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**Gendered dimensions of the  
COVID-19 Pandemic**

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This report is a product of the research collaboration project *Fighting pandemics with enhanced risk communication: Messages, compliance and vulnerability during the COVID-19 outbreak* (PAN-FIGHT). Project initiator and coordinator is the University of Stavanger, and main project partner institutions are the University of Geneva, Mid-Sweden University, King’s College London and DIALOGIK Germany. PAN-FIGHT is funded by the Research Council of Norway and has run from August 2020 to September 2022.

## Introduction

This report forms part of the deliverables produced by the international research project *Fighting pandemics with enhanced risk communication: Messages, compliance and vulnerability during the COVID-19 outbreak (PAN-FIGHT)*, funded by the Norwegian Research Council. It provides an overview of project findings pertaining the gender dimensions of the pandemic, with a particular focus on risk perceptions, compliance and vulnerability.

The COVID-19 pandemic has reiterated that the impacts of a crisis are not homogenous. Gender, which encapsulates both biological and socio-cultural ways of being, plays a role in how crises are experienced. This is evidenced by the health, economic as well as societal consequences of the COVID-19 pandemic which have affected women and men, girls and boys differently. Knowledge about gendered implications of the pandemic is thus vital for designing equitable policy responses.

This report draws on evidence from former research as well as on findings from an online survey conducted as part of the project's data collection in 2021. The survey, reaching out to respondents in Norway, Sweden, Germany, Switzerland and the United Kingdom, investigated public risk perceptions, reactions to governmental of risk communication about COVID-19, compliance with governmental restrictions and risk mitigation measures and vulnerability during the pandemic (N=4206).

This report is organised as follows: Upon presenting an overview of previous relevant research, we describe the methods applied for our data collection and analysis. Further, we present key findings and briefly discuss the implications of these. For in-depth discussions, we refer to scientific articles on the topic that have been published as part of PAN-FIGHT.

## Overview of previous research

Gender has long been considered a social determinant of health. A substantial amount of research shows that the direct health effects of the COVID-19 pandemic have affected men more than women: COVID-19 incidence, hospitalisation, and death rates are higher among men than women across locations (Flor et al., 2022). At the same time, gender has also been found to influence exposure to the coronavirus. Women make up two-thirds of the health workforce worldwide, for example 85% of nurses and midwives (Boniol et al., 2019) and they also amount for 90% of long-term care workers across OECD countries (OECD, 2020). This has put them at a greater risk of infection. Moreover, the pandemic has had other gendered social, economic and health impacts. For example, several studies have shown that the COVID-19 pandemic may have exacerbated gender-linked mental health challenges (Almeida et al., 2020; Wang et al., 2020; Liu et al., 2020) Women who are pregnant, postpartum, miscarrying, or experiencing intimate partner violence were found to be at especially high risk for developing mental health problems during the pandemic (Almeida et al., 2020).

Women have also been disproportionately affected when it comes to loss of employment. Despite the positive trend of increasing women's employment rates in the past years in Europe, the pandemic has hampered the progress. Globally, between 2019 and 2020, women's employment declined by 4.2 per cent, representing a drop of 54 million jobs, while men's employment declined by 3 per cent, or 60 million jobs (ILO, 2021). This could primarily be because women tend to be employed disproportionately in sectors that are harder-hit by COVID-19, such as the hospitality industry or the informal sector, including domestic workers (Flor et al., 2022). While the gender gap in unemployment

has been in a steady decline, the long term effect of this in terms of re-integration in labour market is yet to be seen (Doepke & Olmstead-rumsey, 2021).

Measures introduced during the pandemic, such as lockdown, also resulted in other vulnerabilities such as the increase in gender-based violence across both developed and developing nations (UN Women, 2021). Women have been 1.23 times more likely than men to report that gender-based violence had increased during the pandemic (Flor et al., 2022). Gender inequality is a contributor to persistence of gender-based violence and thus the pandemic further exacerbated the inequalities and exposure to violence.

