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Informe SESPAS

Gender perspective in COVID-19. SESPAS Report 2022

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A B S T R A C T

Keywords:

Sex, Gender, Sex-differences, gender bias, COVID-19, Disease outbreaks analysis, Disease outbreak statistics and numerical data

We failed to adequately launch a gender transformative response to COVID-19 pandemic, data by sex on a variety of indicators for most countries are hard to find. Some symptoms reported as common of COVID-19 infection, are more prominent in men, while others are more prominent in women, one cannot with certainty exclude that some of the differences observed could be due to gender bias in the management of cases in health services. The gender implications of the pandemic reach wide and far. Inequalities can be further aggravated as sex and gender intersect with other axes of inequality. The SAGER guidelines exemplify an effort to improve reporting of sex and gender dimensions and encouraging researchers to integrate these aspects in the research design. These observations and emerging evidence about the persistent gender-blind approach to COVID-19 is a wake-up call to change course. National Gender Equality Institutions can be central in ensuring gender matters are considered in government responses. COVID-19 pandemic is an opportunity to reverse the trend and take action to apply an intersectional feminist approach to global health that enables a just and equal world where everyone's health and wellbeing matter.

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Perspectiva de género en la COVID-19. Informe SESPAS 2022

R E S U M E N

Palabras clave:

Sexo, género, diferencias de sexo, sesgo de género, COVID-19, análisis de brotes de enfermedades, estadísticas de brotes de enfermedades y datos numéricos

No se ha conseguido dar una respuesta adecuadamente transformadora desde la perspectiva de género a la pandemia de la COVID-19. Los datos por sexo en una variedad de indicadores para la mayoría de los países son difíciles de encontrar. Algunos síntomas comunes de la infección por COVID-19, son más frecuentes en los hombres, mientras que otros lo son en las mujeres, no pudiendo excluir con certeza que algunas de las diferencias observadas se deban a un sesgo de género en el manejo de los casos en los servicios de salud. Las implicaciones de género de la pandemia son amplias y de gran alcance. Las desigualdades pueden agravarse aún más cuando el sexo y el género se cruzan con otros ejes de desigualdad. Las directrices del SAGER ejemplifican un esfuerzo por mejorar la información sobre las dimensiones de sexo y género y por animar a quienes investigan a integrar estos aspectos en el diseño de la investigación. Estas observaciones y las pruebas emergentes sobre el persistente enfoque ciego al género de la COVID-19 son una llamada de atención para cambiar de rumbo. Las instituciones nacionales de igualdad de género pueden ser fundamentales para garantizar que las cuestiones de género se consideren en las respuestas gubernamentales. La pandemia de la COVID-19 es una oportunidad para invertir la tendencia y tomar medidas para aplicar un enfoque feminista interseccional en la salud global que permita un mundo justo e igualitario donde la salud y el bienestar de todos y todas importen.

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The COVID-19 pandemic has bitterly reminded us about the persistent gender inequality in our societies and the pervasive gender bias in health research and data analysis, hampering tailored and effective responses.¹ While lessons from past pandemics and outbreaks such as human immunodeficiency virus, Ebola and Zika should have prepared us for the undisputable gendered implications of this pandemic,² we failed to adequately launch a gender transformative response to COVID-19 pandemic. This has led to

deepening gender inequities in terms of physical, mental, social, and economic health.³

To date we know with certainty that there are sex and gender differences in risk to COVID-19 infection and health outcome, including a wide range of gendered implications of the measures to contain the pandemic. Biological factors account for some of the observed sex differences, including men's greater risk of severe illness and death, and greater risk of post-COVID-19 syndrome in women, the mechanisms for which remain to be elucidated.^{3–8} Gender-responsive research could generate greater insights. However, sex-disaggregated data continue to be underreported, and regrettably, data by sex on a variety of indicators, including

