POLICY REPORT

# THE GREAT RESIGNATION: WHY WOMEN HEALTH WORKERS ARE LEAVING

October 2023



Women in Global Health Series: Gender Equity and the Health and Care Workforce



#### **DEDICATION**

This report is dedicated by the Women in Global Health movement to the millions of health workers globally who have gone beyond the ordinary to care for us during the COVID-19 pandemic. In this report we celebrate, particularly, the exceptional contribution of women, who are the majority of health workers. We are proud to count these extraordinary women amongst the members of our own Women in Global Health community.

We mourn health workers who lost their lives during the pandemic, and recognize that significant numbers of health workers, especially women, are burned out after more than three years on the frontlines of patient care.

We call for a new social contract for all women health workers based on safe, decent and equal work, including equality in leadership and decision-making. This new social contract will be the foundation for economic justice, and for the strong, effective, and equitable health systems essential for universal health coverage and future health security.

#### **ACKNOWLEDGEMENTS**

This report was produced by Women in Global Health. The lead authors were Maya Kovacevic and Ann Keeling, supported by Rachel Thompson, Farheen Nahvi, Abhijit Dhillon, Shifa Fatima, Becca Reisdorf and Andreea Petre-Goncalves. The report was designed by Rabia Rauf with support from Ana Gutierrez. We are grateful to the Women in Global Health national chapters and many partner organizations who shared their expert advice and data with us for this report.

#### **ACRONYMS**

**COVID-19:** Coronavirus disease identified in 2019

ICM: International Confederation of Midwives

ICN: International Council of Nurses

**ILO:** International Labour Organization

LMIC: Low- and middle-income countries

NHS: UK National Health Service

**OECD:** The Organisation for Economic

Co-operation and Development

**PPE:** Personal Protective Equipment

PTSD: Post traumatic stress disorder

**UHC:** Universal Health Coverage

**UNDP:** United Nations Development Program

**UNFPA:** United Nations Population Fund

WGH: Women in Global Health
WHO: World Health Organization

### **Table of Contents**

Key Messages	04
Introduction	05
Background	06
The global health worker emergency	06
Health is a mobile profession	07
Burnout and stress among women health workers	10
COVID-19 infections among women health workers	13
Women health workers have not been adequately protected	13
Personal protective equipment	13
Vaccines	15
Lack of fair pay and support	16
Moral injury	18
Gender based violence and stigma	19
Resignations among women health workers	22
The Great Migration	24
Women health workers and migration	26
Impacts of the Great Resignation and Migration	28
Recommendations	30
Conclusions	36
REFERENCES	38

#### **KEY MESSAGES**

- 1. More than three years of the COVID-19 pandemic have deepened pre-existing gender inequities in society and within the health workforce. Women, the majority of health workers, have been under extreme stress and in high-income countries particularly, women health workers are resigning and planning to leave the health workforce in significant numbers. Women health workers have been hard hit primarily because of their position in the health workforce. They made an exceptional contribution on the pandemic frontlines but were paid less, protected less and had little influence over critical decisions. Moreover, they carried an additional burden of unpaid care and domestic work at home. This Great Resignation needs urgent action and should be at the top of the global health agenda.
- 2. The resignation of significant numbers of trained women health workers in high-income countries is driving a **Great Migration** from low-income countries, further weakening vulnerable health systems. The most severe health worker shortages tend to be in the countries and regions with the highest burden of disease and greatest need. Women health workers in high-income countries are also migrating. The migration of women nurses and midwives from LMICs may put further pressure on community health workers, the majority of whom are women. Community health workers, often unpaid/underpaid, are less likely to have qualifications recognized by other countries and so are less likely to migrate. Rapid loss of health workers from low-income countries threatens achievement of health goals, including Universal Health Coverage, and hinders health systems' recovery from the pandemic.
- 3. There were significant global shortages of health workers before the start of the pandemic, particularly in low-income countries. The pandemic has increased the global health worker shortage. Health workers have died from the virus; an unknown number have taken sick leave due to the impact of the virus and 'long COVID'. Health worker shortages, whether driven by resignation, migration or other factors, put additional strain on the health workers left behind and create cycles of increasing workload, stress, risks to physical and mental health and 'moral injury' when health workers feel patient care is unsafe. The pandemic has increased the need for trained health workers, particularly nurses. Many countries, high, middle and low-income, now have severe nurse shortages. Governments must action national health workforce plans to address health worker shortages as a matter of urgency. The lead time to produce new trained nurses, midwives and physicians is long so the focus must be on retention, keeping those we have, and taking every possible measure to get back into the sector, the health workers that have left.
- 4. Current global measures aimed at safeguarding vulnerable countries from losing their health workers may fail if high-income countries set up strong incentives for low-income country health workers to migrate there. Some high-income governments are introducing such measures to facilitate the inward migration of health workers. Urgent action is needed from the local level to the national and the global. Mechanisms, like the WHO Code on the Practice of International Recruitment of Health Personnel, must be adhered to by member states, and be underpinned by comprehensive data. The loss of trained women health workers through the Great Resignation, and consequent Great Migration, must be treated as a global health priority with urgent action taken to retain trained health workers in high, middle- and low-income countries. Addressing the Great Resignation will mean addressing the root causes which lie in the gender inequities women face within the health workforce.

