4	3	2	1
2. いつも善いケアとは何かを考えながら実践している	5	4	3	2	1
3. 患者の安全について常に危険を予測している	5	4	3	2	1
4. インフォームドコンセントの支援のために、他職種とのコミュニケーションに日頃から取り組んでいる	5	4	3	2	1
5. 私は常に清潔操作を徹底している	5	4	3	2	1
6. 患者に対する好みで優先順位が変わることがある	5	4	3	2	1
7. あくまでも危険防止を目的とし、最低限の身体抑制にしている	5	4	3	2	1
8. 私のケアは常に患者への安全が配慮されている	5	4	3	2	1
9. 面倒なケアは億劫になる	5	4	3	2	1
10. 患者のケアには常に最善を尽くせている	5	4	3	2	1
11. コンプライアンスの悪い患者へのケアは消極的になる	5	4	3	2	1
12. 患者の個人情報保護は徹底している	5	4	3	2	1
13. インフォームドコンセントの場面では、患者の意思表示がしやすいような雰囲気作りを行っている	5	4	3	2	1
14. 複数の患者の心身に配慮した公平なケアができていない	5	4	3	2	1
15. 患者の話を聴く機会を積極的に作っている	5	4	3	2	1

調査にご協力いただき誠にありがとうございました。
皆様の貴重なご意見を反映させていただくために、記入漏れがないか今一度ご確認をお願い致します。