

## LETTER TO THE EDITOR

**AA. Zulfiqar. Comment on: Formosa V, Lorusso G, Lentini G, Terracciano E, Gentili S, Liotta G. Multidimensional Short Tools to assess frailty: a narrative review. (Ann Ig 2022 Mar 18. doi: 10.7416/ai.2022.2516. Online ahead of print)**

**Key words:** *Frailty, Elderly, Short tool, Health, Multidimensional evaluation, Primary care, Physical, Psychological, Care, Social*

### **Abstract**

Once read the paper by Formosa et al in Ann Ig 2022 Mar 18. Online ahead of print, where the Authors ask for more studies to assess validity and reliability of the short tool to evaluate frailty proposed by me, through this letter I intend to demonstrate that its validity and reliability have been proved by a series of applications already published in the last past months.

Dear Editor,

We read with interest the review article proposed by Formosa V, Lorusso G, Lentini G, Terracciano E, Gentili S, Liotta G: "Multidimensional Short Tools to assess frailty: a narrative review" (1). We hope our present answers will help readers to fully appreciate the article. This narrative review focuses on scales assessing frailty with a short length and duration of administration, composed by multidimensional domains, like our scale, the Zulfiqar Frailty Scale (ZFS). By evoking our scale, Formosa V et al mentioned «*more studies are needed to assess validity and reliability*». For readers, we want to make some clarifications. The Zulfiqar Frailty Scale "ZFS" was tested in some general practitioner's offices in France and these studies were published. We offer you a sum-up about these results. In fact, this frailty scale was created in an outpatient setting in conjunction with general physicians and tested for the first time in Planoët in Brittany (2). Our frailty screening scale has been the subject of several published studies since the original article was published in the journal MEDICINES MDPI. The results of the proof-of-concept study were very satisfactory and reproducible, and similar results have been found in subsequent trials. A simplified scale derived from the Zulfiqar Frailty Scale (sZFS) was created with 5 items (only 1 question regarding social interactions; the item "Does the patient benefit from home care?" was removed).

In the various studies that were conducted, it took less than 2 minutes to complete the test. The scale is therefore ideal for an outpatient setting. Physicians are provided all the necessary information on the patient's treatments, social interactions, and nutrition. Each item in the questionnaire can potentially score 1 point, for a total of 6 points. The elderly person is considered "frail" by our ZFS scale if they score 3 or higher. For scores of 1 or 2, the patient is considered "pre-frail." For a score of 0, the elderly person is considered "non-frail" or "robust."

In this table, we provide for readers a sum-up of our different studies we conducted in order to validate our frailty scale (Table 1).

Table 1 - Summary of the characteristics of the different studies and populations.

|                                     | Creation of a New Frailty scale in Primary Care: ZFS (2) | Frailty in Primary Care Validation of the sZFS (3) | Validation of the Zulfiqar frailty Scale (ZFS): A New Tool for General Practitioners (4) | Validation of a new frailty scale in primary care: The sZFS (5) | Creation of a new frailty scale in primary care: the ZFS (6) |
|-------------------------------------|--|--|--|---|--|
| Population                          | => 75 y, ADL >= 4  | => 65 y, ADL >= 4                                  | => 65 y, ADL >= 4  | => 65 y, ADL >= 4   | => 75 y, ADL >= 4  |
| Localization                        | Brittany   | Normandy   | Alsace   | Champagne - Ardennes  | Poitou - Charente  |
| Number of elderly patients included | 102 patients   | 107 patients                                       | 102 patients   | 268 patients  | 200 patients   |
| Age                                 | 74 (7)   | 77.5 (7.8)   | 82.65 (4.79)   | 81.4 (4.82)   | 75.9 (8)   |
| Compared with                       | GFST scale   | Fried  | Fried  | Modified SEGA scale   | Modified SEGA scale  |
|                                     |  |  | GFST scale   | CGA   |  |
|                                     |  |  |  | CGA   |  |
| Duration time ZFS/sZFS (seconds)    | 77   | 110  | 109.62   | 71.7  | 92.75  |

ADL: activity of daily living; y: years; sZFS: simplified Zulfiqar Frailty Scale; ZFS: Zulfiqar Frailty Scale; GFST: Gérontopôle Frailty Screening Tool; SEGA: Short Emergency Geriatric Assessment; IADL: Instrumental Activity of Daily Living; CGA: Comprehensive Geriatric Assessment.

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The results of the studies are very satisfactory: the correlations between the Zulfiqar scale (and the simplified scale) and other frailty scales are very satisfactory. In addition, the areas under the curve ranged from 0.80 to 0.94. These results show that the ZFS and sZFS are outstanding tools for detecting frailty. Our goal was to create a rapid frailty screening scale that would be useful for general practitioners. The purpose of our scale is the early detection of frail elderly people, helping to delay the loss of autonomy. The value of systematic screening for frailty in the general practice requires large-scale prospective studies. Adapted physical activity, nutritional management, and diagnosis of underlying pathologies are the main axes of interventions.

A future study will assess the ability of our ZFS frailty screening tool to predict the onset of morbidity and mortality within 6 months for a group of elderly subjects monitored by general practitioners, in particular with regard to falls, fractures, unscheduled hospitalizations (including emergency room visits), a loss of autonomy, institutionalization, and death. The study will begin in the Champagne-Ardenne and Normandy regions of France.

Conflict of interest: None

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