#### INTRODUCTION



"Health and care workers do heroic things, but they are not superheroes.

They are humans like the rest of us."

Dr Tedros Adhanom Ghebreyesus, Director-General WHO, 2021<sup>1</sup>

Now into a fourth year, the COVID-19 pandemic has had a profound impact on health workers on the frontlines of patient care. In particular, it has impacted women who have led the response to the pandemic in the health sector, holding 70% of health worker jobs,<sup>2a</sup> and over 89% of nursing and 93% of midwifery roles.2b Women working in health systems, from community health workers to midwives, have been at disproportionately high risk of COVID-19 infection, as their work involves close contact with patients. Moreover, they have frequently been expected to work without adequate personal protective equipment (PPE) and with PPE designed for the male body, that does not guarantee them safety or dignity.3

At the same time, pandemic response measures, such as school and childcare closures, added hours of unpaid care work that falls to women more than men, and left women health workers juggling exceptional patient workloads while managing their families, elderly relatives and households. Since women earn on average 24% less than men in the sector<sup>4</sup> and millions of women work unpaid or for low ad hoc stipends,<sup>5</sup> the economic shocks of the pandemic impacted women harder than men.

This policy report examines a growing global trend within the health sector, the 'Great Resignation' of women health workers who are leaving or planning to leave the profession. The pandemic has impacted everyone, but it has impacted women and men in the health sector differently. To a significant degree, this is because of the different and unequal positions they hold in the health workforce and in wider society.

The Great Resignation comes against the background of a serious global shortage of 15

million health workers which existed before the pandemic.<sup>6</sup> Since then, health workers have lost their lives and an unknown number have contracted 'long COVID' which may prevent them from working. Large scale resignations from the health workforce are extremely serious. In the United States alone, 100,000 nurses have left since the start of the pandemic and 800,000 more (one in five) plan on leaving the profession by 2027.7 In 2022, in the UK alone, more than 170,000 staff resigned from the National Health Service (NHS) amid burnout caused by a combination of pandemic pressures and staff shortages.8 Men, as well as women health workers, are leaving the profession. We focus on women health workers in this report because they are the majority in the sector and the measures urgently needed to retain and recruit them will largely be determined by gender and therefore different to those needed to retain and recruit men.

The Great Resignation of women health workers in high-income countries is damaging for the women affected and for health systems in those countries. There is also a serious concern that it is already driving a 'Great Migration' of women health workers from low-and middle-income countries (LMICs). Rapid out-migration from countries with vulnerable health systems short of trained health workers will be devastating for countries struggling to rebuild health systems and realize universal health coverage (UHC). In this report, which synthesizes available data with information from media sources and insights from interviews with women health workers, we consider the impact of both the Great Resignation and a Great Migration.

#### **BACKGROUND**

#### THE GLOBAL HEALTH WORKER EMERGENCY

The global health worker shortage is now a global health emergency. The World Health Organization (WHO) estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and lower-middle income countries. Health worker shortages in WHO African region are projected to constitute over half of the global shortage by 2030. 10

There is a persistent 6.5-fold difference in the density of the health workforce between high and low- and lower-middle income countries. 11 The density of nursing and midwifery personnel in the Americas and European regions is the highest: over 82 and 77 per 10,000 population respectively; whereas the African region has the lowest density of medical doctors (around 2 per 10,000 population), and nursing and midwifery personnel (around 10 per 10,000 population). 12 The most acute health worker shortages therefore tend to be in the countries with the greatest burden of disease and most vulnerable health systems.