Overall, the COVID-19 pandemic has been found to exacerbate pre-existing widespread inequalities between women and men during the COVID-19 pandemic (Flor et al., 2022)

## Sample and Methods

This report is based on an online survey conducted in Norway, Sweden, Germany, Switzerland and the United Kingdom between 1 April and 4 May 2021. It investigated public risk perceptions, reactions to governmental of risk communication about COVID-19, compliance with governmental restrictions and risk mitigation measures, and perceived changes in the quality of everyday life during the pandemic. The latter serve as indicators of vulnerability and resilience among different population groups and nationalities. The survey was designed by project researchers with multidisciplinary backgrounds in social science, public policy, statistics, epidemiology, public health and anthropology. We ran the survey (N=4,206) through the online survey panel provider Qualtrics. The data is representative for adults based on age distribution (by six age categories), sex (female/male), highest level of education completed (three categories of aggregated ISCED levels), and annual income (five to eight categories, based on national census data. Attention filters were included in the survey and the median completion time was 19 minutes 27 seconds. Respondents taking less than two-thirds of the median completion time were excluded from analysis during data cleaning.

Table 1 provides an overview of binary gender and age distribution in the sample.

<b>Binary gender</b>	<b>Women</b>	<b>Men</b>	<b>Total</b>
<b>Country</b>			
Norway	431 (50.5)	423 (49.5)	854 (20.4)
Sweden	425 (50.5)	416 (49.5)	841 (20.1)
Switzerland	416 (50.1)	414 (49.9)	830 (19.8)
Germany	421 (50.5)	412 (49.5)	833 (19.9)
United Kingdom	423 (51)	407 (49)	830 (19.8)
Total	2116 (50.5)	2072 (49.5)	4188
<b>Age</b>			
18-29 years	445 (57.9) (21)	324 (15.6)	769 (18.4)
30-39 years	465 (57.9) (20.4)	313 (15.1)	744 (17.8)
40-49 years	402 (55.1) (19)	328 (15.8)	760 (17.4)
50-59 years	340 (49.8) (16)	343 (16.6)	683 (16.3)
60-69 years	306 (43.5) (14.5)	397 (19.2)	703 (16.3)
70+ years	192 (34.3) (9.1)	367 (17.7)	559 (16.8)
Total	2116	2072	4188

## Dependent variables for risk perception

### Personal health risk

We measured personal health risk perceptions via the following questions; On a scale of 0 to 100, what is the chance that in the next three months you will: “Be hospitalised because of the coronavirus”, and “Die from the coronavirus”.

### Personal economic risk

Perceptions of personal economic risk were measured by the question: On a scale of 0 to 100 percent, what is the chance that in the next three months “Your financial situation will worsen”.

### Public health risk

The scale for health risk perception was composed from question: “How would you rate the risks represented by the coronavirus (COVID19) for your country?” This question was measured on a 1-5 scale of ‘no risk at all’ to ‘severe risk’, with a separate ‘don’t know’ option. We measured perceptions of public health risk via the following items: “Risk of more people falling ill in this country than elsewhere”, and “Risk of health services being overstretched”.

### Societal risk perception

Societal risk perceptions were measured via the same scale as the one we used for public health risk perceptions. We focused on three measures of societal risk here: Risk of a deep economic crisis in one’s nation, risk of loss of trust in public authorities, and risk of lack of community feeling and solidarity.

## Findings

### Risk perceptions

When it comes to societal risks, in all age groups, women were found to have consistently higher levels of risk perceptions (See Figure 1). However, men in all age-groups, except those above the age of 70, perceived personal economic risks to be higher as compared to women. For personal health risks, women perceived higher risks than men in all age groups, except that men between 30-39 years of age perceived higher personal health risks than women in the same age group. However, more women reported being much less or somewhat less concerned about other global threats such as climate change.

