

## Letter to the Editor

### Sociodemographic aspects of the older population in front of COVID-19 pandemic in a developing country: the case of Peru



#### Aspectos sociodemográficos de la población adulta mayor frente a la pandemia de la COVID-19 en un país en vías de desarrollo: el caso de Perú

To the editor:

On August 2020, National Institute of Statistics and Information updated population data (32,625,948 citizens)<sup>1</sup> in which Peru became the second country with the highest mortality rate from coronavirus disease 2019 (COVID-19) around the world with 91.5 deaths per 100,000 people and a case fatality rate (CFR) of 4.32%.<sup>2</sup> It is known public health system deficiencies could contribute to high mortality rates but sociodemographic features of individuals over 60 years old (older adult) are also matter factors which may explain the impact of the disease.

First of all, older adults are a risk group for severe COVID-19 and represent 12.7% of the national population<sup>1</sup>. In fact, almost 70% of COVID-19 deaths have been of this group age in Peru. We did not have access to the quantity data of stratified age groups but present CFRs by age and sex in Table 1. Our findings determined that males between 90-99 years was the most affected age group (CFR = 39.35%). In accordance with the current evidence,<sup>3,4</sup> we corroborated older adults and men were the most affected groups.

On the other hand, 42% and 29.5% of nuclear and extended families had at least one older adult respectively; and 19.6% were one-older adult households<sup>1</sup>, so they might be exposed to potential cases. In order to contain COVID-19, Peruvian government has implemented several strategies and diffuse mainly precautionary measures through the media. Nevertheless, 66.3% and 61.1% of households with at least one older adult do not have internet service and cable television, respectively and almost 17 out of every 100 older adults are illiterate at the national level<sup>1</sup>. These conditions may make it difficult the access to preventive information.

**Table 1**

Cases, deaths by COVID-19 and case fatality rates (data updated September 9, 2020).

Items		0-9 years	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70-79 years	80-89 years	90-99 years	Over 100 years
Cases	Total	17731	31731	117138	154091	137889	113166	70551	36254	15264	2666	117
	Women	8492	16514	56590	72760	62502	50358	31662	15754	6794	1365	74
	Men	9239	14662	60548	81331	75387	62808	38889	20500	8470	1301	43
Deaths	Total	78	62	241	834	2444	5495	8432	7399	4269	849	20
	Women	35	26	87	245	613	1344	2495	2314	1446	337	8
	Men	43	36	154	589	1831	4151	5937	5085	2823	512	12
Case fatality rates	Total	0.44	0.20	0.21	0.54	1.77	4.86	11.95	20.41	27.97	31.85	17.09
	Women	0.41	0.16	0.15	0.34	0.98	2.67	7.88	14.69	21.28	24.69	10.81
	Men	0.47	0.25	0.25	0.72	2.43	6.61	15.27	24.80	33.33	39.35	27.91

Staying at home has also been recommended but this is unlikely because 14.9% of older adults are in poverty, more than half who work (53.5%) are independent and 63% does not have any retirement system<sup>3</sup>. Furthermore, 63% of the national population, with at least one older adult, do not have a refrigerator.<sup>1</sup> These characteristics influence this group in order to go out street or to work in informal jobs, exposing themselves to contagion risk and possible adverse outcomes.

Finally, another recommendation to avoid COVID-19 is frequent hand washing. Indeed, it has been recognized as the most efficient form of prevention among Peruvian general population (98.2%).<sup>5</sup> Although, 10% of households, with at least one older adult, still do not have a public water supply network.<sup>1</sup>

COVID-19 pandemic affected Peru in a vulnerability context for the older population. This letter suggests sociodemographic components, including age, sex, type of household, the situation of internet service and cable television, illiteracy, economic situation, job category, the state of retirement system, the possession of refrigerator and the condition of water service, are potential key factors in shaping the pattern of COVID-19 deaths across the country. It is necessary to find a suitable way to support and reach this risk population.

#### Availability of data

The data of COVID-19 cases and deaths used in this letter are freely available online in Spanish at National Open Data Platform: [https://www.datosabiertos.gob.pe/search/field\\_topic/covid-19-917?sort\\_by=changed](https://www.datosabiertos.gob.pe/search/field_topic/covid-19-917?sort_by=changed).

#### Authorship contributions

J.D. Mendoza-Saldaña and J.E. Viton-Rubio contributed to conceptualization, data curation, formal analysis, writing-original draft, writing-review and editing. Authors guarantee the precision, transparency and honesty of the data and information contained in the letter; no relevant information has been omitted; and that all discrepancies between authors have been adequately resolved.

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None.

**Conflicts of interest**

None.

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E-mail address: [juan.mendoza.s@upch.pe](mailto:juan.mendoza.s@upch.pe) (J.-D. Mendoza-Saldaña).<https://doi.org/10.1016/j.gaceta.2020.09.004>0213-9111/ © 2020 SESPAS. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).**La crisis española y los servicios de enfermería durante la COVID-19****The Spanish crisis and nursing services during COVID-19**

Sr. Editor:

En el artículo *The resistance of nurses to austerity measures in the health sector during the financial crisis in Spain*, de Gea-Sánchez et al., se evidencian las difíciles condiciones laborales que padecen las enfermeras desde el año 2009<sup>1</sup>, debido a las medidas de austeridad presupuestaria aplicadas por el Gobierno español. Estas políticas públicas trajeron diversas consecuencias, como el recorte salarial y la disminución de puestos laborales en el sector público.

Estos reajustes ocasionan que la enfermería se convierta en una profesión poco atractiva para los jóvenes y en su lugar prefieran carreras de otras áreas, como las ingenierías, que garantizan mayores ingresos salariales. Esta es una de las consecuencias de la migración del profesional de la salud a otros países. Por otro lado, este escenario obligó a que muchas enfermeras buscaran empleos en el sector privado, que va desde las clínicas particulares hasta la atención a domicilio. Por tanto, se redujo el tiempo para actividades académicas y personales.

A ello sumamos la ausencia de recursos económicos de parte del Estado para brindar una capacitación adecuada que les permitiría realizar su trabajo con mayor eficiencia acorde con los nuevos desafíos que la sociedad exige. Esta política gubernamental no solo es propia de España, sino también de otros países pertenecientes a la Unión Europea que también implementaron medidas similares. Cada vez más, los gobiernos se interesan menos por invertir en la formación de las enfermeras<sup>2</sup>, y menos aún por invertir en estudios de especialización, posgrado<sup>3,4</sup>, etc. Todo ello produce una gran insatisfacción en el personal de salud porque se sienten poco valorados y motivados.

Finalmente, pese a que esta disminución presupuestal sucedió hace más de diez años, sus efectos todavía son evidentes; por ejemplo, existe poco personal de la salud calificado para lidiar eficientemente contra la COVID-19<sup>5</sup>. Las condiciones en que laboran las enfermeras en estos momentos no son las más adecuadas, y por eso confiamos en que esta situación pueda ser revertida en un futuro.

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