More than 80% of nurses globally are women.<sup>13</sup> A 2022 report from the International Council of Nurses' (ICN) highlighted a shortage of 5.9 million nurses before the pandemic,<sup>14</sup> which ICN now believes could be as high as 13 million when the effects of COVID-19 are

taken into account.<sup>15</sup> Vacancy rates for nurses in 16 African countries ranged from 30-55% in 2019.<sup>16</sup> According to the USA Bureau of Labor Statistics, more than 200,000 registered nurse positions in USA are projected to be vacant annually over the next decade.<sup>17</sup>

Similarly to nurses, more than 90% of midwives globally are women. <sup>18</sup> A 2021 WHO report on the midwifery workforce found that fully resourcing midwife-delivered care by 2035 could avert 67% of maternal deaths, 64% of newborn deaths, and 65% of stillbirths and save an estimated four million lives per year. <sup>19</sup> Yet the International Confederation of Midwives (ICM) finds that the world is facing a shortage of 900,000 midwives, a third of the required global midwifery workforce. <sup>20</sup>

Even before the pandemic there were serious shortages of health workers, with an estimated global shortage of 15 million in 2020.<sup>21</sup> Women health workers have borne the brunt of these shortages during the pandemic, working long hours, often without basic conditions such as water or toilet breaks, to cover for vacant posts. Health worker shortages are cited in many studies as a driver for burnout, since work gets harder for those who remain.<sup>22</sup>



#### **HEALTH IS A MOBILE PROFESSION**

International mobility is a longstanding feature of the global health sector. Approximately 15% of health care workers globally are working outside of their country of birth.<sup>23</sup> One in eight nurses practice in a country they were not born or trained in.<sup>24</sup> In 2019, more than 550,000 foreign-trained nurses were working across 36 OECD member countries including 197,000 nurses in USA, 100,000 in the UK, 71,000 in Germany, and 53,000 in Australia.<sup>25</sup> One out of 20 registered nurses in the U.S. was trained in the Philippines.<sup>26</sup> In the UK's NHS, 220,000 staff report a non-British nationality; between them, these staff come from over 200 different nationalities.<sup>27</sup>

Mobility patterns are complex and much of the health migration is between high-income countries. There is also migration between LMICs, especially during times of conflict. Some countries are heavily dependent on migrant health workers. International migration of health workers is not new and health workers have the right to seek new opportunities through migration. The challenge is how to protect health systems and patients in the countries left behind, in the face of severe global health worker shortages.

WHO has recently published a report on global health worker mobility that incudes data from 2020 and 2021.<sup>28</sup> The findings present a complex picture.

# KEY FINDINGS FROM WHO REPORT ON GLOBAL HEALTH WORKER MOBILITY

- Top destination countries: Australia, Canada, France, Qatar, Saudi Arabia, UK, Northern Ireland, USA.
- Top source countries: Egypt, Germany, New Zealand, Romania, Russian Federation, UK.
- Overall, medical doctors trained in just seven countries (Egypt, Germany, India, Pakistan, Romania, Russian Federation and the United Kingdom) constitute more than 30% of the mobile doctors globally.
- Destination countries actively recruit from abroad to meet health labor market imbalances, and this disproportionately benefits high-income countries.
- Small island states and countries on the WHO Safeguards List (where active recruitment by other countries is strongly discouraged) are severely impacted and require global cooperation to safeguard themselves against severe shortages.

The new WHO global mobility report is part of monitoring the implementation of the WHO Global Code of Practice on the International Recruitment of Health Personnel ('The Code'). The Code approved by Member States at the 63rd World Health Assembly in 2010 is intended to be a core component of bilateral, national, regional and global responses to the challenges of health personnel migration and health systems strengthening. The voluntary Code provides ethical principles applicable to the international recruitment of health personnel in a manner intended to strengthen the health systems of LMICs, countries with economies in transition and small island states.





This voluntary code was agreed to by all member states in 2010. Its key principles are ethical recruitment, a commitment to planning and international co-operation. Ethical practices include discouraging active recruitment from countries listed on the WHO's health workforce support safeguards list, which identifies "countries with the most pressing health workforce needs related to universal health coverage." Robust health workforce planning strategies include strengthening health workforce data and implementing plans with a goal of health workforce sustainability and self-sufficiency. Robust data can ensure policies and planning are evidence-based, and document the impact of international recruiting on health systems. The goal should be sustainable, self-sufficient health workforces, including appropriate education, training and retention policies. International co-operation between source and destination countries includes technical assistance and financial support to ensure benefits are mutual."

