Key messages:

- The overcrowding of the Emergency Room (ER) by the elderly is still a focus of public health policies, also due to the recent COVID-19 outbreak.
- Comorbidity and lack of social support impacted ER access and the overcrowding of the emergency department.

Predictors of ER access of frail elderly: a way to fighting the COVID-19 outbreak

Susanna Gentili

S *Gentili*¹, *E Terracciano*¹, *G Liotta*¹

¹Biomedicine and Prevention, University of Rome Tor Vergata, Rome, Italy Contact: susanna_gentili@virgilio.it

Background:

The overcrowding of the Emergency Room (ER) by the elderly is still a focus of public health policies, also due to the recent COVID-19 outbreak. Health policies have tried to mitigate the high use of ER by implementing community care on health demand in the absence of a plan to manage the increasing request of out-of-hospital care. This study aimed to investigate the predictors of Emergency Room Access (ERA) and No-Urgent Emergency Room Access (NUERA) of community-dwelling frail older adults.

Methods:

An observational longitudinal cohort study was carried out. The cohort was made up of 1246 community-dwelling frail older adults (over 64) residents into the Latium Region. The ER admission rate was assessed over three years from the baseline administration of the Functional Geriatric Evaluation questionnaire to evaluate Bio-Psycho-Social Frailty. The GENLIN ordinal regression model was used to identify the predictors of ERA and NUERA.

Results:

Mean age was 73.6 (SD \pm 7.1) years, and 53.4% were female. The sample was stratified in Robust (43.5%), Pre-frail (35.8%), Frail (14.0%), and Very Frail (7.3%). The ordinal logistic regression model highlighted the predictive role of comorbidity (OR=1.13, p<0.001) and frailty level (OR=1.29, p<0.001) for ERA. With regard to NUERA, the predictors were social network (OR 0.54, P-value = 0.015) and) and a medium score of pulmo-cardio-vascular function (OR 1.50, P-value = 0.006).

Conclusions:

Comorbidity and lack of social support impacted ER access and the overcrowding of the emergency department. Overall bio-psycho-social frailty represents an indicator of the frequency of ER accesses. This study could support policy-makers and public health professionals in implementing community health care and defining and meeting the demand for care of non-frail individuals.