

Content validation index of an interdisciplinary intervention plan to support informal caregivers in Autonomous Region of Azores

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Introduction:

Caring for dependent persons includes supporting or performing essential activities for survival such as personal hygiene, dressing, feeding, and control of elimination, or mobility, which are frequently assured by informal caregivers (1). Numerous informal caregivers perform these functions full-time or part-time for affective, sentimental, kinship, or friendship reasons (2). The growing complexity of the phenomena implies accompanying these caregivers and developing intervention plans adjusted with interdisciplinary responses to their needs(3). Thus, based on a literature review, an intervention plan was prepared for the informal caregiver, implemented in a Portuguese region, in 19 municipalities by several multidisciplinary teams.

This study aimed to describe the content validity testing of the interdisciplinary intervention plan (IIP) for informal caregivers in the Autonomous Region of Azores (ARA), Portugal

Methods:

About fifty potential participants were invited by electronic mail. These potential participants are health professionals from local teams supporting informal caregivers at ARA who have implemented the IIP.

The instrument comprises 49 items divided in six domains: ‘Caregiver role empowerment’ – 11 items; ‘Material & equipment resources’ – 5 items; ‘Physical resources accessibility’ – 5 items; ‘Social support’ – 19 items; ‘Individual & family support needs’ – 6 items; ‘Caregiver health support’ – 3 items.

An online survey with two questions for each of the items of the instruments was conducted between April 27th, 2022, and May 10th, 2022. The first question of the survey was related to the inclusion in the instrument of each of the intervention plan items, with three response options: strongly agree; relevant, but not essential; strongly disagree. The second question asked about the clarity and ease of understanding of the wording of the item with two options, ‘yes’ or ‘no’.

An item content validity index (I-CVI) and a modified kappa coefficient (K), following recommendation from Polit & colleagues (4), was computed for the instrument’s items using Microsoft Excel (for the first question only ‘strongly agree’ option was considered relevant).

Results:

Fifteen health professionals fulfilled the online survey during the period under consideration.

Two items were classified as ‘poor’ for relevance: the item related to the existence of ‘information and communication technology devices’ in the domain of material & equipment resources was the one that obtained the lowest value, with an I-CVI of 29% and a modified k value of 0.24, followed by the item ‘other rooms in the house’ in the field of accessibility (I-CVI=43%; modified k value of 0.30). Another two items were classified as ‘fair’ for relevance: in the domain of caregiver role empowerment the item ‘socialization activities promotion’ (I-CVI=57%; modified k value of 0.48) and in the domain of social support the item ‘volunteering’ (I-CVI=54%; modified k value of 0.42). All the other items were classified as ‘Excellent’ - Table 1.

The interpretation of the results regarding the clarity and ease of understanding of the items places three items with the classification of ‘Good’ (socialization activities promotion’: I-CVI=73%, modified k value of 0.72; ‘information and communication technology devices’: I-CVI=67%, modified k value of 0.63; ‘need to redefine family roles’: I-CVI=73%, modified k value of 0.72) and all others as ‘Excellent’ - Table 1.

Keywords:

Caregiver; needs assessment; health plan

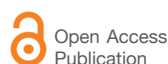
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Conflict of interest:

The authors declare no conflict of interests

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Table 1 – Results of Item Content Validity Testing of the Interdisciplinary Intervention Plan

