World Health Organization
Collaborating Centre on Investment
for Health and Well-being

GIG CYMRU NHS WALES
Iechyd Cyhoeddus Cymru
Public Health Wales

The impact of the COVID-19 pandemic on women, employment and health inequalities

Explanatory Note

Authors:
Michael Fletcher, Laura Evans, Lee Parry-Williams, Kath Ashton, Liz Green.

We would like to thank **Nerys Edmonds** for providing feedback and contributing to the development of the report.

There has been a major impact from the COVID-19 pandemic on women in general, but also specifically for women of working age and in the workforce. This explanatory note and accompanying infographic look at the major identified impacts of the pandemic on women of working age, whilst also taking into account existing inequalities related to employment. It uses the lens of a Health Impact Assessment (HIA) which identifies both positive and negative health and wellbeing impacts and highlights the equity impacts on different population groups.

Key findings are depicted in the separate infographic and in the table below:

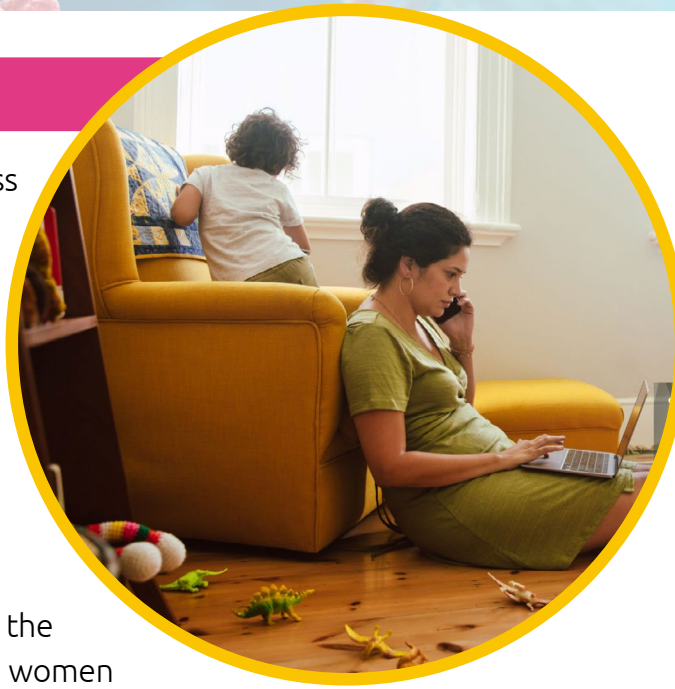
Population Groups Impacted:

- Younger and older women
- Female carers and lone mothers
- Women affected by violence and abuse
- Women with chronic conditions and/or disabilities
- Women's income and employment type, e.g., furlough, part-time, zero-hour, precarious and low-income
- Women from ethnic minority backgrounds

Determinants of Health and Wellbeing Impacted:

- Social and community influence on health
  - Family relationships and roles
  - Violence against women and coercive control
- Economic conditions
  - Working conditions
  - Unequal loss of income
  - Unemployment
  - Changes in employment status
- Working environment affecting mental health and wellbeing

Population Groups:



The pandemic has had direct and indirect impacts across populations from the evidence gathered. Many of the women identified in this report have multiple and intersecting characteristics, e.g., are both a lone parent and from an ethnic minority background. This explanatory note and the accompanying infographic focus specifically on women and how working or not during the pandemic has had an impact using HIA methodology.

Age: Younger women have been impacted because of the disproportionate effects of the COVID-19 pandemic on women and girls, including in employment and the closure of education institutions (World Health Organization, 2021). While some of the existing inequalities exacerbated by COVID-19 are even starker among the younger (working age) population (Suleman et al., 2021), some of the inequalities mentioned include stark differences in the health of the working age population, with government restrictions leading to consequences from unmet health needs, mental health problems, education gaps, lost employment and financial insecurity (Suleman et al., 2021). **Older people** on the other hand, particularly women, have been most likely to leave the workforce during the pandemic, and this group have experienced greater negative impact on employment than has been seen in previous crises (Brewer et al., 2021). Older women were more likely to have reduced working hours than men in the UK (14.8% to 12.1%) from December 2020 to February 2021 (ONS, 2021a). Redundancy and employment were affected majorly during the pandemic, and in terms of the sectors women were being made redundant from, a third were in distribution, hotels and restaurants (ONS, 2021a). There were high numbers of redundancies in banking and finance which accounted for around one in five redundancies overall for both males and females during the pandemic, while there was around a 14% rate of redundancies for older female workers in each of manufacturing, and in public administration, education and health (ONS, 2021a).

Work-from-home arrangements were of benefit to many working **mothers / guardians** combining careers with childcare needs (Alon et al., 2020; Green et al., 2021). However, figures suggest that in the UK, mothers performed two-thirds of the extra 40 hours a week of caring for adults and children required during the pandemic period from 2020 to 2021 (World Health Organization, 2021).

