

Development and Application of a Health Management Checklist for Older Adults with Chronic Disease-Related Disability Based on Fitch's Supportive Care Theory

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Abstract

Objective Informed by Fitch's Supportive Care Theory,a health management checklist for elderly patients with chronic disease-related disabilities was developed to serve as a practical tool for standardizing health management practices within this population.

Methods Based on Fitch's Supportive Care Theory,a preliminary draft of the management checklist for elderly patients with chronic disease-related disabilities was developed on the basis of evidence-based practice.The Delphi method was then used to conduct expert consultation and to construct the health management checklist for elderly patients with chronic disease-related disabilities.In May 2025,20 elderly patients with chronic disease-related disabilities who attended the Department of Geriatrics of a tertiary hospital in Fuyang were selected by convenience sampling.Nurses and health managers applied the checklist in patient management,and both healthcare staff and patients were invited to evaluate the developed checklist.

Results The positive response rates for the two rounds of expert consultation were 93.33%and 100%,respectively,and the experts'authority coefficients were 0.82 and 0.86.In the first round,Kendall's W for the importance and feasibility of the items were 0.39 and 0.21,respectively,and in the second round,they were 0.34 and 0.28(all $P<0.001$).The finalized health management checklist for elderly patients with chronic disease-related disabilities comprised four first-level domains—medical assistance,daily care,recreational support,and assistive device-related services—13 second-level indicators,and 34 third-level indicators.Both patients and nurses rated the checklist as comprehensive,professionally sound,and clinically practical.

Conclusion In this study,a health management checklist for elderly patients with chronic disease-related disabilities was developed based on Fitch's Supportive Care Theory.The checklist is relatively systematic and demonstrates good scientific rigor,feasibility,comprehensiveness,and clinical practicality,and may provide a reference for the health management of elderly patients with chronic disease-related disabilities.However,given the limited sample source of this study,its application effects still need to be further verified in larger samples.

Introduction

According to data from the National Bureau of Statistics of China,by the end of 2023,the population aged 60 years and above in China had reached 297 million,accounting for 21.1%of the total population^[1].The prevalence of chronic diseases is high among middle-aged and older adults,with a higher prevalence among older adults than among middle-aged individuals,and more than 50%of older adults experiencing complex multimorbidity^[2].Multimorbidity not only significantly reduces the quality of life of older patients,but is also closely associated with increased risks of functional limitation and disability^[3].Older adults with chronic disease-related disability are often confronted with limitations in activities of daily living,greater dependence on long-term care,and reduced ability to obtain and implement health

information,thereby imposing a sustained burden on family caregivers and the social care system^[4].Providing systematic and continuous health management for this population can help improve symptom experience,self-care capacity,and quality of life,while also facilitating the implementation of continuous post-discharge care^[5].As a structured tool,the Health Management Checklist can assist patients,caregivers,and healthcare professionals in systematically identifying health problems,continuously monitoring health status,and standardizing management practices^[6].However,existing related checklists mainly focus on a single medical aspect,such as medication optimization^[7-8],or emphasize areas of daily care,such as caregiver support and household fall risk factors^[9-11].Comprehensive tools targeting older adults with chronic disease-related disability that simultaneously cover health assessment,care guidance,psychological support,and continuous management remain lacking.Fitch's supportive care framework emphasizes that individuals experience multidimensional needs throughout the disease trajectory,including physical,informational,emotional,psychosocial,and practical support needs,and advocates providing corresponding assistance in response to changes in these needs^[12].This framework provides a theoretical basis for the systematic integration of health management content for older adults with chronic disease-related disability.Therefore,guided by Fitch's Supportive Care Theory,this study aims to develop a Health Management Checklist for older adults with chronic disease-related disability and to conduct expert consultation and a preliminary application evaluation,with the goal of providing a practical tool and reference for standardized and continuous health management in this population.