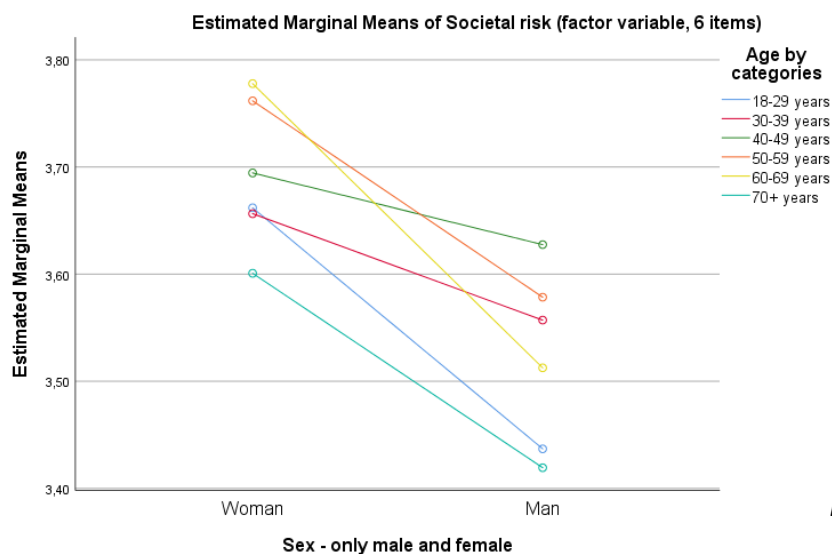


Figure 1

A higher proportion of men perceived no risk or low risk of losing trust in public authorities than women in all five countries. This was also the case for perception about risk of getting vaccinated, where more men perceived low or no risk of getting vaccinated as compared to women.

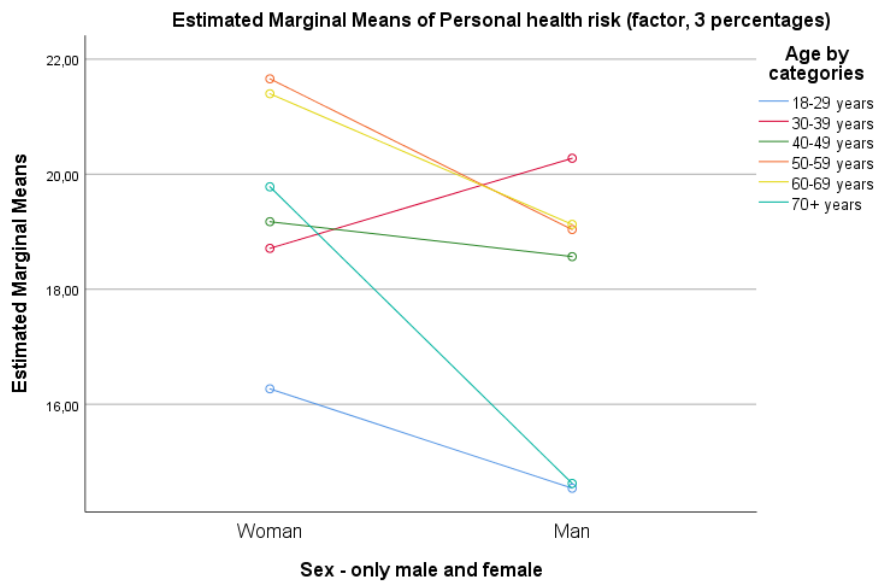


Figure 2

Risk communication

A higher proportion of men in all countries, except the UK reported never seeking information from official authorities. In the UK an equal proportion of men and women reported never seeking information from official authorities. Incidentally, a higher proportion of men in all countries perceived that the authorities have not provided any useful information whatsoever. More men perceived that authorities have not provided any useful information whatsoever. On the other hand, more women perceived that while authorities have provided some useful information but that it was not enough (except in Switzerland where an equal number of men and women reported the same).