Public health measures brought in to slow the transmission of the virus such as social distancing and quarantine, placed some women at increased risk of **domestic violence and coercive control** through home working or being furloughed which made them more isolated (Douglas et al., 2020). Addis and Snowdon (2021) found that calls to helplines

increased fivefold in some countries as rates of reported intimate partner violence increased due to the pandemic. Refuge, a charity helpline dealing with domestic violence support for women and children, saw a 60% increase in monthly calls from April 2020 to February 2021, compared with the start of 2020, with 72% of these calls from women experiencing **domestic abuse** (Suleman et al., 2021).

Women's income and employment type have also been impacted. This includes not only exacerbating existing employment inequalities, but also the creation of new inequalities with women disproportionately represented specifically regarding furlough, part-time, zero-hour contracts and precarious jobs. To be able to pay for childcare, women from lower socio-economic backgrounds have fewer financial resources to cope with unpredictable and unreliable working hours, thus carrying the double burden of balancing paid and unpaid work (Chung and van der Lippe, 2018). School closures as a result of COVID-19 restrictions also impacted women's earnings and financial independence (Guerrina et al., 2021). Job losses have disproportionately impacted women in the workforce who have less education and a lower socio-economic position (World Health Organization, 2021). Statistics from the Office for National Statistics (ONS) show that the gender pay gap widens with age and that women in their 40s and 50s earn on average 20% less than their male counterparts, and when comparing 40s and 50s with the 22-29 age group, the gender pay gap is 4% (Centre for Ageing Better, 2021). Some of this may be due to existing structural and societal inequalities and expectations such as parenthood, women being less likely to bargain successfully for higher wages, being more likely to enter 'family-friendly' occupations over high-paying ones, and having more caring responsibilities, with these issues also affecting women's pensions (Hickman et al., 2023).

Finally, specific population groups, for example, **lone female parents, female carers, women with disabilities and people from ethnic minority backgrounds** have also been impacted during the pandemic. In the UK, 90% of the 2.9 million lone parents are women, while 58% of all carers in the UK are women, with women undertaking more unpaid intensive informal care (Glasgow Centre for Population Health, 2021). The same paper (Glasgow Centre for Population Health, 2021) shows that disabled women were more exposed and vulnerable to the unintended impacts of lockdowns, due to pre-existing higher levels of common mental health problems, social isolation and digital exclusion. They were also more likely to report abuse and domestic violence during the pandemic. However, the shift to home working could enable more people with disabilities to join the workforce (Green et al., 2020a). A Welsh Government report (2022a) highlighted how the pandemic amplified pre-existing inequalities and disadvantages, including for disabled women. For ethnic minority women, over half were unsure where to turn for financial help as a result of the pandemic compared with just 18.7% of white respondents (Suleman et al., 2021).

Determinants of Health and Wellbeing:

Social and community impacts

There are some positive impacts such as a shift away from the 'flexibility stigma' which the move to more agile and home working has allowed for (Chung et al., 2020). This could hypothetically, have allowed some fathers to be able to use flexible working for care purposes more freely, with housework and childcare tasks being divided more equally between mothers and fathers in households (Chung et al., 2020). In general, mothers who were working part-time or from home allowed them to have more frequent enriching parent-child interactions, while men working more flexibly allows them to take up more of the routine childcare, which has been shown to positively increase women's career prospects (Chung and van der Lippe, 2018).

However, a number of negative impacts have been identified and the COVID-19 pandemic has led to a 'gender gap' in perceived work productivity and job satisfaction, with women becoming less productive and less satisfied with their job than men after the outbreak of COVID-19 (Feng and Savani, 2020). In times of crisis, work-from-home and lack of childcare services have created a gender gap in dual-career families and these shifts in the workplace can reverse the trend towards gender equality in a number of work domains such as leadership roles and work pay (Feng and Savani, 2020). The pandemic also caused some family relationships to exacerbate existing tensions and has created new strains with an increase in concerns regarding domestic and family violence (Green, Fernandez and MacPhail, 2021).

Violence Against Women, Domestic Abuse and Sexual Violence (VAWDASV) and coercive control has also been identified as a major impact, having direct and indirect impacts on all women from the evidence analysed. This is due to the fact that more women were required to work from home or were furloughed which made them more isolated and have more exposure to perpetrators of VAWDASV. In the literature it has been noted that the reporting of cases of rape and sexual assault in March to April 2020 decreased significantly (Cameron et al., 2021), although an overwhelming amount of the literature points to negative impacts in the area of VAWDASV such as an increase in the amount of Intimate Partner Violence (IPV) and gender-based violence (Connor et al., 2020; Douglas et al., 2020; Gurney, 2021; ONS, 2021b; Welsh Government, 2022b). Public health measures that were brought in to slow the transmission of COVID-19 such as social distancing and staying at home placed women at increased risk of domestic abuse and physical, sexual, emotional and verbal violence (Douglas et al., 2020; Gurney, 2021). For example, the number of police recorded domestic abuse-related crimes in England and Wales saw a 6% increase, at 845,734 for the year ending March 2021

