Table 1 Medication use at admission versus discharge among patients presenting with falls

	N = 292n (%)		
	Admission	Discharge	P value
Any PIM	207 (70.9)	230 (78.8)	<0.001
Total number of PIMs, median (IQR)	1 (0–2)	2 (1–3)	< 0.001
Total number of medications, median (IQR)	11 (6–15)	12 (8–16)	< 0.001
Polypharmacy <sup>†</sup>	252 (86.3)	264 (90.4)	0.004

†Defined as ≥4 medications

IQR, interquartile range; PIMs, potentially inappropriate medications.

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#### Disclosure statement

The authors declare no conflict of interest.

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### References

- 1 Bergen G, Stevens MR, Burns ER. Falls and fall injuries among adults aged ≥65 years United States, 2014. *MMWR Morb Mortal Wkly Rep* 2016; **65**: 993–998.
- 2 Galet C, Zhou Y, Eyck PT, Romanowski KS. Fall injuries, associated deaths, and 30-day readmission for subsequent falls are increasing in the elderly US population: a query of the WHO mortality database and

- National Readmission Database from 2010 to 2014. *Clin Epidemiol* 2018; **10**: 1627–1637.
- 3 American Geriatrics Society Beers Criteria Update Expert Panel. American Geriatrics Society 2019 updated AGS beers criteria for potentially inappropriate medication use in older adults. *J Am Geriatr Soc* 2019; 67: 674–694.
- 4 Francis E, Dyks D, Kanji S. Influence of admission to a tertiary care hospital after a fall on use of potentially inappropriate medications among older patients. *Can J Hosp Pharm* 2014; **67**: 429–435.
- 5 Walsh ME, Boland F, Moriarty F, Fahey T. Modification of potentially inappropriate prescribing following fall-related hospitalizations in older adults. *Drugs Aging* 2019; 36: 461–470.
- 6 McMahon CG, Cahir CA, Kenny RA, Bennett K. Inappropriate prescribing in older fallers presenting to an Irish emergency department. Age Ageing 2014; 43: 44–50.
- 7 Marvin V, Ward E, Poots AJ, Heard K, Rajagopalan A, Jubraj B. Deprescribing medicines in the acute setting to reduce the risk of falls. Eur J Hosp Pharm 2017; 24: 10–15.
- 8 Cossette B, Éthier J-F, Joly-Mischlich T et al. Reduction in targeted potentially inappropriate medication use in elderly inpatients: a pragmatic randomized controlled trial. Eur J Clin Pharmacol 2017; 73: 1237–1245.

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# Mental health stigma related to novel coronavirus disease (COVID-19) in older adults

Keywords: coronavirus, COVID-19, mental health, stigma.

Dear Editor,

The coronavirus disease 2019 (COVID-19) pandemic has become a global issue. Although COVID-19 has a higher incidence than other respiratory disease, such as influenza or SARS, it has a lower mortality rate. However, it seems to be becoming psychosocial stigma that attacks the dignity of those infected with it.<sup>1</sup>

According to research, there is a direct relationship between age and COVID-19 disease. Less than 5% of people aged <50 years have been hospitalized in the UK because of COVID-19, but in people aged 70–79 years age, the hospitalization rate reaches 24 %. Of patients age <40 years, 5% have been

transferred to intensive care compared with 27% of patients aged 60–69 years and 43% of patients aged 70–79 years.  $^2$ 

According to the USA Centers for Disease Control and Prevention, intensive care and deaths were higher in older adults; that is, 53% of those admitted were aged >55 years, and 80% of deaths were in people aged >65 years.<sup>3</sup>

With the spread of the coronavirus, especially among older adults, and the growing fear and anxiety, the issue of coronavirus stigma with older adults or those associated with older adults has become a major social concern.

Stigma is an annoying social force associated with a multitude of traits, conditions and social groups. Explanations for mental health

stigmatization include the social situation, which suggests people become classified as undesirable due to possessing a certain attribute or showing certain behaviors. In turn, this attitude leads to generalized stigma toward a subsection of society; in this case, people who experience illness. Any number of attributes or conditions can be stigmatizing, including infectious diseases, such as COVID-19.