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Key points

- The quality of epidemiological surveillance needs to be improved, the COVID-19 pandemic has demonstrated flaws in its system also from the perspective of sex differences and gender inequalities.
- Basic COVID-19 sex data for most countries are hard to find, including symptoms, comorbidity, diagnostic tests, hospitalisation, ICU admission, and post-COVID-19 as well as cases and deaths. Without this information, there is uncertainty about the higher mortality from COVID-19 in men than in women, at least in some countries.
- Some common symptoms of COVID-19 infection are more frequent in men, while others are more frequent in women, and it cannot be excluded with certainty that some of the observed differences are due to a gender bias in case management in health services.
- Gender inequalities may be further exacerbated when sex and gender intersect with other axes of inequality.

symptoms, comorbidity, testing, hospitalization, ICU admission, and post-COVID-19 for most countries are hard to find.^{8–10}

Early data on COVID-19 symptoms from Spain indicate statistically significant differences in presentation of symptoms between women and men.^{11–13} This observation highlights how symptoms reported as common of COVID-19 infection, e.g., fever, difficulty breathing, and pneumonia, are more prominent in men, while more women seem to display symptoms such as sore throat, vomiting and diarrhea, which may not be considered “typical”. As such, one cannot with certainty exclude that some of the differences observed in terms of hospitalization, ICU admission and death could be due differential diagnosis or lower likelihood for ICU admission or due to lower access to health services.^{10,14} The excess mortality rate, which can be considered a more accurate measured of the overall impact of the pandemic, seem to vary across countries and age groups, and in some countries, such as Spain, it was reported to be somewhat higher among women according to the latest figures.^{12,15–17}

The gender implications of the pandemic reach wide and far. Notions of masculinity contribute to higher reluctance among men to comply with precautionary measures such as wearing masks, handwashing or in some places being vaccinated.¹⁸ As COVID-19 vaccines are being administered at scale, gender considerations of vaccination remain conspicuous by their absence. The rationale for such consideration is extensively outlined in a recent publication.^{19,20}

As the pandemic has evolved, the infection cases among women have increased due to the disproportionate burden of caregiving, both formally and informally. With more than 70% women, the health workers have been particularly affected as they stepped up to deliver services to the growing number of COVID-19 patients. At home, due to entrenched social norms and patriarchal gender role attitudes, women continued to shoulder even greater share of responsibility related to care of children and sick parents or relatives, and homeschooling when schools were closed, while expected to maintain the same level of productivity at work.^{21–24} There has also been a surge in reported cases of intimate partner violence and domestic abuse, and at the same time, reduced access to sexual and reproductive health services, severely affecting women’s health.²⁵ While these struggles preexisted, the pandemic exacerbated these harmful gender norms and has deepened pervasive gender inequalities.

The financial implications of the pandemic have also been harsher for women. In many parts of the world, the lockdowns and movement restrictions closed businesses and the service sector, where women often occupy low paid jobs and many were forced out of work. Again, due to deep-rooted gender inequalities, women are more likely to occupy part-time jobs or be in precarious employments, where social insurance and safety nets don’t apply to them. With many economic recovery plans being gender-blind, the effects of the pandemic can be far-reaching for women.²¹

These disparities can be further aggravated as sex and gender intersect with other axes of inequality such as age, ethnicity, disability, sexual orientation and gender identity, migration status and other social markers to influence risk, access to services and health outcomes.²⁶ Studies have reported the disproportionate impact on ethnic minorities, people living with disability, migrants and forcibly displaced populations, particularly women, and people of diverse sexual orientation and gender identity. These group face greater risk of infection and more barriers to access services and information.^{27–29} However, uneven, incomplete and fragmented reporting does not allow a thorough examination of disparities across groups in a society or the variations across and within countries, or changes in incidence over time in different groups.⁹

Sadly, despite the numerous reports highlighting the gendered impact of the pandemic, we see a persistent failure to adequately consider gender aspects in the pandemic response. Global Health 50/50 report further exposes how the vast majority of COVID-19 related policies, including those related to vaccine deployments, remain gender insensitive.³⁰