(ONS, 2021b) and for the year ending March 2020 in England and Wales, 2.3 million people are known to have experienced domestic abuse, with 1.6 million (69.6%) of these victims being women (Welsh Government, 2022b). Around 60,000 domestic abuse incidents occur in Scotland every year, with young women being the most affected (Douglas et al., 2020). IPV incidents saw increases during the Ebola and Zika outbreaks, and it followed a similar pattern during the COVID-19 pandemic, with a third of women who were experiencing IPV having difficulty accessing resources due to the pandemic (Connor et al., 2020). To mitigate against these issues, there is a need to integrate service delivery and improved access for women to mental and physical health services and other welfare and support systems (Seedat and Rondon, 2021).

The new working environments which the population were employed within also had a major impact on **mental health and wellbeing**. This had direct and indirect impacts; it was one of the most critical impacts to come out of the pandemic for women, with a wealth of evidence to support this.

Most studies that looked at the differences between males and females' mental health during the pandemic found that women were more likely to report negative mental health outcomes than men (Gibson et al., 2021; Thibaut and van Wijngaarden-Cremers, 2020; Suleman et al., 2021). This is due to a range of factors including being a critical front line worker, for example, a health care professional or essential retail employee or working from home in isolation away from human contact or colleagues. Throughout the studies women consistently reported higher levels of depression, anxiety and stress with lower levels of resilience, while pregnant women were also reported to have worse mental wellbeing outcomes after the COVID-19 outbreak than pre-pandemic (Arzamani et al., 2022; Gibson et al., 2021; Thibaut and van Wijngaarden-Cremers, 2020). Women were more likely to be reporting negative mental health impacts from the pandemic, while younger women and women with disabilities were more likely than men in general to seek support for their mental health during the pandemic (Close the Gap, 2021). The Health Foundation COVID-19 impact inquiry report (Suleman et al., 2021) highlighted the number of women who self-reported a decline in mental health was double the numbers of men; this could be due to differences in care giving responsibilities, social engagement and health behaviours. Welsh Government's Coronavirus Restrictions Review (2021) demonstrated how women were faring worse than males in terms of being very worried about their mental health and wellbeing (25% of women, 20% of men), feeling very anxious (28% for women, 20% for men) and feeling isolated (29% of women, 18% of men), and many women said their sleep was negatively impacted during the COVID-19 lockdown (Welsh Government, 2021).

Economic factors

Within economic factors, specifically **working conditions, unequal loss of income, unemployment/reduced working hours and changes in employment status** were looked at in the HIA. The literature on impacts experienced during the pandemic relating to ways of working and working from home specifically reflected the pre-existing impacts seen prior to the pandemic. In terms of **working conditions**, the impacts are mainly positive due to the nature of flexible working and working from home. Working from home can have positive effects on women's satisfaction with work-life balance, by being able to combine childcare with paid work and having more spare time due to no commute, it can relieve work-to-family conflict and it allows mothers to maintain their working hours after childbirth (Chung and van der Lippe, 2018). There are a number of benefits to home working such as work-life balance, autonomy and productivity, health and wellbeing and flexibility and accessibility (Scottish Government, 2022) but it can bring its challenges, such as worsening mental wellbeing and feelings of loneliness (Public Health Wales, 2022). Remote working can also potentially lead to new employment opportunities for working mothers (Suleman et al., 2021). On the other hand, due to social norms, women are expected to carry out more of the 'domestic work' when they work flexibly, whilst men are more likely to prioritise their work which could lead to negative career implications and outcomes for women (Chung and van der Lippe, 2018). Zero-hour contracts and other insecure work have been perceived as flexible working by employers but damaging impacts of insecure work have been identified such as sick leave and future flexibility. Fairer conditions allow for predictable shift patterns and notice of hours of work (TUC, 2021a). A survey conducted by the TUC (2021b) in 2021 found that half of flexible working requests from working mothers are denied.

As for **unequal loss of income**, the literature identifies that there are many negative impacts for these determinants. Loss of income during the pandemic will see women affected unequally, experiencing a greater loss of income compared to men (Douglas et al., 2020). Women in lower socio-economic groups will also have fewer financial resources to cope with the unpredictable work hours which arise from zero-hour contracts to pay for childcare (Chung and van der Lippe, 2018) and women were also more likely than men to report financial precarity from the pandemic (Close the Gap, 2021). There is also evidence to suggest that school closures during the pandemic had an impact on women's earnings and their financial independence (Guerrina et al., 2021). Insightful statistics on this include the following: of the 3.2 million workers in high-risk roles (includes care workers, nurses, medical professionals, paramedics, pharmacists and midwives) during the pandemic, 77% were women, and over a million of those workers were/are paid below 60% median wages with a staggering 98% of these being women. Women are also more likely to be in low paid and insecure employment with 69% of low earners being women (Women's Budget Group, 2020).