Stigma and fear of stigma are very important in Eastern cultures, such as Iran. Because in these cultures, issues, such as misconceptions and labeling of patients, the use of words with negative connotations, the spread of misinformation and misinterpretation on social networks, and the use of terms that make people feel guilty, are very common.

Mental health stigma as a result of COVID-19 causes older people to hide early symptoms of the disease and not seek healthcare because of fear of discriminatory behavior. Thus, this stigma leads to the reluctance of older patients to undergo tests, not seeking out for healthcare services, non-commitment to treatment and non-disclosure of disease. Even older adults who do not have the disease, but have common characteristics and symptoms (such as cough or fever), might suffer from this stigma. Evidence clearly shows that stigma and fear of communicable diseases prevent responding to the disease.

The hypothesis that older people are more likely to have COVID-19 leads to people in the community being less likely to have contact with older people. This leads to the isolation of older people. Therefore, mental health stigma can weaken social cohesion and lead to social isolation among older adults.<sup>5</sup>

The mental health stigma of having COVID-19 causes older adults to not only endure the pain and stress of illness, and fear of death, but also suffer the negative attitudes and feelings of society, such as rejection, humiliation and other kinds of discrimination. Therefore, it appears that the consequences and problems of COVID-19-related mental health stigma are more painful for older adults than the disease itself.

Older people with COVID-19 experience three types of stigma: (i) self-stigma in that they feel deficient and devalued; (ii) stigma from family who reject them; and (iii) stigma from society who discriminate against older adults and prevent their full integration into society. Self-stigma reduces self-esteem, and leads to feelings of shame and not wanting to ask for help from others. Stigma from family and society leads to more social isolation, and not using social opportunities.

Generally, COVID-19-related mental health stigma among older adults is associated with several factors: (i) a high prevalence

and mortality from COVID-19; (ii) lack of awareness of COVID-19, and consequently the general public's fear of the illness; and (iii) attributing this fear to older adults, and the prevalence and spread of inaccurate and false information. This incorrect information and rumors play an important role in the negative effects of COVID-19, including stigma and discrimination among older adults. Therefore, to prevent and control the coronavirus, it is important to pay attention to COVID-19-related mental health stigma, especially among older adults.

#### Disclosure statement

The author declares no conflict of interest.

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#### REFERENCES

- 1 Mahase E. Coronavirus: covid-19 has killed more people than SARS and MERS combined, despite lower case fatality rate. Br Med J 2020; 368: m641.
- 2 Roser M, Ritchie H, Ortiz-Ospina E. Coronavirus disease (COVID-19)– statistics and research. Our World Data 2020. Avaliable from https:// ourworldindata.org/coronavirus
- 3 Jernigan DB. Update: public health response to the coronavirus disease 2019 outbreak—United States, February 24, 2020. MMWR Morb Mortal Wkly Rep 2020; 69: 216–219.
- 4 Bharadwaj P, Pai MM, Suziedelyte A. Mental health stigma. *Econom Lett* 2017; **159**: 57–60.
- 5 Wu IH, Bathje GJ, Kalibatseva Z, Sung D, Leong FT, Collins-Eaglin J. Stigma, mental health, and counseling service use: a person-centered approach to mental health stigma profiles. *Psychol Serv* 2017; **14**: 490–501.

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#### **COMMENTS**

# Comment on article by Abe et al.

Keywords: calf circumferences, hearth failure, mid-arm circumference, sarcopenia, sarcopenia index.

Dear Editor,

A recent study by Abe *et al.* published in *Geriatrics & Gerontology International* suggested that calf circumferences (CC) and mid-arm circumference (MAC) were more closely associated with the appendicular skeletal muscle mass index than the sarcopenia index, defined as the serum creatinine/cystatin C ratio, in patients with heart failure (HF). Sarcopenia that is defined as the loss of muscle mass accompanied by

reduced performance was first described by Rosenberg in the 1989.<sup>2</sup> Subsequently, several clinical and diagnostic algorithms for sarcopenia and their updates have been generated during the last decade in Europe,<sup>3,4</sup> the USA<sup>5</sup> and Asia.<sup>6</sup> Although no consensus has been reached concerning a certain muscle parameter to define sarcopenia in the clinical setting, tools to estimate the muscle mass and global performance have been well described in these reports. There is also a wide agreement that the use of anthropometric indices to determine skeletal