Methods

1.1 Establishment of the research team

The research team for this study consisted of 12 members,including 2 chief supervising nurses,4 associate chief supervising nurses,3 supervising nurses,and 3 postgraduate students,whose research areas covered nursing management,geriatric nursing,oncology nursing,cardiovascular nursing,and post-discharge health management.Guided by Supportive Care Theory,the research team synthesized the major care needs of older adults with chronic disease-related disability through a literature review and developed the preliminary draft of the health management checklist.Based on predefined criteria,experts were selected for consultation,expert consultation questionnaires were designed and distributed,and the returned opinions were collated,summarized,and analyzed.Taking into account patients'major health problems,the urgent guidance needed after discharge,and weak links in follow-up management,the research team conducted multiple rounds of discussion and revision.This study was approved by the Ethics Committee of Fuyang People's Hospital(Approval No.FK20245554-2).Written informed consent was obtained from all participants prior to their inclusion in the study.

1.2 Development of the preliminary draft of the Health Management Checklist for older adults with chronic disease-related disability

The preliminary draft of the Health Management Checklist for older adults with chronic disease-related disability was developed on the basis of evidence-based practice. A top-down search was conducted according to the “6S” model. The databases and decision-support systems searched included CNKI, Wanfang Data, VIP, PubMed, Web of Science, Embase, Cochrane Library, CINAHL, Scottish Intercollegiate Guidelines Network, DXY, and Yimaitong. A combination of subject headings and free-text terms was used. The English search terms included “elderly, aged, senior,” “disability, semi-disability, daily living ability, ADL, self-care ability, semi-self-care,” and “nursing, nursing intervention, nursing services, intervention, continued care, health management, caregiving, long-term care, supportive care.” The corresponding Chinese search terms included “老年人”, “日常生活活动能力ADL”, and “护理”. The search period covered January 2019 to October 2024. Literature retrieval and quality appraisal were performed independently by two researchers who had received systematic training in evidence-based nursing. Any disagreements were resolved through discussion with a third researcher.

Through the literature search, 42,776 studies and 29 guidelines were initially identified. After duplicate removal, preliminary screening, and full-text screening, 32 publications were finally included, comprising 17 randomized controlled trials, 8 quasi-experimental studies, 4 systematic reviews, and 3 guidelines. Following evidence extraction and synthesis, a preliminary Health Management Checklist for older adults with chronic disease-related disability was developed. The checklist covered four domains: medical assistance services, daily care, recreational support services, and assistive device-related services, including 4 first-level items, 13 second-level items, and 34 third-level items.

1.3 Expert consultation

1.3.1 Development of the expert consultation questionnaire

The expert consultation questionnaire consisted of three parts: experts’ basic information, the checklist item evaluation form, and the survey of expert authority. Item evaluation included two dimensions, namely importance and operability, both rated using a five-point Likert scale. Experts were invited to evaluate each item based on its content and their own practical experience. For items considered unreasonable or in need of improvement, experts could provide suggestions for modification or deletion. An open-ended comment section was provided after each level of item to facilitate the collection of further expert suggestions.

1.3.2 Selection of experts for consultation

The inclusion criteria for experts were as follows:

- 1. experts engaged in geriatric clinical treatment or nursing with at least 10 years of work experience;
- 2. holding an intermediate professional title or above;
- 3. clinical medical experts with a master’s degree or above, and nursing experts with a bachelor’s degree or above;

4. voluntary participation in this study.

1.3.3 Implementation of expert consultation

From October to December 2024, expert consultation was conducted through a combination of on-site questionnaire delivery and online distribution. After the completion of the first round of consultation, the research team integrated the experts' suggestions and supplemented, revised, or deleted checklist items accordingly. On this basis, a second-round questionnaire was developed and distributed, and consultation continued until expert opinions tended to converge. The criteria for item retention were a mean importance score of no less than 4.00 and a coefficient of variation not exceeding 0.25.

1.4 Preliminary application of the management checklist

To conduct a preliminary validation of the management checklist, this study used convenience sampling in May 2025 to recruit older adults with chronic disease-related disability from the geriatric department of a tertiary Grade A hospital in Fuyang City as the application participants. Health management was implemented by nurses and health managers who had received standardized training and had more than 5 years of practical experience in geriatric nursing. During the implementation period, patient feedback was collected to determine whether any checklist content had been omitted and such information was recorded. At the same time, nurses and health managers evaluated the checklist from the perspective of practical application and proposed suggestions for further optimization.