Efforts to address the persistent gender gap in health research and policies have been growing in the past decade. The SAGER guidelines exemplifies an effort to improve reporting of sex and gender dimensions, and encouraging researchers to integrate these aspects in the research design.^{31,32} The growing adoption of the SAGER guidelines, which have been translated into several languages, by several prestigious journals and publishers such as Elsevier and Springer is promising, thought their full implementation requires additional investment.^{33–35} At a critical time in the pandemic, where robust and detailed evidence can improve the effectiveness and success of our efforts, studies show that reporting of COVID-19 clinical research fail to comply with the SAGER guidelines’ recommendations. A recent systematic review by Palmer-Ross and colleagues reveals that of the 55 interventional clinical trials examined, none fully complied with the SAGER guidelines and only four mentioned briefly any potential differences between women and men.³⁶

Taken together, these observations and emerging evidence about the persistent gender-blind approach to COVID-19 is a wake-up call to change course. We need to invest in capacity building and mechanisms to improve collection and reporting of sex-disaggregated data and support routine sex and gender-based analysis. We must ensure that policies and interventions developed to respond to the pandemic is based on a solid foundation of gender-sensitive evidence.

Critical to this end is women’s equal and meaningful participation in decision-making at every level across research to policy continuum. While women predominate the healthcare system and are at greater risk of its social and economic impact, their voices are often absent or they remain under-represented in decision-making fora, where policies are crafted, interventions developed, or pandemic responses shaped. According to the COVID-19 Global Gender Response Tracker tool, of 225 COVID-19 task forces reviewed in 137 countries, women represented less than a quarter. Shockingly, there were no women in 26 task forces.³⁷ Similar observation was made in Spain, where women were underrepresented in nearly

75% of the advisory boards involved in the COVID-19 response.³⁸ As such, it's not surprising that policies remain gender-insensitive and women's needs go overlooked, perpetuating gender inequalities. Women's participation in decision-making does not mean that gender aspects are automatically incorporated, however, it is a requisite for a gender-transformative approach.

National Gender Equality Institutions can be central in ensuring gender matters are considered in government responses. The Spanish *Instituto de la Mujer*, for example, provided an assessment on the impacts of the COVID-19 pandemic on women as a means to inform policy-making processes and encourage these “aspects [to] be considered in order to incorporate a gender perspective into the response to COVID-19”.³⁹ However, national gender equality mechanisms must be fully resourced and supported to catalyze gender mainstreaming across other ministries and departments. Other examples of innovative steps taken are Canada and Iceland that are pushing for gender budgeting to promote gender-responsive COVID-19 policies.⁴⁰

COVID-19 pandemic is an opportunity to reverse the trend and take action to apply an intersectional feminist approach to global health that enables a just and equal world where everyone's health and wellbeing matter.⁴¹