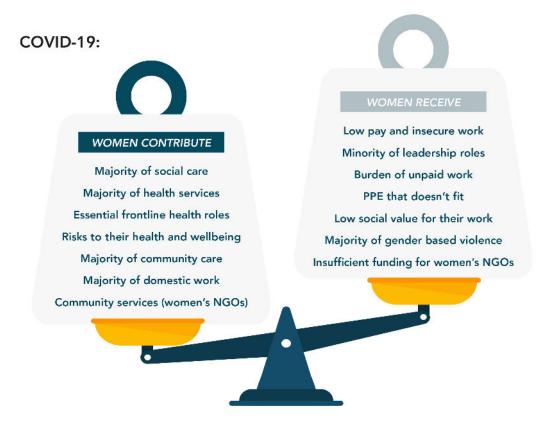
Bourgeault et al, 2023<sup>29</sup>

**The WHO Health workforce Support and Safeguards list**<sup>30</sup> comprises 55 countries with the most pressing UHC- related health workforce challenges. These 55 countries have been prioritized for health system support along with personnel development. The Code also provides safeguards to the listed countries that discourage active recruitment of health personnel by other countries. Consistent with the guiding principles of the Code, the listed countries should be: "Prioritized for health personnel development and health system related support", and "Provided with safeguards that discourage active international recruitment of health personnel."<sup>31</sup>

The countries in the WHO Health Workforce Support and Safeguards List<sup>32</sup> represented half of the estimated shortage of health workers in 2020. Alarmingly, it is estimated these countries between them will encompass almost 70% of the global health workforce shortage by 2030.<sup>33</sup> Among the countries that recently joined the list of those with vulnerable health workforces are Rwanda, Comoros, Zambia and Zimbabwe in the African region; Timor-Leste in the South-East Asia region; and Lao People's Democratic Republic, Samoa and Tuvalu in the Western Pacific region of the WHO.<sup>34</sup>



### THE GENDERED IMPACTS OF COVID-19 ON WOMEN HEALTH WORKERS



Source: Women in Global Health, Global Health Security Depends on Women, 2020<sup>35</sup>

#### WOMEN DELIVER HEALTH BUT MEN LEAD IT

COVID-19 and previous pandemics have demonstrated how health emergencies exacerbate and multiply gender inequities within the health workforce. Women health workers are clustered into roles within the health workforce that are generally accorded lower status and lower pay. Although they are the majority of workers in the sector,<sup>36</sup> women hold only 25% of senior roles in health and this position has not changed in the last five years.<sup>37</sup>

The marginalization of women in leadership continued in the pandemic. A 2020 WGH study found 85% of 115 national COVID-19 task forces had majority male membership.<sup>38</sup> Similarly, a 2021 study by the United Nations Development Program (UNDP) found women were systematically underrepresented on the 300 COVID-19 task forces operating in 163 countries and territories: only 6% of task forces had gender parity, while 11 %, had no women represented. In the Europe region, Czechia, the Holy See, Italy and Ukraine had all-male taskforces.<sup>39</sup>

Including equal numbers of women, as well as people from diverse social groups and geographies, in leadership encourages more informed decisions on all policy measures, including on lockdowns and maintenance of essential services that impact particularly on women. Women (and men) from marginalized groups bring different interests, priorities and perspectives. Diverse leadership groups make better, more informed decisions.<sup>40</sup>

Studies confirm how COVID-19 resulted in service disruptions that affected access to abortion, contraceptives, HIV/STI testing, and change in sexual behavior, menstruation, and pregnancy intentions for women.<sup>41</sup> Yet analysis by UNDP and UN Women found only one in eight countries had measures in place to protect women against the social and economic impacts of the pandemic.<sup>42</sup>

The sudden and exceptional impact of COVID-19 propelled millions of women in a precarious contractual position on the lower rungs of health systems, onto the front lines of patient care with minimal mental or physical protection. Women, especially migrant women and those from marginalized races, castes etc., were not in a strong position to influence decisions that affected their health and safety. Women low down in health system hierarchies, such as community health workers, were expected to take on high risk duties and

increased workloads whilst having very little autonomy and influence. In one Canadian study, nurses described never being asked for their input by management, and those who were asked for their input often did not feel their insights were listened to or influenced policy. These stressors have been multiplied by the additional pressures the pandemic imposed on women outside work. All these have combined to drive burnout and exhaustion in women health workers and their exodus from the sector.

