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# The ICOPE-WHO and the IVCF-20: a critical view of the *Handbook for Multidimensional Geriatric Assessment in Primary Care*

O ICOPE-OMS e o IVCF-20: observações críticas sobre o *Manual de Avaliação Multidimensional da Pessoa Idosa para a Atenção Primária à Saúde*

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## Abstract

Rapid population aging is driving initiatives aimed at optimizing the health of older populations worldwide. In Brazil, the National Council of State Secretaries of Health (CONASS) recently published the Handbook for Multidimensional Geriatric Assessment in Primary Care, which proposes the combined, large-scale adoption of the World Health Organization (WHO) ICOPE screening tool and the Clinical-Functional Vulnerability Index-20 (IVCF-20) instrument to define care pathways for older people. Although there is a pressing need for initiatives of this nature, the proposed instruments have not yet been adequately validated in the Brazilian population, and their use for the purpose of establishing countrywide health guidelines appears hasty and risky. Therefore, we propose a broad, urgent debate among experts in the field with the aim of planning effective and safe public health policies for the Brazilian older population.

**Keywords:** aged; health policy; health services; public health; quality of life; World Health Organization.

## Resumo

O rápido envelhecimento populacional impulsiona iniciativas com o objetivo de otimizar a saúde da população idosa em todo o mundo. Recentemente, no Brasil, foi publicado pelo Conselho Nacional dos Secretários de Saúde (CONASS) o Manual de Avaliação Multidimensional da Pessoa Idosa, que propõe a adoção combinada e em larga escala da ferramenta de triagem do ICOPE da Organização Mundial da Saúde (OMS) e do instrumento Índice de Vulnerabilidade Clínico-Funcional-20 (IVCF-20) para definir linhas de cuidado à pessoa idosa. Embora iniciativas dessa natureza sejam prementes, os instrumentos propostos ainda não têm validação adequada na população brasileira, e a sua utilização com o objetivo de balizar diretrizes em saúde em todo o território nacional parece precipitada e arriscada. Diante disso, propõe-se um debate amplo e urgente entre os especialistas da área, com o objetivo de planejar políticas de saúde pública eficazes e seguras para a população idosa brasileira.

**Palavras-chave:** saúde pública; pessoa idosa; serviços de saúde; políticas de saúde; Organização Mundial da Saúde; qualidade de vida.

The heterogeneity of human aging and its implications for health and quality of life drive the search for accurate, effective processes for the assessment and care of the older adult. Furthermore, the accelerated growth of this population is a cause for concern among public health experts and managers worldwide. In 2015, the United Nations (UN) and the World Health Organization (WHO) forecast the consequences of population aging on economic and health systems in their respective reports on aging,<sup>1,2</sup> expressing particular concern about the speed of its progression in low- and middle-income countries, such as Brazil.

Given this scenario, in 2017, a WHO-led working group composed of subject matter experts representing different nations prepared a document proposing systematic, evidence-based actions with the aim of mitigating the negative impacts of aging and this demographic transition.<sup>3</sup> The WHO Integrated Care for Older People (ICOPE) proposal was born. Built around the concept of intrinsic capacity (IC), ICOPE aims to promote the early identification of IC losses, thus providing opportunities to adopt interventions capable of preserving the functional ability of older adults. The strategy is structured into five stages or steps:

1. Screening people at risk of functional decline in each of the IC domains (vitality, visual capacity, hearing capacity, locomotor capacity, cognitive capacity, and psychological capacity);
2. Establishment of detailed pathways for subsequent assessment of each domain found to be potentially impaired on screening;
3. Development of a person-centered care plan, with interventions aimed at the domain(s) in which impairment was confirmed by the previous assessment step;
4. Monitoring of people under such care plans;
5. Proposal of actions aimed at supporting family members and caregivers and engaging communities regarding the issue of aging (promoting a pro-aging culture and preventing ageism).

Despite this robust theoretical framework and annual reviews and improvement by an advisory group of experts,<sup>4-9</sup> WHO has recognized in its report on ICOPE pilot studies<sup>10</sup> that the large-scale implementation of this strategy still requires validation through more robust studies with more representative samples. Furthermore, a recent scoping review<sup>11</sup> demonstrated the scarcity and heterogeneity of evidence of validity regarding the accuracy of the ICOPE screening instrument, which highlights the need for better evaluation of its psychometric properties. WHO understands that all of these steps are essential for the responsible implementation

of any public health strategy,<sup>10</sup> ensuring the optimization of available resources, avoiding waste and, especially, safeguarding older adults from unnecessary or even harmful interventions (such as iatrogenesis, one of the major geriatric syndromes).

In Brazil, the National Council of State Secretaries of Health (CONASS) recently published the *Manual de Avaliação Multidimensional da Pessoa Idosa para a Atenção Primária à Saúde: Aplicações do IVCF-20 e do ICOPE (Handbook for Multidimensional Geriatric Assessment in Primary Care: Applications of the IVCF-20 and ICOPE)*.<sup>12</sup> This handbook proposes not only the immediate incorporation of the ICOPE screening instrument into primary health care (PHC) settings of the Brazilian Unified Health System (SUS), but also its use in conjunction with another multi-domain screening instrument: the Clinical-Functional Vulnerability Index-20 (*Índice de Vulnerabilidade Clínico-Funcional-20, IVCF-20*). Even though this initiative reflects a necessary concern with the accelerated aging of the Brazilian population, its rushed implementation in PHC settings appears hasty and may pose risks.

