



Content Validation of an Instrument for Identifying High-need Older Adults in the Community

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Background

- Current available assessment tools used for older adults lack multidimensional evaluation, and those measures are unsuitable to be used by community volunteers with no professional background.
- Purpose: To develop a brief and user-friendly screening scale to identify high-need older adults in the community that could serve as a care-visit guide for community volunteers.

Methods

- In the first phase, a two-round modified Delphi method involving 10 experts was performed to evaluate the relevancy of the dimensions and indicators, clarity of the item descriptions, and the suitability of score weighting using a 4-point scale.
- The item-level content validity index (I-CVI) and the overall scale-level content validity index (S-CVI) were used to assess content validity.
- In the second phase, the screening scale based on the results in the first phase was tested on 40 community volunteers, the potential screening scale users.

Results

Table 1. First Draft of the “High-need Community Older Adults Screening Scale”

Dimensions	Items	Scoring
Demographic characteristics (4 items)	1. Living alone	Yes = 1; No = 0
	2. Low income identity	Yes = 1; No = 0
	3. Adequate monthly expense	Yes = 0; No = 1
	4. Age ≥ 75 years old	Yes = 1; No = 0
Physical functions (3 items)	5. Need help with activities of daily living	Yes = 1; No = 0
	6. Need help with instrumental activities of daily living	Yes = 1; No = 0
	7. Physical disability	Yes = 1; No = 0
Health conditions (3 items)	8. Falls in one year	Yes = 1; No = 0
	9. Hospitalization and ER visit in 6 months	Yes = 1; No = 0
	10. Chronic diseases ≥ 3	Yes = 1; No = 0
Cognition and emotion (7 items)	11. People orientation	Correct = 0; Wrong = 1
	12. Time orientation	Correct = 0; Wrong = 1
	13. Location orientation	Correct = 0; Wrong = 1
	14. Forgetfulness	Yes = 1; No = 0
	15. Mood distress	Yes = 1; No = 0
	16. Hopelessness	Yes = 1; No = 0
	17. Mood distress to affect daily life	Yes = 1; No = 0
Support systems (4 items)	18. Elder abuse	Yes = 1; No = 0
	19. Family support	Yes = 0; No = 1
	20. External support	Yes = 0; No = 1
	21. Government or community support	Yes = 0; No = 1

Score Weighting for the 5 Types of High-need Older Adults

Types	Weighted Items
Disability	Items #5, #6 = “Yes”; items #19, #20 = “No”
Living alone without any support	Items #1, #6 = “Yes”; items #19, #20 = “No”
Dementia	Items #1, #14 = “Yes”; items #11, #12, #13 = wrong
Depression	Items #15, #16, #17 = “Yes”; items #19, #20 = “No”
Elder abuse	Item #18 = “Yes”

Results

Table 2. Content Validity Index and Experts’ Feedback for the “High-need Community Older Adults Screening Scale”

Item	Delphi 1		Delphi 2	
	Relevancy I-CVI	Clarity I-CVI	Relevancy I-CVI	Clarity I-CVI
1	1.0	1.0	1.0	1.0
2	0.9	1.0	1.0	1.0
3	0.9	1.0	1.0	1.0
4	0.9	0.9	1.0	1.0
5	0.9	0.9	1.0	1.0
6	0.9	0.9	1.0	1.0
7	0.9	0.9	1.0	1.0
8	1.0	1.0	1.0	1.0
9	1.0	1.0	1.0	1.0
10	1.0	1.0	1.0	1.0
11	1.0	1.0	1.0	1.0
12	1.0	1.0	1.0	1.0
13	1.0	1.0	1.0	1.0
14	1.0	1.0	1.0	1.0
15	1.0	1.0	1.0	1.0
16	0.9	0.9	1.0	1.0
17	1.0	1.0	1.0	1.0
18	0.9	0.8	1.0	1.0
19	1.0	1.0	1.0	1.0
20	1.0	1.0	1.0	1.0
21	1.0	1.0	-	-
S-CVI/Ave	0.96	0.97	1.0	1.0

Types	Delphi 1	Delphi 2
	Suitability of score weighting	Suitability of score weighting
Disability	0.9	1.0
Living alone without any support	0.8	1.0
Dementia	1.0	1.0
Depression	1.0	1.0
Elder abuse	0.8	1.0
Poverty ^a	--	1.0

Note. ^a A new type was added after experts’ suggestions in Delphi 1.

Conclusions

- The screening scale demonstrated adequate content validity.
- Global nurse practitioners who work at the community setting could further train the community volunteers to use the screening scale to identify high-need older adults in the community.