# BURNOUT AND STRESS AMONG WOMEN HEALTH WORKERS

Although there is no global comprehensive data on health worker departures from the sector, there is evidence from countries at all income levels of burnout amongst health workers, especially women health workers, and planned departures from the profession.

Burnout is a situation where a person experiences severe emotional exhaustion and anxiety often induced by unfavorable workplace conditions. The American National Academy of Medicine defines burnout as "a syndrome characterized by a high degree of emotional exhaustion and depersonalization, and a low sense of personal accomplishment at work."<sup>44</sup> Burnout has been included in the 11th Revision of the International Classification of Diseases (ICD-11) as a significant factor that leads to health-seeking behavior.<sup>45</sup> In the medical context, it is related to increased errors risking patient safety.<sup>46</sup> One doctor from the USA describes their experience of burnout:



"What happens if burnout can't be reversed? What if part of me as a doctor has been fundamentally changed and can't go back? ... I guess that's what happens when you see death over and over and over, standing helpless as you fail to preserve life after life despite your every effort."

Doctor, USA<sup>47</sup>

Prior to the COVID-19 pandemic, burnout levels among health workers in the USA had reached crisis levels, with almost 35-45 % of nurses and physicians reporting burnout symptoms.<sup>48</sup> In Canada during the spring of 2020, 30%-40% of healthcare workers reported severe burnout, which rose to almost 60% by the spring of 2021.<sup>49</sup> Almost 80% of nurses in China reported experiencing burnout during the pandemic.<sup>50</sup> A meta-analysis of 30 studies from mainly high and middle-income countries conducted in 2021 found the prevalence of burnout among doctors and nurses was 66%.<sup>51</sup>

A 2022 report published by WHO with the World Innovation Summit for Health (WISH) titled Our duty of care: A global call to action to protect the mental health of health and care

workers<sup>52</sup> found that a quarter of health and care workers surveyed reported anxiety, depression and burnout symptoms. The analysis found that estimates of burnout during the pandemic ranged from 41–52%, with individual studies reporting even higher levels. The report also found that women were at greater risk of psychological distress.

Multiple other studies have found that women, especially nurses, are at higher risk of adverse mental health outcomes during this pandemic.<sup>53 54 55 56 57</sup> A study conducted across Asian countries found over half of that 51% of women health workers surveyed experienced anxiety directly linked to their working conditions.<sup>58</sup>

Studies conducted in China found that 20% more women health workers experienced increased stress, as compared to their male counterparts. Studies reveal that women health care workers in Kenya experienced more burnout and worse mental health outcomes compared to men during the pandemic folion including increased prevalence of self-medication. Vurses have described "the emotional toll" of working with COVID-19 patients during the peak, and how

they struggled to "switch off" from work when they went home, being anxious about their next shift, having trouble sleeping due to thinking about work.<sup>63</sup> The average prevalence of post-traumatic stress symptoms (PTSD) during the pandemic among health workers is estimated to be around 17% but this figure is much higher for nurses (28%) and frontline workers (31%).<sup>64</sup>



"I was diagnosed with severe depression, severe anxiety in the context of post-traumatic stress disorder. I have never had mental health issues in my entire life. I can actually talk about that today without crying, but seven months ago if you asked me how was work, I'd burst into tears and shut down."

Nurse, Canada 65

The ICN has described a "mass traumatization of the world's nurses." The results below of surveys of nurses, majority women, show alarming levels of burnout and mental illness during the pandemic.