In terms of changes in **employment status**, a survey undertaken by McKinsey in early 2022 states that one in every three women are considering downshifting their career or completely leaving the labour market, compared with one in four a few months into the pandemic (McKinsey & Company, 2022). This is due to the increased burden of childcare, housework and paid work causing extra stress (Chung et al., 2020). The cost-of-living crisis has exacerbated this, as people struggle to pay for energy, fuel, housing and food which has a knock-on impact on being able to afford childcare and affects employment through hygiene and period poverty and transport issues, while it can also have an impact on mental health (Roberts et al., 2022). Although some men increased their share of domestic work and care responsibilities during the COVID-19 pandemic lockdowns, women continued to do the majority of it (Chung et al., 2020). Data from 2016 showed that on average, women carry out 60% more unpaid work than men meaning that they earn less, own less and are more likely to be living in poverty (Women's Budget Group, 2020). More recently, Katsha (2023) showed that women spend at least 15 hours completing unpaid work every week, such as childcare, cleaning, cooking and other unpaid work, compared with 12.6 hours for men. Again, the cost-of-living crisis has implications for these women and their families. This can create cumulative or compounding impacts which have direct or indirect effects on women's employment and health and wellbeing.

Women are also more likely to be in low-paid and insecure jobs than men, and these jobs were disproportionately affected by the pandemic (Petts et al., 2020). There is also the potential for longer-term negative impacts for women and changes in employment status from the pandemic. This is due to the fact that if they left the workforce they may struggle when coming back into a changed economy and ways of working (Schindler-Ruwisch and Eaves, 2021). Worldwide during the pandemic women have been more likely than men to report foregoing work in order to care for others and the gender gap has widened over the course of the pandemic (Flor et al., 2022).

Finally, in terms of **unemployment**, women were disproportionately affected by the COVID-19 pandemic related economic decline, as women saw higher levels of employment loss and an increase in unpaid labour (Flor et al., 2022). Women experienced higher increases of unemployment than men in the United States (US), with 16.2% of women being made unemployed compared to 13.5% of men (Petts et al., 2020). Although in the UK, Health Data Research UK (2022) showed that men saw the greater increases in unemployment compared with women, as women were more likely to be employed in public sector roles which were largely protected from redundancies or saw increases in employment such as the health sector. Also, Francis-Devine (2021) showed that the employment rate for men dropped by 2.2% from January-March 2020 to October-December 2020, compared with a lower drop of 1.5% for women.

Mitigating Actions:

- In terms of how employers can help to address the risk of increased exposure to VAWDASV in the workplace (be it online or in person), there is a need to integrate service delivery and improved access for women to mental and physical health services and other welfare and support systems for employees who may need it (Seedat and Rondon, 2021). There also should be a mechanism for women to safely report issues without feeling pressured whether that be casual or institutionalised sexism or misogyny so that these are eradicated and the workforce in organisations and systems feel valued.

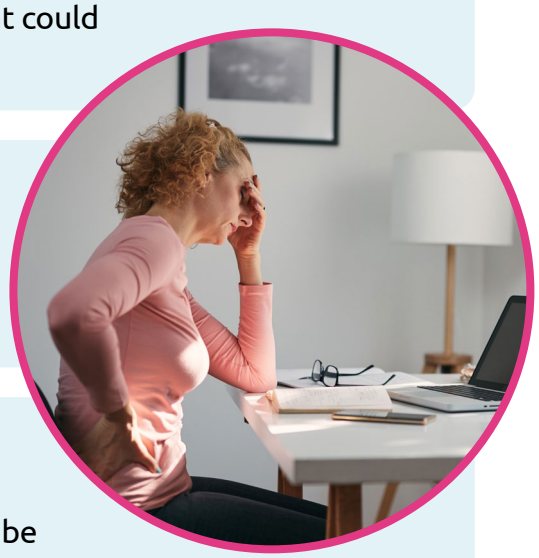
- To combat the issues of flexible working and the potential for women to experience inequality in terms of the gender gap in productivity and job satisfaction, organisations should offer more support, for example flexible deadlines and working hours, employee assistance programmes which can provide anonymous and free advice which could relieve some of the pressures associated with flexible working (Feng and Savani, 2020).

- There is a need to highlight the impacts experienced by women across society in order to raise awareness, particularly in relation to increased exposure to VAWDASV from more home working and also the mental load of being seen to be at home and do home tasks whilst working. Businesses have a key role to play in helping to reduce health inequalities and improving good health and wellbeing and health equity (Marmot et al., 2022), due to the emotional and mental strain on women in public health emergencies, who are working, supporting family relationships and may also be experiencing violence and abuse. For example, employers can take action regarding employment practices to positively impact on employees' health and well-being (Marmot et al., 2022).