1.5 Statistical methods

Excel was used for data entry and verification, and SPSS version 26.0 was used for statistical analysis. Expert enthusiasm was reflected by the effective questionnaire response rate. The reliability of expert opinions was mainly evaluated from three aspects: degree of concentration, degree of authority, and degree of coordination. The degree of concentration was expressed as the mean $\pm$ standard deviation of the importance scores for each item; a higher mean and a smaller standard deviation indicated a greater concentration of expert opinions. The authority of expert opinions was expressed by the authority coefficient (Cr), with $Cr \geq 0.8$ indicating that the experts had a high level of confidence in the research content. The Cr value was calculated as the average of the judgment basis coefficient (Ca) and the familiarity coefficient (Cs), namely, $Cr = (Ca + Cs) / 2$. $P < 0.05$ was considered statistically significant. The degree of coordination was evaluated using the coefficient of variation (CV) and Kendall's coefficient of concordance (Kendall's W). A smaller CV indicated higher consistency, while W ranged from 0 to 1, with a larger value indicating a higher degree of coordination^[13].

Results

2.1 Results of expert consultation

2.1.1 General characteristics of the consulted experts

The general characteristics of the consulted experts,including gender,educational background,and professional title,were analyzed.The results indicated that the consulted experts possessed solid professional knowledge and extensive clinical experience.Details are presented in Table 1.

Table 1 General information of correspondence experts

Item		Category (n)	Percentage (%)
Age (years)	30-40	1	7.14
	41-50	10	71.43
	51-	3	21.43
Gender	Female	14	100.00
Educational level	Bachelor's degree	11	78.57
	Master's degree	2	14.29
	Doctoral degree	1	7.14
Professional title	Chief physician/Chief superintendent nurse	7	50.00
	Associate chief physician/Associate chief superintendent nurse	6	42.86
	Attending physician/Supervisor nurse	1	7.14
Years of professional experience	10-20	3	21.42
	20-30	8	57.14
	31-40	3	21.42
Field of work	Clinical nursing	14	100.00
Hospital level	Grade III-A	9	64.29
	Grade III-B	2	14.29
	Grade III	2	14.29
	Grade II-A	1	7.14
Administrative position	Vice president	1	7.14
	Director of Nursing Department	1	7.14
	Deputy Director of Nursing Department	2	14.29
	Head nurse	8	64.29
	Deputy head nurse	1	7.14
	None	1	7.14

2.1.2 Experts'level of engagement and authority

In this study,the effective response rate of the expert consultation questionnaires was 93.33%(14/15)in the first round and 100%(14/14)in the second round.In the first round,the experts’authority coefficient(Cr)was 0.82,with a judgment basis coefficient(Ca)of 0.87 and a familiarity coefficient(Cs)of 0.76.In the second round,the experts’authority coefficient(Cr)was 0.86,with a judgment basis coefficient(Ca)of 0.91 and a familiarity coefficient(Cs)of 0.81.

2.1.3 Degree of coordination of expert opinions

After two rounds of expert consultation,the coefficients of variation(CV)for all items were controlled below 0.25,indicating that expert opinions gradually converged.In addition,the Kendall’s coefficient of concordance(W)values for both item importance and operability were all within the range of 0 to 1,and the test results were statistically significant($P<0.001$),suggesting that the consultation results had good reliability.The detailed results are shown in Table 2.

Table 2 The degree of coordination in soliciting expert opinions

Item	Item Importance				Item Operability			
	CV	W	χ^2	P	CV	W	χ^2	P
Round 1	0.00-0.37	0.39	254.96	0.000	0.07-0.42	0.21	137.30	0.000
Round 2	0.00-0.21	0.34	237.34	0.000	0.07-0.24	0.28	192.92	0.000

2.1.4 Results of the expert consultation

(1)Treatment of items in the first round of expert consultation

1)Item revision

According to the experts’suggestions,there was overlap between the contents of“1.5 Specialized Nursing”and“1.6 Specialized Guidance.”The research team therefore decided to delete these two second-level items and merge the relevant content into the item“Follow-up and Medical Visit Management”(formerly Item 1.5),so as to simplify the indicator framework and enhance the logical coherence and operational convenience of the items.Meanwhile,original Items 1.5.1 and 1.6.1 were merged and revised as Items 1.3.5 and 1.3.6,respectively;original Items 1.5.2 and 1.6.2 were merged and adjusted as Items 1.5.1 and 1.5.2,respectively.In addition,second-level Item 1.7 was renumbered as 1.6,and the serial numbers of the corresponding third-level items were revised accordingly.