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References

- Gender and COVID-19: Advocacy Brief. World Health Organization; 2020. Available at: <https://apps.who.int/iris/handle/10665/332080>.
- Davies SE, Bennett B. A gendered human rights analysis of Ebola and Zika: locating gender in global health emergencies. *International Affairs*. 2016;92:1041–60.
- Wenham C, Smith J, Morgan R. COVID-19: the gendered impacts of the outbreak. *Lancet*. 2020;395:846–8.
- Townsend L, Dyer AH, Jones K, et al. Persistent fatigue following SARS-CoV-2 Infection is common and independent of severity of initial infection. *PLoS One*. 2020;15:e0240784.
- Sudre CH, Murray B, Varsavsky T, et al. Attributes and predictors of long-COVID: analysis of COVID cases and their symptoms collected by the Covid Symptoms Study App. Available at: <https://www.medrxiv.org/content/10.1101/2020.10.19.20214494v2>.
- Abate BB, Kassie AM, Kassaw MW, et al. Sex difference in coronavirus disease (COVID-19): a systematic review and meta-analysis. *BMJ Open*. 2020;10:e040129.
- Bischof E, Oertelt-Prigione S, Morgan R, et al., The Sex and Gender in COVID19 Clinical Trials Working Group (SGC). Gender and COVID19 Working Group. Towards precision medicine: inclusion of sex and gender aspects in COVID-19 clinical studies – acting now before it is too late— A joint call for action. *IJERPH*. 2020;17:3715.
- Heidari S, Ahumada C, Kurbanova Z. Towards the real-time inclusion of sex- and age-disaggregated data in pandemic responses. *BMJ Glob Health*. 2020;5:e003848.
- Global Health 50/50. Available at: <https://globalhealth5050.org>.
- Ruiz-Cantero MT. Ceguera de género en la información sobre la COVID-19 Los datos hablan. *Gac Sanit*. 2021;S0213–9111, <http://dx.doi.org/10.1016/j.gaceta.2021.06.003>, 00114-X. Online ahead of print.
- Informe No 33. Análisis de los casos de COVID-19 notificados a la RENAVE hasta el 10 de mayo en España a 29 de mayo de 2020. Equipo COVID-19. National Epidemiological Surveillance System (RENAVE) of the Ministry of Health. RENAVE. 2020.
- Ruiz Cantero MT. Las estadísticas sanitarias y la invisibilidad por sexo y de género durante la epidemia de COVID-19. *Gac Sanit*. 2021;35:95–8.
- Informe sobre la situación de COVID-19 en personal sanitario en España a 30 de abril de 2020. Equipo COVID-19. National Epidemiological Surveillance System (RENAVE) of the Ministry of Health. RENAVE. 2020.
- Ancochea J, Izquierdo JL, Soriano JB. Evidence of gender differences in the diagnosis and management of coronavirus disease 2019 patients: an analysis of electronic health records using natural language processing and machine learning. *J Womens Health (Larchmt)*. 2021;30:393–404.
- Islam N, Shkolnikov VM, Acosta RJ, et al. Excess deaths associated with covid-19 pandemic in 2020: age and sex disaggregated time series analysis in 29 high income countries. *BMJ*. 2021;373:n1137.
- The dashboard of the Ministry of Health, Spain. (Accessed August 24, 2021.) Available at: <https://momo.isciii.es/public/momo/dashboard/momo.dashboard.html>.
- MoMo. Periodos de exceso desde enero de 2020. Published 19 July To 18 September. (Accessed October 4, 2021.) Available at: <https://momo.isciii.es/public/momo/dashboard/momo.dashboard.html>.
- FDU Poll finds masculinity is a major risk factor for COVID-19. Fairleigh Dickinson University. Published February. 2021;16 (accessed April 12, 2021.) Available at: <https://www.fdu.edu/news/fdu-poll-finds-masculinity-is-a-major-risk-factor-for-covid-19/>.
- Heidari S, Goodman T. Critical sex and gender considerations for equitable research, development and delivery of COVID-19 vaccines. Published online April. 2021;18 (accessed July 5, 2021.) Available at: <https://www.who.int/publications/m/item/critical-sex-and-gender-considerations-for-equitable-research-development-and-delivery-of-covid-19-vaccines>.
- Heidari S, Durrheim DN, Faden R, et al. Time for action: towards an intersectional gender approach to COVID-19 vaccine development and deployment that leaves no one behind. *BMJ Glob Health*. 2021;6:e006854.
