Research Paper
Construction and Validation the Healthy Lifestyle Questionnaire Among the Iranian Elderly Who Receive Home Care Services

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ABSTRACT

Objectives Investigating the elderly's lifestyle conditions is a challenging issue, due to various factors influencing lifestyle. The current study was developed to explore the construct and validity of the Healthy Lifestyle Questionnaire (HLQ) among the Iranian elderly who receive home care services.

Methods & Materials This combinatory, sequential exploratory study was conducted for creating a lifestyle measuring tool among the elderly in Tehran City, Iran, in 2018. The research was performed in 4 steps including the following: studying semi-structured texts and interviews (the elderly & specialists); extracting fields and factors related to lifestyle; validity examination, and the final assessment on the target community (reliability). To check the validity, ratio tests were implemented by the expert's panel (n=20 in 8 different specialty fields related to the elderly's treatment). Besides, Cronbach's alpha coefficient was implemented to check the scale's reliability (n=40). SPSS was also used for the statistical analysis of the collected data.

Results The agreed limit for the Content Validity Ratio (CVR) was selected as 42% according to the specialist's number. Accordingly, out of 130 extracted questions, only 69 questions, CVR point was more than the agreed limit (CVR≥0.42). Thus, the remained question's CVR point equaled 52.5, by dividing it by the number of remained questions. CVI was calculated to be 0.76 for the whole questionnaire. Moreover, CVI was more than the agreed limit for all the questions in 11 fields (CVI≥0.76). Lifestyle's Cronbach's alpha coefficient (0.979) was >0.7.

Conclusion The Elderly's Healthy Lifestyle Questionnaire (EHLSQ) has appropriate reliability and validity for assessing lifestyle in the elderly. It can be used to evaluate lifestyle among the elderly in various studies.

Extended Abstract

1. Introduction

The elderly issues have changed into one of the most challenging and essential topics. This is due to the increased life expectancy, decreased fertility, decreased birth rate, healthcare improvement, and increased elderly population. According to the estimations, by 2025, the elderly population will have reached one billion and 200 individuals (14% of the world population) [3]; therefore, pursuing healthy aging, exposure of a high proportion of the population to certain diseases of this period is inevitable and requires extensive health service. Due to aging, the individuals' health will deteriorate and the number of diseases will rise [4]. Iran, as a developing country, has a young population; soon, this population will move to the upper part of the population pyramid [5]. Lifestyle is a manner by which individuals' health, welfare, and life quality are provided,

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maintained, and improved [6]. Furthermore, lifestyle refers to behavior patterns related to health, i.e. according to the individuals' accessible life opportunities [7, 8]. Based on studies, there is an increase in the effective criteria on lifestyle and the lack of proper and comprehensive scales about the elderly's healthy lifestyle in Iran.

The present study intended to design and validate a healthy lifestyle questionnaire among the Iranian elderly. This goal was achieved by comprehensively reviewing the previous studies and benefiting from the elderly's ideas and experiences, as well as the experts of elderly issues.

The present study aimed to develop a comprehensive scale that includes all aspects of lifestyle proportionate to its theoretical concept.

2. Methods & Materials

The present study applied a combined method; consecutive exploratory aiming at generating lifestyle assessment scale among the elderly living in Tehran City, Iran, in 2018. The study was conducted in 4 steps, as follows: reviewing texts and semi-structured interviews (the elderly & experts); extracting domains and items related to lifestyle; performing validity examination, and conducting a final assessment on the target society (reliability check). To evaluate the validity, Content Validity Index (CVI) and Content Validity Ratio (CVR) were implemented by the expert's panel (n=20 in 8 different specialties related to the elderly's healthcare issues). Moreover, to assess its reliability, Cronbach's alpha coefficient (n=40) was implemented. The statistical analysis was conducted by SPSS.

3. Results

The agreed unit for CVR was calculated as 42 according to the experts' numbers. CVR value was calculated for each question in different fields.

Table 1 presents the achieved CVI and CVR scores of every question for each field. The questions with scores less than the agreed limit were eliminated (CVR≤0.76); accordingly, out of 130 extracted questions, the CVR was above the agreed limit for 69 questions (CVR≥0.42). CVI was calculated to be 0.76 for the whole questionnaire. In 11 fields, CVI exceeded the agreed limit for all questions (CVR≤0.76). Cronbach's alpha coefficient equaled >0.7 in all defined fields.

4. Conclusion

The designed questionnaire in the present study (EHLSQ), compared with other questionnaires, not only covers more aspects of the elderly's lifestyle, but it can also be used to assess all the elderly's lifestyle; it is not limited to the elderly with special conditions. Therefore, it has the necessary comprehensiveness to assess all elderly's lifestyle. Moreover, the researchers benefited from the elderly's ideas while interviewing them in designing the EHLSQ. Furthermore, the EHLSQ provided a desirable validity and reliability due to benefiting from more experts' opinions (20 individuals); diversity in the specialty (8 specialties); CVR and CVI assessment; using the target group opinions (the elderly), and obtaining a high Cronbach's alpha coefficient (0.974). The researchers attempted to act scientifically and standardly in the field of scale production during the operation procedure; thus, that the method used in designing the EHLSQ could have the adequate assurance to design scales. Besides, the researchers tried to eliminate the previous scales' faults in assessing lifestyle while designing the EHLSQ.

Ethical Considerations

Compliance with ethical guidelines

All ethical principles were considered in this article. The participants were informed about the purpose of the research and its implementation stages; they were also assured about the confidentiality of their information; Moreover, They were allowed to leave the study whenever they wish, and if desired, the results of the research would be available to them.

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Authors' contributions

Design and conceptualization: Fereshteh Farzianpour, Morad Esmaeil Zali; Methodology and data analysis: Morad Esmaeil Zali, Abbas Rahimi Foroushani; Supervision and final writing: Morad Esmaeil Zali, Mohammad Arab, Fereshteh Farzianpour.

Conflicts of interest

The authors declared no conflict of interest.