- There is increased scope for policy and action on women's health and wellbeing across all sectors. Welsh Government released a Quality Statement for women and girls' health specifically aimed at problems women face in healthcare. It describes how health boards can deliver good quality health services specifically for women and girls (Welsh Government, 2022c). Additionally, UK Government published a Women's Health Strategy for England (Department of Health & Social Care, 2022) which looks at reducing the disparities women face in getting the care they need including women-specific issues such as miscarriage, menopause and smoking in pregnancy. The Welsh Government have committed to producing a "Women's Health Plan" (NHS Wales Executive, 2022). The Bevan Foundation (2022) have also shared recommendations for the Welsh Government's ten-year women and girls' health plan, which focuses on the inequalities and disproportionate challenges women face in end-of-life care.

Potential areas that require more research:

- There is limited evidence of the impact of COVID-19 on employment of women in different geographical areas, i.e., rural and urban that could shape responses and future opportunities.



- More research is needed into the long-term impact of changing employment culture from the COVID-19 pandemic on women's wellbeing, for example on physical activity and mental health.

- Career progression and future opportunities are a 'watching brief' given that there is only limited evidence on this. Further research in this area would be beneficial given that there is the potential for inequalities in career progression to widen further as it might be harder for women to re-enter the economy post-pandemic.

- Most of the literature was broad in focus and many of the impacts were for both men and women. However, it could be interesting to identify how low-income groups and lone women parents were impacted given the significant challenges posed by changing roles and more women working from home.

- Research into the longer-term impacts the new virtual working environment on VAWDASV including coercive control on women's health and wellbeing is needed.

Methodology

Health Impact Assessment (HIA) is a well-respected and recognised public health tool (World Health Organization, n.d.). It has been used to inform decisions and actions across a wide range of settings and sectors, including the wider impacts of the COVID-19 pandemic (Green et al., 2020b; Green et al., 2021; WHO, n.d.). Following the Welsh HIA guidance (WHIASU, 2012), this HIA used a variety of different evidence sources to better understand the impacts of the pandemic on women, with a spotlight on women's employment and inequalities. This included a review of academic and grey literature, semi-structured interviews with key stakeholders, a case study workshop and statistics, data and health intelligence evidence.

Literature review: The literature review sourced 482 results on the Ovid medical research platform. A set of search terms were used that included the words 'employment' as a standalone word, 'gender' or 'women' or 'female' or 'woman' as a second set, before looking at more health and wellbeing terms in the next including 'health', 'wellbeing', 'mental health' and 'wider determinants'. 'Inequality' and 'inequity' were also included before adding limits that included excluding literature published before 2010, English language only and abstracts only. These 482 results were screened for relevance and reduced to 36 literature sources because they mentioned COVID-19, women and employment for focus, and to have a manageable number for an analysis to be carried out. Of note, there was more relevant grey literature with 166 sources of evidence of which the team analysed.

Stakeholder interviews: Eight semi-structured interviews were undertaken with stakeholders from Welsh Government, Public Health Wales NHS Trust, Confederation of Business Industry (CBI), Chwarae Teg, Disability Wales, Carers Wales, Federation of Small Businesses and the Trades Union Congress (TUC). A topic guide was prepared and included questions which aimed to find out what policies, if any, were in place to address gender equality in the workplace or home working in the organisations mentioned. Interviews also aimed to gather insights into what the stakeholders thought about which population groups and determinants of health were affected the most by the pandemic. A case study workshop with the Women's Network (Public Health Wales) was held to gain insights into the procedures and policies in place to protect and support women in a specific workplace setting and for those in employment within Public Health Wales as an organisation.

Population Health Profile: A population health profile was compiled which summarises the key data on women, employment and inequalities both prior and during the COVID-19 pandemic. It specifically looks at general population demographics, deprivation, employment, numbers working from home, provision of childcare and unpaid work, and physical and mental wellbeing statistics.

References:

Addis, S and Snowdon, L (2021) What Works to Prevent Violence against Women, Domestic Abuse and Sexual Violence (VAWDASV)? Systematic Evidence Assessment. Wales Violence Prevention Unit, Public Health Wales NHS Trust. Available at https://www.violencepreventionwales.co.uk/cms-assets/research/What-Works-to-Prevent-Violence-against-Women-Domestic-Abuse-and-Sexual-Violence-Systematic-Evidence-Assessment_2021-09-20-124755_aypz.pdf [Accessed: 16 January 2023]

Alon, T; Doepke, M; Olmstead-Rumsey, J and Tertilt, M (2020) The impact of the coronavirus pandemic on gender equality. National Bureau of Economic Research: Working Paper 26947. DOI: https://doi.org/10.3386/w26947