Regarding the ICOPE screening tool, the validation data produced to date are still insufficient, as recognized by WHO itself.<sup>10,11</sup> Analysis of the underlying concept and sources of validity evidence from the standpoint of contemporary psychometric recommendations<sup>13,14</sup> clearly shows a need for additional exploration of the internal structure of the instrument, based on content defined and validated for the Brazilian reality. The evidence of validity available in the literature<sup>11</sup> supports the tool's ability when used in association with other variables, notably of a predictive nature, but without any preceding analysis of its internal structure, thus reducing the strength of inference of any further analysis of predictive ability and accuracy.<sup>13,14</sup> Studies designed to assess the psychometric properties of the ICOPE tool and pilot testing of its implementation are underway in different countries, such as France, China, and Brazil.<sup>15-17</sup> The ICOPE Brasil project, for instance, a multicenter, longitudinal study with a psychometric arm that will include more than 4,000 individuals aged 60 and older, is in the recruitment phase.<sup>17</sup>

The IVCF-20, in turn, is a locally designed instrument meant to assess vulnerability in older adults. In its development study,<sup>18</sup> the IVCF-20 was compared to a comprehensive geriatric assessment (CGA) in a convenience sample of 449 individuals seen at a single referral center. However, the instruments included in this CGA were not described in detail in the study, making interpretation of the results obtained by the authors impossible. Furthermore, the validation procedures adopted by the authors<sup>18</sup> were not robust or consistent with currently recommended concepts and methods.<sup>13,14</sup> In our view, there is not yet sufficient evidence to unequivocally conclude or even infer

that the IVCF-20 has a high enough level of validity and reliability. From the available literature, it is possible to infer that the IVCF-20 has some evidence of validity based on relation to other variables but, to date, there is no evidence whatsoever of internal structure or overall validity of the test to support the statement made by the authors<sup>12,18</sup> that the instrument has “excellent evidence of validity” or is “ready for use”.

Therefore, contrary to what is stated in the CONASS handbook,<sup>12</sup> one cannot yet state that “[...] the IVCF-20 presents high accuracy for recognition of frail older adults” (page 20). The literature that underlies this claim of accuracy is limited to a study by Moraes et al.<sup>18</sup> and a master’s thesis<sup>19</sup> and its corresponding journal article.<sup>20</sup> Another excerpt from the aforementioned handbook<sup>12</sup> states that the IVCF-20 is “[...] recognized as being one of the four best instruments in the world capable of recognizing frailty [...]”, citing a systematic review that, despite its methodological limitations, makes no claim whatsoever of superiority of one instrument over another (not even the IVCF-20), but rather recommend caution in relation to all of the instruments investigated.<sup>21</sup> Finally, the CONASS handbook<sup>12</sup> proposes unqualified use of the IVCF-20 at the national level in a country with marked regional differences, despite the instrument only ever having been tested in a single center of excellence, with all of the particularities that entails.

In view of the foregoing, it seems clear to us that, to date, neither the ICOPE screening instrument nor the IVCF-20 has sufficient evidence of validity to warrant inclusion in guidelines or handbooks for the assessment of older adults. Consequently, the proposed combination of two strategies (ICOPE and IVCF-20) with such distinct underlying frameworks, both of which still lack adequate validation, appears inordinately hasty. Even though the primary objective of the document is legitimate insofar as it proposes solutions to a

real problem which is only likely to worsen, the implementation of this proposal without adequate evidence of validity or real benefit would be filled with uncertainty and carry a high risk of potential unanticipated harm to the population and to the treasury.

There is an unquestionable, urgent need to disseminate knowledge and expand training in the care of older adults in Brazil. Although the establishment of care pathways solidly grounded in PHC for this population is essential, there is a clear need for better scientific evidence before these propositions can be written into manuals and recommended for system-wide implementation. A more in-depth evaluation of the proposed tools and of the subsequent steps resulting from their application must be informed by robust scientific studies, not necessarily long-term but employing reliable, up-to-date methods, and aimed not only at generating evidence of the validity of the proposed instruments but also at establishing the efficiency and sustainability of a program of this magnitude when implemented across such heterogeneous scenarios. Adequate pilot testing of assessment and care pathways in primary care settings, based on the tenets of implementation science, can shed light on these myriad uncertainties and thus inform more rational choices in policymaking for public health.

Finally, given the challenge to be faced, we suggest that a meeting be held as soon as possible with experts from across the country, representing universities, the federal government (Ministries of Health; Social Development and Assistance, Family, and Fight against Hunger; and Human Rights and Citizenship), state Departments of Health, and supranational organizations (such as the Pan American Health Organization and WHO), to establish short-term interventions aimed at better adapting the public health and social care systems to the needs of older adults.

## DECLARATIONS

### Conflict of interest

The authors report no conflicts of interest. RAL, RGBM, and RELFR are editors of this journal. The Editor-in-Chief was the handling editor, to ensure the selection of unbiased external peer-reviewers.

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### Authors’ contributions

RAL: conceptualization, writing – review & editing, methodology. RGBM: conceptualization, writing – original draft, writing – review & editing. RELFR: conceptualization, writing – review & editing, methodology. VPO: conceptualization, writing – original draft, writing – review & editing. EF: conceptualization, writing – review & editing, methodology.

### Ethical approval and informed consent

Not applicable.

### Data availability statement

There are no data to share.

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