2)Item modification

The experts put forward several suggestions for item modification,and the research team adopted the following adjustments:“1.2 Record-related Services”was revised to“Health Record Services”;“1.3.2 Education on the Prevention of Infection and Complications”was revised to“Education on the Prevention of Complications”;“1.4.1 Internet-based Health Consultation Services”was adjusted to“Internet Plus

Extended Services”;“2.3 Daily Care for Pressure Injury”was revised to“Daily Skin Care”;and“2.2.2 Elimination Management”was adjusted to“2.3.2 Elimination Management.”

3)Item addition

Based on the experts’suggestions,three third-level items were added,namely“1.1.5 Fall Risk Assessment,”“1.1.6 Cognitive Assessment,”and“1.1.7 Swallowing Test,”in order to enrich the content of risk assessment and improve the specificity of health management for older adults.In addition,Item“4.2.2 Guidance on Emergency First Aid”was added to strengthen the emergency response capacity of the indicator system and improve its practicality and safety.Furthermore,three additional references were included^[14-16].

(2)Treatment of items in the second round of expert consultation

1)Item revision

According to the experts’suggestions,“Rehabilitation Training and Nursing”was revised to“Rehabilitation Training and Guidance.”After discussion,the research team adopted this revision.Experts also suggested replacing the Morse Scale in“1.1.5 Fall Risk Assessment”with the Fall Risk Self-Assessment Scale for the Elderly(FraSE).Considering that the FraSE is more suitable for older adults,the research team replaced the Morse Scale with the FraSE after group discussion.In addition,experts suggested revising“Establishment of Electronic Health Records”to“Establish Electronic Health Records.”This suggestion was adopted and the item was revised accordingly.Experts further recommended changing the exercise duration in“Exercise Recommendations and Guidance”from ≥ 60 minutes each time to ≥ 30 minutes each time.Taking the endurance of older adults into account,the research team revised the duration to ≥ 30 minutes per session.Another expert suggested replacing“fixation with a Y-shaped method”with“proper fixation of the tube/catheter.”The research team considered this wording to be more consistent with practical requirements and adopted the revision.In addition,experts suggested moving“Safety Guidance”to the third second-level item.After discussion,the research team revised the original Item 4.2.2“Guidance on Emergency First Aid”to 1.3.7“Guidance on Emergency First Aid,”and renamed“Safety Guidance”as“Environmental Safety Guidance.”

2)Item refinement

One expert suggested including vitamin D in the item on key micronutrient supplementation.Given that older adults with chronic disease-related disability are prone to vitamin D deficiency,the research team added vitamin D to this item after discussion.Experts also suggested that“2.3.2 Guidance on the Management of Slippage or Blockage”should include a brief description of the handling methods.After discussion,additional explanations were provided,including safe management measures for catheter slippage and blockage.

3)Item retention

Experts pointed out that the second-level items related to daily care should include “medication guidance” and “safety guidance.” After discussion, the research team concluded that the existing third-level items had already covered these aspects; therefore, no revision was made at this stage, while leaving room for further refinement in subsequent research. Experts also proposed revisions to the expressions “use of electronic devices” and “prolonged napping.” After discussion, the research team considered the original wording to be more accurate and operable and therefore retained it. In addition, experts suggested adding extended basic services, such as replacement of gastric tubes. Considering the relatively high operational risk, the research team decided not to adopt this suggestion at the present stage.

4)Item deletion

Experts suggested deleting the activity “brisk walking.” In consideration of safety issues in the older population, the research team decided to remove this activity after discussion. Ultimately, the Health Management Checklist for older adults with chronic disease-related disability comprised 4 first-level indicators, 13 second-level indicators, and 34 third-level indicators, as shown in Table 3.