Arzamani, N; Soraya, S; Hadi, F; Nooraeen, S and Saeidi, M (2022) The COVID-19 pandemic and mental health in pregnant women: A review article. Frontiers in Psychiatry 13: 949239. DOI: https://doi.org/10.3389%2Ffpsyt.2022.949239

Bevan Foundation (2022) Welsh Government's ten-year women's and girls' health plan must include end of life care. Available at https://www.bevanfoundation.org/views/marie-curie-welsh-government-health-plan/ [Accessed: 15 December 2022]

Brewer, M; McCurdy, C and Slaughter, H (2021) Begin again? Assessing the permanent implications of Covid-19 for the UK's labour market. The Economic 2030 Inquiry, November 2021. Available at https://economy2030.resolutionfoundation.org/wp-content/uploads/2021/11/Begin-again.pdf [Accessed: 16 June 2022]

Brown, J (2021) Half of flexible working requests by working mums are denied, poll finds. People Management – CIPD. Available at https://www.peoplemanagement.co.uk/article/1747290/flexible-working-requests-working-mums-denied-poll-finds [Accessed: 15 December 2022]

Cameron, E.C.; Hemingway, S.L.; Ray, J.M.; Cunningham, F.J. and Jacquin, K.M. (2021) COVID-19 and women: Key components of SDG-5 and the estimated prevalence of modern slavery. International Perspectives in Psychology: Research, Practice, Consultation 10(3), p. 138 – 146. DOI: https://psycnet.apa.org/doi/10.1027/2157-3891/a000019

Centre for Ageing Better (2021) Women in their 40s and 50s earning 20% less than their male peers, according to new figures. Available at https://ageing-better.org.uk/news/women-in-their-40s-and-50s-earning-less-than-their-male-peers [Accessed: 15 December 2022]

Chung, H and van der Lippe, T (2018) Flexible Working, Work-Life Balance, and Gender Equality: Introduction. Social Indicators Research 151, p. 365 – 381. DOI: https://doi.org/10.1007/s11205-018-2025-x

Chung, H; Birkett, H; Forbes, S and Seo, H (2020) Working From Home and the Division of Housework and Childcare Among Dual Earner Couples During the Pandemic in the UK. SocArXiv. DOI: https://doi.org/10.31235/osf.io/4esf7

Close the Gap (2021) Joint briefing on the impact of COVID-19 on women's wellbeing, mental health, and financial security. Engender. Available at https://www.closethegap.org.uk/content/covid-19/1620895646_Close-the-Gap-and-Engender-Joint-briefing-on-the-impact-of-COVID-19-on-womens-wellbeing-mental-health-and-financial-security.pdf [Accessed: 15 December 2022]

Connor, J; Madhavan, S; Mokashi, M; Amanuel, H; Johnson, N.R.; Pace, L.E. and Bartz, D (2020) Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review. Social Science & Medicine 266, 113364. DOI: https://doi.org/10.1016/j.socscimed.2020.113364

Department of Health & Social Care (2022) Women's Health Strategy for England. CP 736. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1100721/Womens-Health-Strategy-England-web-accessible.pdf [Accessed: 15 December 2022]

Douglas, M; Katikireddi, S.V.; Taulbut, M; McKee, M and McCartney, G (2020) Mitigating the wider health effects of covid-19 pandemic response. BMJ 369. DOI: https://doi.org/10.1136/bmj.m1557

Feng, Z and Savani, K (2020) Covid-19 created a gender gap in perceived work productivity and job satisfaction: implications for dual-career parents working from home. Gender in Management 35(7/8), p. 719 – 736. DOI: https://doi.org/10.1108/GM-07-2020-0202

Flor, L.S; Friedman, J; Spencer, C.N.; Cagney, J; Arrieta, A; Herbert, M.E.; Stein, C; Mullany, E.C.; Hon, J; Patwardhan, V; Barber, R.M.; Collins, J.K.; Hay, S.I.; Lim, S.S.; Lozano, R; Mokdad, A.H.; Murray, C.J.L.; Reiner, R.C.; Sorensen, R.J.D.; Pigott, D.M.; Haakenstad, A and 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), p. 2381 – 2397. DOI: https://doi.org/10.1016/S0140-6736(22)00008-3

Francis-Devine, B (2021) How has the coronavirus pandemic affected women in work? House of

Commons Library, UK Parliament. Available at https://commonslibrary.parliament.uk/how-has-the-coronavirus-pandemic-affected-women-in-work/ [Accessed: 7 August 2023]

Gibson, B; Schneider, J; Talamonti, D and Forshaw, M (2021) The impact of inequality on mental health outcomes during the COVID-19 pandemic: A systematic review. Canadian Psychology 62(1), p. 101 – 126. DOI: https://doi.org/10.1037/cap0000272