#### Surveys of Nurses During the Pandemic (2020 - 2023)<sup>66 67 68</sup>

Australia	44% of respondents moderately or extremely concerned for their personal health and safety; 17% of respondents had sought mental health or wellbeing support from external providers
Belgium	Two-thirds of intensive care unit nurses at risk of burnout, associated with working conditions during the first wave of the pandemic
Brazil	17% nurses surveyed reported burnout
Canada	52% reported stress from inadequate nurse staffing; 47% met diagnostic cut-off indicative of potential post-traumatic stress disorder
China	Mental health of frontline nurses was generally poor during COVID-19: 9% exhibited depression; 7% reported suicidal thoughts
Germany	20% surveyed considered quitting the profession often or very often since the outbreak of the pandemic
India	Front line nurses in emergency department reported moderate-to-severe level of burnout, emotional exhaustion, and depersonalization
Ireland	Survey of nurses/midwives: 83% reported COVID-19 had negative psychological impact, 61% considered leaving the profession
Israel	Over 40% (n=231) of nurses greatly agreed with the statement that they are "scared to care for sick and carrier patients" and that "caring for sick or carrier COVID-19 patients entails a significant emotional burden"
ECOWAS 15 West African States	78% nurses reported moderate stress and 10% reported severe stress; 20% of respondent nurses reported daily depression symptoms during the pandemic, compared to 2% prior to the pandemic
Japan	Hospitals designated to accept COVID-19 patients exhibited a higher nurse attrition rate: 21%, compared to 11% in other institutions
Lebanon	38% said they wanted to leave nursing but that their families need their salary; 25% indicated they were thinking of working outside the country

Netherlands	27% nurses reported symptoms of anxiety, 19% depression, and 22% post-traumatic stress disorder
Oman	76% nurses reported stress, 44% reported anxiety, 38% reported depression, 74% reported poor sleep
Republic of Korea	73% experienced unfair treatment such as forced shift changes, forced individual time off, forced change of work units, and unpaid leave
South Africa	Pandemic related nurse shortages reported due to COVID-19 infection or infected family. Worsened by early retirement, resignation or death of nurses.
Spain	Lack of PPE crucial issue; 80% reported high or very high psychological impact of COVID-19; 30% reported COVID-19 symptoms
Uganda	40% reported high levels of burnout. Predictors of nurses' burnout were lack of availability of PPE and increased workload
UK	62% reported being too busy to provide level of care they would like to, 57% considering/planning to leave due to feeling undervalued, 70% under too much pressure, 61% exhausted, 60% low staffing levels, 59% low levels of pay
USA	63% nurses reported burnout, 56% reported work overload. Approximately one in three physicians and nurses surveyed intended to reduce work hours. One in five physicians and two in five nurses intended to leave the profession. The American Nurses Association found that at least 69% of nurses said they agree or strongly agree that they put their patients' health and safety before their own



#### "Midwives were trained for life, not death"

Sandra Oyarzo, Midwife and President of the ICM

Pregnancy and childbirth do not stop for global health emergencies so midwives were on the frontlines of patient care in the pandemic. In some countries, midwives were diverted to COVID-19 wards, leaving pregnant women without support for safe maternity, antenatal checks and post-delivery counselling on reproductive health and contraception.

Sandra Oyarzo has been a midwife in Chile for 30 years and is currently the President of the ICM. She has described how midwives of all ages are taking sick leave or resigning: those of retirement age have had enough of the "inhumane system", while those from the younger generations are not willing to tolerate such poor working conditions. Reasons for sick leave or resignation include lack of institutional support/recognition, barriers in access to PPE, safety in the workplace, and the double burden of care. During the height of the pandemic, and without adequate training, many midwives had to support very sick patients and the families of the dying. Their jobs were made harder by health measures restricting access of relatives to the delivery room, including husbands of women delivering babies, to support childbirth.



### COVID-19 INFECTIONS AMONG WOMEN HEALTH WORKERS

Regrettably, very few countries reported data on health worker infections from the virus, and only a small number produced sex-disaggregated data so there is no accurate global picture. Only 42 countries reported sex disaggregated data on confirmed cases among healthcare workers between 2020 and 2022.<sup>69</sup> However, at the start of the pandemic, infection cases of COVID-19 among health personnel were significantly higher among women than among men health workers, with 76% vs 25% in Spain and 69% vs 31 % in Italy.<sup>70</sup> This is unsurprising, given that women are the majority of the health workforce and the majority in patient-facing roles.

WHO estimates that between 80,000 and 180,000 health and care workers could have died from COVID-19 in the period between January 2020 to May 2021, converging to a medium scenario of 115,500 deaths.<sup>71</sup> This is widely accepted to be an underestimate. In addition, millions of health workers will have long term physical and mental health impacts from the virus.