Table 3 Health Management Checklist for Disabled Elderly Patients with Chronic Diseases

First-level Item	Second-level Item	Third-level Item
1 Medical Assistance Services	1.1 Health Assessment	1.1.1 Disability level assessment.Assessment is conducted using the Activities of Daily Living(ADL)scale.
		1.1.2 Dynamic nutritional assessment.Nutritional status is assessed using the Mini Nutritional Assessment-Short Form(MNA-SF).
		1.1.3 Short physical performance assessment.Limb function is assessed using the Short Physical Performance Battery(SPPB):0–4 points=severe impairment;5–8 points=moderate impairment;9–12 points=mild impairment.
		1.1.4 Pressure injury risk assessment.The Braden Scale is used,with each item scored from 1 to 4 and a total score ranging from 6 to 23;the lower the score,the higher the risk(≤ 12 indicates high risk).
		1.1.5 Fall risk assessment.Assessment is conducted using the FraSE Fall Risk Assessment Scale.
		1.1.6 Cognitive assessment.Assessment is conducted using the Mini-Mental State Examination(MMSE).
		1.1.7 Swallowing test.Testing is conducted using the Repetitive Saliva Swallowing Test(RSST).
	1.2 Health Record Services	1.2.1 Establish electronic health records.
	1.3 Health Education	1.3.1 Community health education station services.Group-based health education lectures or discussion sessions are organized regularly at community sites to provide patients and their family members with health education,rehabilitation guidance,nutrition education,psychological counseling,and follow-up services.
		1.3.2 Education on the prevention of complications.Education on complication prevention is provided through telephone calls,WeChat,and other educational approaches,with regular follow-up.
		1.3.3 Education on the prevention of accidental events.Safety education on the prevention of falls,scalds,bed falls,and other accidental events is delivered through telephone calls,WeChat,and other educational approaches to reduce the occurrence of such incidents.
		1.3.4 Education on healthy sleep knowledge and sleep environment.Emphasis is placed on maintaining regular sleep and wake times,reducing caffeine intake and electronic device use,avoiding excessively long daytime naps,and keeping the sleeping environment quiet,appropriately lit,and at a comfortable bedroom temperature before bedtime.

1.3.5 Medication guidance. Provide instruction on the correct medication dosage and administration methods, and regularly check medication lists to prevent incorrect or missed medication use.

1.3.6 Guidance for family members on daily care. Guide family members in daily living care, including repositioning and feeding techniques.

1.3.7 Guidance on emergency first aid. Provide patients and their family members with practical instruction in emergency rescue techniques, such as cardiopulmonary resuscitation, the Heimlich maneuver, and first aid for hypoglycemia and syncope.

1.4 Health Consultation

1.4.1 Internet Plus extended services. Establish a WeChat account to provide health consultation services.

1.5 Follow-up and Medical Visit Management

1.5.1 Regular home visits by family physicians and home-based health examinations.

1.5.2 Assistance with medical visits, accompanied consultations, and referral services.

1.5.3 Establishment of a green channel for emergency treatment.

1.6 Rehabilitation Training and Guidance

1.6.1 Exercise recommendations and guidance. Based on the results of the short physical performance assessment: 0–4 points, increase basic balance training and assisted walking; 5–8 points, strengthen resistance training, such as elastic-band exercises; 9–12 points, add more dynamic balance and flexibility training. Exercise should be performed at least 3 times per week, ≥30 minutes each time, for more than 12 weeks.

1.6.2 Oral and respiratory integrated functional training. Use oral exercises to train tongue and lip functions, thereby improving swallowing and speech. The training is performed twice daily, 15 minutes each time.

1.6.3 Cognitive and memory function training. Improve cognitive and social functions by participating in various activities, such as puzzle games and reminiscence-based communication. Training is conducted 2–3 times per week, 30 minutes each time.

2 Daily Care

2.1 Daily Living Care

2.1.1 Dietary care and development of individualized nutrition plans. Set calorie and protein intake targets according to patient needs, adjust food texture, and provide diversified dietary support and individualized interventions. For patients at high risk of pressure injury, supplementation with high-quality protein (1.25–1.5 g/kg body weight), micronutrients (zinc; vitamins A, C, D, and E), and foods rich in omega-3 fatty acids is recommended.

2.1.2 Self-feeding training. Provide swallowing and chewing function training, select appropriate food according to the

patient's swallowing ability, and encourage independent use of eating utensils.