- Profeta P, Caló X, Occhiuzzi R. COVID-19 and its economic impact on women and women's poverty. Policy Department for Citizens' Rights and Constitutional Affairs. 2021. Available at: [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/693183/IPOL_STU\(2021\)693183_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/693183/IPOL_STU(2021)693183_EN.pdf).
- Alon T, Doepke M, Olmstead-Rumsey J, et al. The impact of COVID-19 on gender equality. National Bureau of Economic Research. 2020. Available at: <https://www.nber.org/papers/w26947>.
- Reichelt M, Makovi K, Sargsyan A. The impact of COVID-19 on gender inequality in the labor market and gender-role attitudes. *European Societies*. 2021;23 Suppl 1:S228–45.
- del Río Lozano M, García Calvente MM. Cuidados y abordaje de la pandemia de COVID-19 con enfoque de género. *Gac Sanit*. 2020;35:594–7.
- COVID-19 and violence against women. World Health Organization; 2020. (Accessed June 21, 2021.) Available at: <http://www.who.int/reproductivehealth/publications/vaw-covid-19/en/>.
- Castellanos-Torres E, Caballero Pérez I. La violencia contra las mujeres con discapacidad en tiempos de COVID-19 y experiencias grupales de sororidad online. *REDIS*. 2020;8:211–21.
- Coronavirus (COVID-19) related deaths by ethnic group, England and Wales: 2 March 2020 to 10 April 2020. Office for National Statistics. 2020.
- COVID-19 and the human rights of LGBTI people. OHCHR; 2020. Available at: <https://www.ohchr.org/Documents/Issues/LGBT/LGBTIpeople.pdf>.
- Lau LS, Samari G, Moresky RT, et al. COVID-19 in humanitarian settings and lessons learned from past epidemics. *Nat Med*. 2020;26:647–8.
- The Sex, Gender and COVID-19 Project. *Global Health 50/50*. (Accessed August 6, 2021.) Available at: <https://globalhealth5050.org/the-sex-gender-and-covid-19-project/>.
- Heidari S, Babor TF, De Castro P, et al. Sex and gender equity in research: rationale for the SAGER guidelines and recommended use. *Res Integr Peer Rev*. 2016;1:2.
- Equidad según sexo y de género en la investigación: justificación de las guías SAGER y recomendaciones para su uso - ScienceDirect. (Accessed August 9, 2021.) Available at: <https://www.sciencedirect.com/science/article/pii/S0213911118300748>.
- Elsevier. The importance of sex and gender reporting. Elsevier Connect. (Accessed April 25, 2021.) Available at: <https://www.elsevier.com/connect/editors-update/the-importance-of-sex-and-gender-reporting>.
- Editorial policies - Sex and gender in research (SAGER Guidelines). Springer. (Accessed April 25, 2021.) Available at: <https://www.springer.com/gp/editorial-policies/sex-and-gender-in-research-sager-guidelines>.
- Peters SAE, Norton R. Sex and gender reporting in global health: new editorial policies. *BMJ Glob Health*. 2018;3:e001038.
- Palmer-Ross A, Ovseiko PV, Heidari S. Inadequate reporting of COVID-19 clinical studies: a renewed rationale for the Sex and Gender Equity in Research (SAGER) guidelines. *BMJ Glob Health*. 2021;6:e004997.
- Women's absence from COVID-19 task forces will perpetuate gender divide, says UNDP, UN Women. ReliefWeb. (Accessed August 9, 2021.) Available at: <https://reliefweb.int/report/world/women-s-absence-covid-19-task-forces-will-perpetuate-gender-divide-says-undp-un-women>.
- Bacigalupe A, Cabezas-Rodríguez A, Giné-March A, et al. Invisibilidad de género en la gestión de la COVID-19: ¿quién toma las decisiones

- políticas durante la pandemia? *Gac Sanit.* 2021;S0213–9111:00046–47, <http://dx.doi.org/10.1016/j.gaceta.2021.02.005>. Online ahead of print.
39. The gender approach, key in COVID-19 response. Government of Spain. Instituto de la Mujer. 2020. Available at: https://www.inmujeres.gob.es/disenov/novedades/PlantillaCovid-19/EN_IMPACTO_DE_GENERO_DEL_COVID-19.03_EN.pdf.
 40. OECD. Towards gender-inclusive recovery. (Accessed August 9, 2021.) Available at: https://read.oecd-ilibrary.org/view/?ref=1094.1094692-vsm1fnncha&title=Towards-gender-inclusive-recovery&_ga=2.127821455.384807825.1628507758-2053998465.1628507758.
 41. Heidari S, Doyle H. Viewpoint. An invitation to a feminist approach to global health data. *Health and Human Rights Journal*. Published online December. (Accessed April, 2020;13:2021. Available at: <https://www.hhrjournal.org/2020/12/viewpoint-an-invitation-to-a-feminist-approach-to-global-health-data/>).