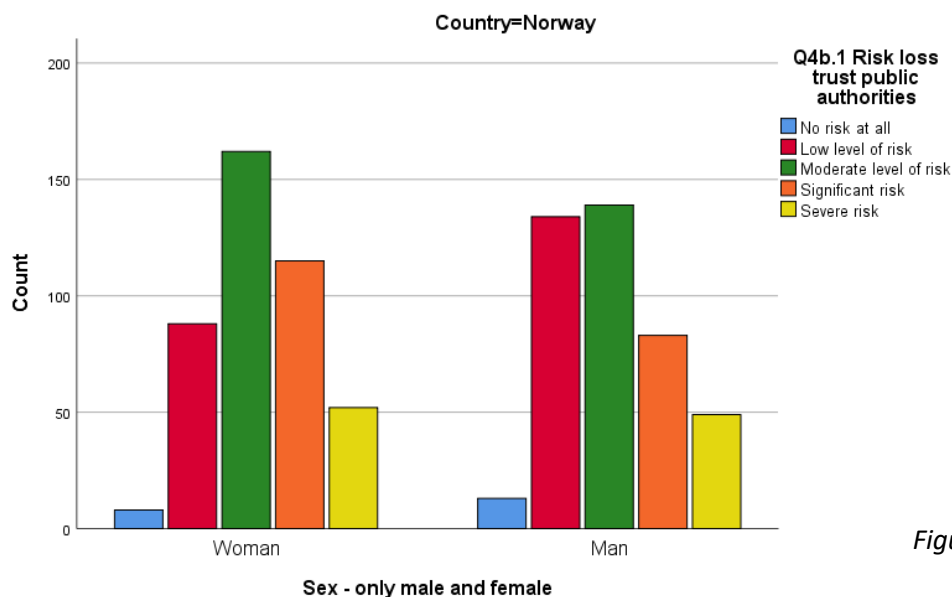


Figure 3

Compliance

Compliance was measured through several questions. Overall, our data revealed that a higher proportion of men reported never or rarely observing lockdown when relevant, keeping the required social distance and reported attending a gathering with more than permitted number of people. The exception was Switzerland, where a higher proportion of women reported never or rarely keeping required social distance. When it comes to how often their job required them to keep less than one meter distance, more women reported that either on daily or several times a day basis across all countries.

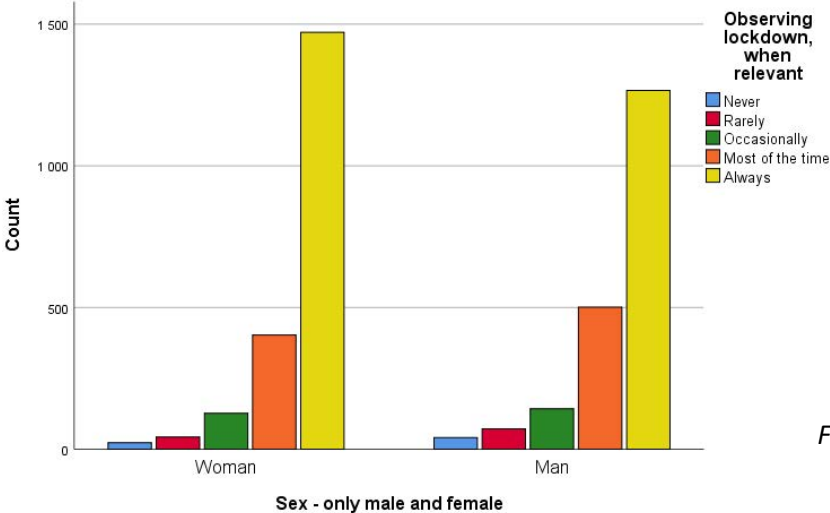


Figure 4

Regarding ability to work from home, more women reported that they have not been able to work from home across all countries. In addition, a slightly higher number of women reported working from home at the same time as caring for children, except in Sweden and the UK.

Vulnerability

More women in all countries reported having more time for hobbies as compared to men, however, more women also reported feeling somewhat more or much more tired and overworked. When it comes to exposure to physical aggression in the household, our data revealed that approximately an equal number of men and women reported experiencing somewhat more or much more physical aggression. However, more women reported experiencing much more or somewhat more conflict within the household, feeling stigmatised by others and disruption in their family.

More women reported having much less or somewhat less quality sleep and feeling much less or somewhat less free during the pandemic. Given the above findings, it isn't surprising that more women reported feeling more somewhat more or much more tired and having more mental fatigue as compared to men. More women also stated spending much less or somewhat less time with family. Loneliness was reported as somewhat more or much more by a higher number of women as well as experience of depression and anxiety. At the same, more women reported feeling somewhat more or much more anger, sense of confusion, feelings of powerlessness and uncertainty about future.

More women reported that they were either not able to work from home or their ability to work from home had been fairly limited. Slightly higher numbers of women worked from home at the same time



as caring for children. In line with this, more women also reported having much less or somewhat less ability to separate work from home. They also reported worrying more about family members.

A higher number of men reported that their consumption of substances such as tobacco, alcohol or drugs had become somewhat more or much more, whereas more women reported that their own compulsive behaviours such as working out too much or cleaning had increased.

## Conclusion

Our findings have given an overview of risk perceptions, risk communication and vulnerability from a gender perspective. They are in line with prior research which show the increased mental health challenges as well as a greater burden of managing childcare, work and home experienced by women during the pandemic (Thibaut et al., 2020; Power, 2020). Men's increased consumption of substances such as tobacco is also concerning, given its negative long-term effects (WHO, 2021).