2.1.3 Assistance with activities of daily living. Such as walking, washing, getting in and out of bed, and toileting.

2.2 Daily Skin Care

2.2.1 Prevention of pressure injury and recommendations for dressing use. Reposition the patient accurately every 2 hours, adopt a 30° lateral position alternately, closely inspect the skin over bony prominences, keep the skin clean and dry, apply pressure-relief measures, and increase protein intake. Foam dressings are recommended for heavily exuding wounds, while antimicrobial dressings are preferred when there is a high risk of infection. Use aseptic procedures after wound cleansing, change dressings every 1–3 days, and maintain skin dryness.

2.2.2 Elimination management. Instruct patients with toileting difficulties to use bedpans correctly, develop regular bowel and bladder habits, strengthen urinary catheter care, and clean the perineal area 1–2 times daily.

2.3 Daily Tube/Catheter Care

2.3.1 Education on catheter self-management. Ensure proper fixation of the catheter, monitor catheter position, prevent traction, twisting, and kinking, remind patients to adjust clothing appropriately, and instruct them to replace fixation dressings in a timely manner.

2.3.2 Guidance on the management of slippage or blockage. If catheter dislodgement occurs, cover the wound immediately to avoid infection and seek prompt medical attention for reinsertion by professionals. In case of blockage, forceful flushing or self-management is strictly prohibited to avoid catheter rupture or embolism risk.

3 Recreational Support Services

3.1 Psychological Care for Older Adults with Disability

3.1.1 Remote counseling services. Establish WeChat accounts and telephone hotlines to provide remote counseling services.

3.1.2 Organization of community activities. Organize interest groups, such as painting, handicrafts, and gardening, to promote interaction, and arrange light physical activities such as simplified exercise routines.

3.2 Psychological Care for Spouses or Caregivers

3.2.1 Psychological support for spouses or caregivers. Provide emotional support through listening, understanding, and communication to reduce caregiving stress and promote psychological well-being.

4 Assistive Device-Related Services

4.1 Usage Guidance

4.1.1 Guidance on the use of assistive devices. Provide patients with instructions on the use of mobility aids, supportive devices, hearing aids, walkers, and other equipment, and regularly check the functionality of these assistive devices.

2.2 Preliminary application results

In May 2025, convenience sampling was used to select 20 older adults with chronic disease-related disability from the geriatric department of a tertiary Grade A hospital in Fuyang City as participants for the preliminary application. Their ages ranged from 63 to 89 years, with a mean age of (78.15 ± 7.51) years. The checklist was applied by uniformly trained nurses and health managers to implement health management.

Feedback from the preliminary application showed that nurses considered the checklist to be systematically structured, with content covering multiple aspects, including health assessment, health education, daily care, rehabilitation training, and safety guidance. It was regarded as being generally consistent with the health management needs of older adults with chronic disease-related disability and as having a certain degree of operability and practical value. Patients reported that the checklist content was relatively comprehensive and practical, and that it helped deepen their understanding of chronic disease management and family caregiving. The preliminary application results suggest that the checklist has good scientific soundness, feasibility, comprehensiveness, and clinical practicality. However, its actual application effects still need to be further verified in studies with larger samples.

Discussion

3.1 Scientific rigor and feasibility of the development of the health management checklist based on Fitch's Supportive Care Theory

This study developed the health management checklist under the framework of Fitch's Supportive Care Theory^[17], with the construction process centered on the dimensions that should be included in the checklist and the dynamic nature of patients' needs. For evidence collection, a comprehensive literature search, screening, quality appraisal, extraction, and grading process was conducted to establish the evidence base for the checklist items. These tasks were completed independently by multiple experts, followed by cross-checking and discussion to resolve disagreements, thereby reducing the possibility of bias and omission^[18-19]. Finally, two rounds of expert consultation were conducted to refine the checklist items. Specific criteria were established for expert selection, and 14 experts in geriatric clinical treatment and nursing were ultimately included to ensure that the source of expert opinion was consistent with the research background. In both rounds of consultation, the expert authority coefficient reached a relatively high level ($Cr \geq 0.80$), indicating that the experts had strong confidence in the selection of checklist items. Meanwhile, the CV values further converged in the second round and Kendall's W was

statistically significant($P<0.001$), suggesting that consensus on the importance and feasibility of the items had gradually been achieved. More importantly, several highly controversial items were identified during the first round of consultation. These items were subsequently fed back, revised, and refined before being resubmitted for further expert evaluation. This process ensured that the checklist was both theoretically grounded and practically applicable, while also enhancing the transparency and reproducibility of checklist development.