Glasgow Centre for Population Health (2021) COVID-19 Micro Briefing 2: Consequences of the COVID-19 pandemic: exploring the unequal social and economic burden on women. University of Glasgow and Glasgow Women's Voluntary Sector Network. Available at https://policyscotland.gla.ac.uk/wp-content/uploads/2021/05/PSGCPHCOVIDMicroBrief2Women.pdf [Accessed: 15 December 2022]

Green, H; Fernandez, R and MacPhail, C (2021) The social determinants of health and health outcomes among adults during the COVID-19 pandemic: A systematic review. Public Health Nursing 38(6), p. 942 – 952. DOI: https://doi.org/10.1111/phn.12959

Green, L; Ashton, K; Azam, S; Dyakova, M; Clemens, T and Bellis, M.A. (2021) Using health impact assessment (HIA) to understand the wider health and well-being implications of policy decisions: the COVID-19 'staying at home and social distancing policy' in Wales. BMC Public Health 21(1456). DOI: https://doi.org/10.1186/s12889-021-11480-7

Green, L; Ashton, K; Edmonds, N and Azam, S (2020b) Process, Practice and Progress: A Case Study of the Health Impact Assessment (HIA) of Brexit in Wales. International Journal of Environmental Research and Public Health 17(18): 6652. DOI: https://doi.org/10.3390%2Fijerph17186652

Green, L; Morgan, L; Azam, S; Evans, L; Parry-Williams, L; Petchey, L and Bellis, M.A. (2020a) A Health Impact Assessment of the 'Staying at Home and Social Distancing Policy' in Wales in response to the COVID-19 pandemic: Main Report. Available at https://phwwhocc.co.uk/wp-content/uploads/2020/07/HIA-Rapid-Review-of-SAH-Policy-Main-Web_Final.pdf [Accessed: 15 December 2022]

Guerrina, R; Borisch, B; Callahan, L.F.; Howick, J; Reginster, J.Y. and Mobasheri, A (2021) Health and Gender Inequalities of the COVID-19 Pandemic: Adverse Impacts on Women's Health, Wealth and Social Welfare. Frontiers in Global Women's Health 2: 670310. DOI: https://doi.org/10.3389/fgwh.2021.670310

Gurney, C.M. (2021) Dangerous liaisons? Applying the social harm perspective to the social inequality, housing and health trifecta during the Covid-19 pandemic. International Journal of Housing Policy. DOI: https://doi.org/10.1080/19491247.2021.1971033

Health Data Research UK (2022) How COVID-19 has impacted women and men's working lives in the UK. Available at https://www.hdruk.ac.uk/case-studies/how-covid-19-has-impacted-women-and-mens-working-lives-in-the-uk/ [Accessed: 7 August 2023]

Hickman, B; Baginsky, M; Wilks, D and Hickman, S (2023) Working Experiences of Women over 50 in Wales. Chwarae Teg and Myriad. Available at https://chwaraeteg.com/wp-content/uploads/2023/05/Women-over-50-report_Eng-1.pdf [Accessed: 17 May 2023]

Katsha, H (2023) Women Spend a Whopping Extra 15 Working Days on Unpaid Labour Compared to Men. Huffington Post. Available at https://www.huffingtonpost.co.uk/entry/only-1-in-5-british-couples-split-chores-equally_uk_6400afe0e4b0d14ed6a63a45 [Accessed: 30 June 2023]

Marmot, M; Alexander, M; Allen, J and Munro, A (2022) The Business of Health Equity: The Marmot Review for Industry. Institute of Health Equity. Available at https://www.instituteofhealthequity.org/resources-reports/the-business-of-health-equity-the-marmot-review-for-industry/read-report.pdf [Accessed: 19 April 2022]

McKinsey & Company (2022) Women in the Workplace 2022. Available at https://www.mckinsey.com/featured-insights/diversity-and-inclusion/women-in-the-workplace [Accessed: 15 December 2022]

NHS Wales Executive (2022) A Healthier Wales for Women and Girls. Available at https://executive.nhs.wales/networks/implementation-groups/womens-health/a-healthier-wales-for-women-and-girls/ [Accessed: 15 December 2022]

Office for National Statistics (ONS) (2021a) Living longer: older adults during the coronavirus (COVID-19) pandemic. Available at https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglonger/olderworkersduringthecovid19pandemic [Accessed: 15 December 2022]

Office for National Statistics (ONS) (2021b) Domestic abuse in England and Wales overview: November 2021. Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/domesticabuseinenglandandwalesoverview/november2021 [Accessed: 15 December 2022]

Petts, R; Carlson, D.L. and Pepin, J (2020) A Gendered Pandemic: Childcare, Homeschooling, and Parents' Employment During COVID-19. SocArXiv. DOI: https://doi.org/10.31235/osf.io/gwkzx

Public Health Wales (2022) Is working from home good for your health? Available at https://phw.nhs.wales/news/is-working-from-home-good-for-your-health/ [Accessed: 7 August 2023]