A key finding from the report concerns the differential risk perceptions and compliance among women and men. Several research projects conducted during the pandemic have found that increased perceived health risks of COVID-19 relates to a greater likelihood of undertaking protective behaviours across multiple countries (de Bruin and Bennett et al., 2020; Dryhust et al., 2020; Schneider et al., 2021). Men's lower concerns about societal and personal health risks (except for men between-30-39 years) could thus possibly be contributing to their lower compliance. This necessitates the significance of gender-specific communication strategies. It is further emphasized by our findings that men were generally more reluctant to seek information (except in the UK) and less satisfied by the information given by the authorities.

Gender, thus, continues to be a determinant of health, necessitating the need for gender-sensitive support systems and risk communication strategies.

## References

- Almeida, M., Shrestha, A. D., Stojanac, D., & Miller, L. J. (2020). The impact of the COVID-19 pandemic on women's mental health. *Archives of women's mental health*, 23(6), 741-748.
- Boniol, M., M. Mcisaac, L. Xu, T. Wuliji, K. Diallo and J. Campbell (2019). *Gender equity in the health workforce: Analysis of 104 countries, Health Workforce Working Paper*. World Health Organization
- de Bruin, W. B., & Bennett, D. (2020). Relationships between initial COVID-19 risk perceptions and protective health behaviors: a national survey. *American Journal of Preventive Medicine*, 59(2), 157-167.
- Doepke, M., & Olmstead-rumsey, J. (2021). The Impact of COVID-19 on Gender Equality in Europe. *Intereconomics*, 56(5), 248-248.
- Dryhurst, S., Schneider, C. R., Kerr, J., Freeman, A. L., Recchia, G., Van Der Bles, A. M., ... & Van Der Linden, S. (2020). Risk perceptions of COVID-19 around the world. *Journal of Risk Research*, 23(7-8), 994-1006.
- Flor, L. S., Friedman, J., Spencer, C. N., Cagney, J., Arrieta, A., Herbert, M. E., ... & Gakidou, E. (2022). Quantifying the effects of the COVID-19 pandemic on gender equality on health, social, and economic indicators: a comprehensive review of data from March, 2020, to September, 2021. *The Lancet*, 399(10344), pp. 2381-2397. DOI: [https://doi.org/10.1016/S0140-6736\(22\)00008-3](https://doi.org/10.1016/S0140-6736(22)00008-3)
- ILO (2021). *Building forward fairer: Women's Right to Work and at Work at the Core of the COVID-19 Recovery*. Available at: [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms\\_814499.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_814499.pdf)
- OECD (2020). Who Cares? Attracting and Retaining Care Workers for the Elderly, in *OECD Health Policy Studies*, OECD Publishing.
- Liu H, Wang LL, Zhao SJ, Kwak-Kim J, Mor G, Liao AH. Why are pregnant women susceptible to COVID-19? An immunological viewpoint. *J Reprod Immunol*. 2020;139:103122. doi: 10.1016/j.jri.2020.103122
- Power, K. (2020). The COVID-19 pandemic has increased the care burden of women and families. *Sustainability: Science, Practice and Policy*, 16(1), 67-73.
- Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L., Recchia, G., Spiegelhalter, D., & van der Linden, S. (2021). COVID-19 risk perception: a longitudinal analysis of its predictors and associations with health protective behaviours in the United Kingdom. *Journal of Risk Research*, 24(3-4), 294-313.
- Thibaut, F., & van Wijngaarden-Cremers, P. J. (2020). Women's mental health in the time of Covid-19 pandemic. *Frontiers in global women's health*, 1, 588372.
- UN Women (2020). *The Shadow Pandemic: Violence Against Women and Girls and COVID-19*, New York, USA. Available at: <https://www.unwomen.org/en/digital-library/multimedia/2020/4/infographic-ccovid19-violence-against-women-and-girls>
- Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, Ho RC. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*. 2020;17(5):1729. doi: 10.3390/ijerph17051729
- World Health Organization. *WHO Report on the Global Tobacco Epidemic, 2021. Addressing new and emerging products*. Available online at: <https://www.who.int/teams/health-promotion/tobacco-control/global-tobacco-report-2021>. (2021).



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