3.2 Comprehensiveness of the health management checklist based on Fitch's Supportive Care Theory

The checklist in this study was developed on the basis of the dimensions of Fitch's Supportive Care Theory, thereby ensuring the comprehensiveness of its content. This theory emphasizes multidimensional needs, including physical, informational, emotional, and psychosocial needs. The four first-level indicators in the checklist correspond to these four domains. Medical assistance services include health assessment, health education, and follow-up management, thereby addressing patients' needs for information and professional support. Daily care and assistive device-related services correspond to physical needs and environmental support, covering items such as dietary care, skin care, and safety guidance. Recreational support services correspond to emotional and psychosocial needs and address the psychological health needs of both patients and their families through remote counseling, community activities, and psychological support for caregivers^[20]. By transforming an abstract theoretical framework into 34 specific operational items, the checklist extends beyond single-disease management to a comprehensive care model and compensates for the limitations of traditional checklists that focus only on medical treatment or daily living support.

3.3 Clinical practicality of the health management checklist based on Fitch's Supportive Care Theory

The health management checklist developed in this study was designed with clinical practicality as a central consideration, transforming the theoretical framework into an operable health management plan and thereby further improving nursing efficiency. The results showed that, during the preliminary application, nurses generally considered the checklist to have a clear structure and comprehensive content and to be consistent with the health management needs of older adults with chronic disease-related disability. Patients also reported that the checklist enhanced their understanding of disease-related knowledge. Previous studies have shown that nurse-led chronic disease management and structured health education can improve continuity of care and enhance patients' self-management abilities^[21-22]. In terms of specific item design, the checklist was developed in response to the major care challenges encountered by older adults with chronic disease-related disability. For example, items such as "1.3.6 Guidance for family members on daily care, repositioning, and feeding" and "2.2.1 Prevention of pressure injury and recommendations for dressing use" translate professional nursing knowledge into clear and practical operational guidance, facilitating effective communication by nurses during health management and reducing the difficulty of implementation for family caregivers^[23-24]. In addition, items such as "1.4.1 Internet Plus extended services" and "3.1.1 Remote counseling services" make use of information technology to overcome time and space constraints, enabling patients and caregivers to

continue receiving support after discharge^[25]. Within “3. Recreational Support Services,” “psychological care for spouses or caregivers” was listed as an independent second-level indicator, reflecting attention to the psychological burden of family caregivers and aligning with the importance of caregiver support emphasized in the literature^[26-27]. Overall, the checklist balances scientific rigor with operability in its design, provides a standardized tool for nursing practice, and is expected to effectively guide the health management of older adults with chronic disease-related disability in future clinical applications, while also offering a reference for multidisciplinary continuous care and individualized interventions.

Conclusion

This study developed a Health Management Checklist for older adults with chronic disease-related disability based on Fitch’s Supportive Care Theory. The checklist is relatively systematic and demonstrates a certain degree of reliability and clinical applicability, and it may provide a useful reference for the health management of this population. However, because the sample source in this study was relatively limited, its application effects still need to be further verified in studies with larger samples.

Declarations

5.1 Ethics Approval and Consent to Participate

This study was approved by the Ethics Committee of Fuyang People’s Hospital (Approval No. FK20245554-2).

Written informed consent was obtained from all participants prior to their inclusion in the study.

All procedures involving human participants, human data, and/or human samples were conducted in accordance with relevant guidelines and regulations, including the Declaration of Helsinki.

5.2 Consent for Publication

All participants provided consent for their data to be used in academic publications, with no disclosure of personal identifiers.

5.3 Availability of Data and Materials

The datasets and management checklist used in this study are available from the corresponding author upon reasonable request.

5.4 Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

5.5 Funding

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5.6 Authors' Contributions

Dongyu Hua,Yumeng Gong:study design,methodology,manuscript writing

Juanjuan Wang,Jiajia Chen:literature review,data collection,questionnaire design

Xiumu Yang,Yongli Duan:study supervision,data analysis,manuscript revision

All authors have read and approved the final manuscript.

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