Roberts, M; Petchey, L; Challenger, A; Azam, S; Masters, R and Peden, J (2022) Cost of living crisis in Wales: A public health lens. Public Health Wales NHS Trust. Available at https://phwwhocc.co.uk/wp-content/uploads/2022/11/PHW-Cost-of-Living-Report-ENG.pdf [Accessed: 6 March 2023]

Schindler-Ruwisch, J and Eaves, T (2022) Maternity leave in America during a pandemic: The impact of leave on family wellbeing. Families, Systems, & Health 40(1), p. 132 – 135. DOI: https://doi.org/10.1037/fsh0000629

Scottish Government (2022) Working from home during the COVID-19 pandemic: benefits, challenges and considerations for future ways of working. Available at https://www.gov.scot/publications/working-home-during-covid-19-pandemic-benefits-challenges-considerations-future-ways-working/pages/3/ [Accessed: 7 August 2023]

Seedat, S and Rondon, M (2021) Women's wellbeing and the burden of unpaid work. BMJ Women's Health and Gender Inequalities 374. DOI: https://doi.org/10.1136/bmj.n1972

Suleman, M; Sonthalia, S; Webb, C; Kane, M; Finch, D and Bibby, J (2021) Unequal pandemic, fairer recovery: The COVID-19 impact inquiry report. The Health Foundation. Available at https://www.health.org.uk/publications/reports/unequal-pandemic-fairer-recovery [Accessed: 15 December 2022]

Thibaut, F and van Wijngaarden-Cremers, P.J.M. (2020) Women's Mental Health in the Time of the Covid-19 Pandemic. Frontiers in Global Women's Health 1:588372. DOI: https://doi.org/10.3389/fgwh.2020.588372

Trades Union Congress (TUC) (2021a) The future of flexible work: A TUC report. Available at https://www.tuc.org.uk/sites/default/files/2021-07/Flexibleworkingreport3.pdf [Accessed: 15 December 2022]

Trades Union Congress (TUC) (2021b) Half of working mums don't get the flexibility they ask for – TUC survey. Available at https://www.tuc.org.uk/news/half-working-mums-dont-get-flexibility-they-ask-tuc-survey [Accessed: 15 December 2022]

Wales HIA Support Unit (2012) Health Impact Assessment (HIA): A Practical Guide

Welsh Government (2021) Coronavirus Restrictions Review – 22 April 2021: Summary Impact Assessment. Available at https://www.gov.wales/sites/default/files/publications/2021-06/coronavirus-restrictions-review-22-april-2021-summary-impact-assessment.pdf [Accessed: 15 December 2022]

Welsh Government (2022a) Locked out: liberating disabled people's lives and rights in Wales beyond COVID-19. Available at https://www.gov.wales/sites/default/files/pdf-versions/2023/6/3/1687949221/locked-out-liberating-disabled-peoples-lives-and-rights-wales-beyond-covid-19.pdf [Accessed: 1 June 2023]

Welsh Government (2022b) Violence against women, domestic abuse and sexual violence: national advisers annual report 2021 to 2022. Available at https://www.gov.wales/violence-against-women-domestic-abuse-and-sexual-violence-national-advisers-annual-report-2021-0 [Accessed: 15 December 2022]

Welsh Government (2022c) The Quality Statement for women and girls' health. Available at https://www.gov.wales/sites/default/files/pdf-versions/2022/7/2/1657017419/quality-statement-women-and-girls-health.pdf [Accessed: 15 December 2022]

Women's Budget Group (2020) Crises Collide: Women and Covid-19 – Examining gender and other equality issues during the Coronavirus outbreak. Available at https://wbg.org.uk/wp-content/uploads/2020/04/FINAL.pdf [Accessed: 15 December 2022]

World Health Organization (WHO) (2021) COVID-19 and the social determinants of health and health equity: evidence brief. Available at https://www.who.int/publications/i/item/9789240038387 [Accessed: 15 December 2022]

World Health Organization (WHO) (n.d.) Health impact assessment (HIA) tools and methods. Available at https://www.who.int/tools/health-impact-assessments [Accessed: 15 December 2022]

WHIASU
Wales Health Impact Assessment Support Unit
Uned Gymorth Asesu Effaith ar Iechyd Cymru

www.whiasu.wales.nhs.uk

@whiasu

World Health Organization Collaborating Centre on Investment for Health and Well-being

phwwhocc.co.uk

@phwwhocc Phwwhocc

GIG CYMRU NHS WALES
Iechyd Cyhoeddus Cymru
Public Health Wales

Public Health Wales
Number 2 Capital Quarter
Tyndall Street
Cardiff CF10 4BZ
Tel: +44 (0)29 2022 7744

phw.nhs.wales

Email: generalenquiries@wales.nhs.uk

@PublichealthW

/PublicHealthWales

ISBN 978-1-83766-299-9