	Important to measure?				Clear and easy to understand?			Item relevance			Item comprehensibility		
	Strongly agree	Relevant, but not essential	Strongly disagree	No answer	Yes	No	No answer	I-CVI	k*	Evaluation*	I-CVI	k*	Evaluation**
Caregiver role empowerment													
Feeding	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Mobility	14	0	0	1	14	1	0	100%	1,00	Excellent	93%	0,93	Excellent
Hygiene care	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Toileting	12	2	0	1	12	3	0	86%	0,86	Excellent	80%	0,80	Excellent
Dressing	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Changing & maintaining body position	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Transferring	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Medication management	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Socialization activities promotion	8	5	1	1	11	4	0	57%	0,48	Fair	73%	0,72	Good
Health surveillance	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Autonomy promotion	12	2	0	1	14	1	0	86%	0,86	Excellent	93%	0,93	Excellent
Material & equipment resources													
Comfort and positioning	14	0	0	1	13	0	2	100%	1,00	Excellent	100%	1,00	Excellent
Hygiene and personal care	14	0	0	1	14	0	1	100%	1,00	Excellent	100%	1,00	Excellent
Mobility and transferring	14	0	0	1	14	0	1	100%	1,00	Excellent	100%	1,00	Excellent
Meals and household activities	12	1	0	2	13	2	0	92%	0,92	Excellent	87%	0,87	Excellent
Information and communication technologies	4	10	0	1	10	5	0	29%	0,24	Poor	67%	0,63	Good
Physical resources accessibility													
Bedroom	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Kitchen	12	2	0	1	15	0	0	86%	0,86	Excellent	100%	1,00	Excellent
Bathroom	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
External areas	11	3	0	1	14	1	0	79%	0,78	Excellent	93%	0,93	Excellent
Other room in the house	6	7	1	1	13	2	0	43%	0,30	Poor	87%	0,87	Excellent
Social support													
Home Support Service: Hygiene care	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Home Support Service: Meals	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Home Support Service: Housing cleaning	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Home Support Service: Clothes management	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Home Support Service: Support for Informal Caregivers	14	0	0	1	14	1	0	100%	1,00	Excellent	93%	0,93	Excellent
Psychological support	14	0	0	1	14	0	1	100%	1,00	Excellent	100%	1,00	Excellent
Transport for the person cared for	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Day center	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Complementary financial subsidy	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Dependency financial subsidy	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Pension financial supplement	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Third person assistance subsidy	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Social Benefit for Inclusion	12	2	0	1	14	1	0	86%	0,86	Excellent	93%	0,93	Excellent
Financial support to the caregiver	14	0	0	1	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Respite services	14	0	0	1	13	2	0	100%	1,00	Excellent	87%	0,87	Excellent
Compamid	13	0	0	2	15	0	0	100%	1,00	Excellent	100%	1,00	Excellent
Neighborhood / family network	12	1	0	2	14	1	0	92%	0,92	Excellent	93%	0,93	Excellent
Volunteering	7	5	1	2	13	2	0	54%	0,42	Fair	87%	0,87	Excellent
Tele-assistance	10	3	0	2	13	2	0	77%	0,76	Excellent	87%	0,87	Excellent
Individual & Family support needs													
Need for support in providing care	14	0	0	1	14	1	0	100%	1,00	Excellent	93%	0,93	Excellent
Difficulty in organizing care	14	0	0	1	13	2	0	100%	1,00	Excellent	87%	0,87	Excellent
Difficulty managing household activities	12	2	0	1	14	1	0	86%	0,86	Excellent	93%	0,93	Excellent
Difficulty setting time for yourself	14	0	0	1	14	1	0	100%	1,00	Excellent	93%	0,93	Excellent
Need to redefine family roles	13	0	1	1	11	4	0	93%	0,93	Excellent	73%	0,72	Good
Need to participate in activities of personal interest	13	1	0	1	12	2	1	93%	0,93	Excellent	86%	0,86	Excellent
Caregiver health support													
Health promotion: Introducing healthy lifestyles	13	1	0	1	14	1	0	93%	0,93	Excellent	93%	0,93	Excellent
Health surveillance	12	1	0	2	13	2	0	92%	0,92	Excellent	87%	0,87	Excellent
Health problems	12	2	0	1	14	1	0	86%	0,86	Excellent	93%	0,93	Excellent

I-CIV Item content validation index; k* - modified kappa ; ** Poor k*: <.40; Fair k*: .40 to .59; Good k*: .60–.74; Excellent k* > .74.

Discussion:

This work presents the preliminary quantitative results of the content validation phase of an interdisciplinary intervention plan to support informal caregivers. The results seem to support the option for items defined based on the literature, with most items being rated 'Excellent' for relevance (45 out of 49) and for their formulation (47 out of 49). While it may be understandable that the item 'other rooms in the house' may be redundant in the assessment of the accessibility of physical resources, the classification obtained by the item relating to 'information and communication devices' is somewhat surprising, especially in a geographical context where support at distance could be one of the resource optimization strategies. All items presented acceptable comprehensibility. Future works should include qualitative data to deepen the reasons for the results obtained.

Ethics committee and informed consent:

Ethical precepts safeguarded, with authorization by the Ethics Committee of the Portuguese Society of Mental Health Nursing.

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