Applying an intersectional lens reveals that in some high-income countries, nurses of color and from ethnic minorities have died at higher rates than others. In 2020, 75.3% of registered nurses in USA were white,<sup>72</sup> but they accounted for only 39.4% of deaths from COVID-19 in the same year.<sup>73</sup> In the UK, 61% of 200 National

Health Service health workers who died from COVID-19, or its complications, were from black, Asian or minority ethnic backgrounds, disproportionately high compared to their number in the workforce.<sup>74</sup> Evidence from many countries also showed that some groups of women health workers, who are more likely to have roles accorded lower status, have been disproportionately affected by the virus, including older workers and those marginalized by race, ethnicity and migrant status.<sup>75</sup>

A large number of health workers who have contracted the virus will be left with the symptoms of 'long COVID-19': an estimated 20% of people infected with COVID-19 will have symptoms five weeks later and 10% will still have symptoms after 12 weeks.76 In 2022 the British Medical Association conducted a survey to explore the impact of long COVID-19 on the medical profession; the results reveal that almost one in five (18%) were no longer able to work and nearly half (49%) of respondents had lost income because of long COVID-19.77 Women are more likely to suffer long COVID-19, outnumbering men by as much as four to one.78 It is difficult to estimate percentage of trained health workers with long COVID-19, and other physical health and mental health impacts resulting from COVID-19, who as a result have been unable to resume their jobs.

# WOMEN HEALTH WORKERS HAVE NOT BEEN ADEQUATELY PROTECTED

#### PERSONAL PROTECTIVE EQUIPMENT



"In the early days of the pandemic, it was very challenging because PPE was limited, but we had to continue providing maternal healthcare services even without PPE...it felt like we were going to battle without appropriate armor."

Midwife, Indonesia79

Insufficient or poorly fitting, **personal protective equipment (PPE)** increased infection risks for women health workers.<sup>80</sup> PPE was already in short supply in less well-resourced countries but as the pandemic escalated, shortages were reported everywhere, with health workers sometimes asked to reuse PPE, contrary to guidelines. WGH research in 2020 found only 25% of women had access to adequate PPE all the time.<sup>81</sup> Many health workers had to improvise, using items such as garbage bags as aprons.<sup>82</sup>



"The first thing that they did at my workplace was lock up all the PPE, so we didn't have access to masks right off the bat, even just plain masks or gowns or gloves... Twice a day the door would be unlocked for an hour, somebody stood in that room and watched us count each and every glove that we took."

Nurse, Canada<sup>83</sup>

Even when available, PPE access has sometimes been influenced by gender power imbalances in the health workforce. PPE distribution during the pandemic was based on priority which mirrored existing power hierarchies within many hospital systems. Despite their pivotal role in fighting the COVID-19 pandemic, and maintaining essential health services, especially in LMICs, <sup>84</sup> women community health workers have been among the most unprotected members of the health workforce. <sup>85</sup> At the start of the pandemic, the all-women cadre of Accredited Social Health Activists (ASHA) workers in India were forced to buy their own PPE without government supplies or resources; some mentioned receiving only one mask in the span of four months. <sup>86</sup>

Midwives were often left with little PPE, despite their role demanding close, physical contact with their patients. In Canada, midwives were not eligible to access PPE from the government supply chain and so had to source their own, which was challenging during the initial months of the pandemic due to shortages. Midwives described sewing their own masks and washing out gloves to be reused. One midwife described the "constant stress of balancing my fears and thinking of the women and babies I work with." Another described having two homebirths in one night with only enough PPE for one. Lack of PPE for midwives, resulted in increased risks for families, which in turn increased moral distress among midwives.<sup>87</sup>

In all parts of health systems, women health workers have often faced greater occupational risks than male colleagues, as described by this community psychologist in Malawi:<sup>88</sup>



"There are two women in the department, and it's always the two of us who end up being the ones that are sent out to the field because we're women, and we can 'relate with people better'. So that's the excuse that they end up giving. But we're not getting adequate protection. And the men end up staying behind in their safe space. The [gender] dynamics have been playing out, where women are expected to do the dirty work, but without getting any protection. I have seen this trend in different departments, and also hearing it from female friends in different fields - nurses, pharmacists, physiotherapists – and when we complain about being sent out into the field without proper protection, we get labelled as being stubborn."

There is also evidence that women from racial and ethnic minorities have been less protected. In the UK, black and ethnic minority nurses were found to have less access to adequate PPE than their white counterparts. In Brazil, white men received PPE more frequently. In Wuhan, China, The United Nations Population Fund (UNFPA) sent sanitary towels and adult diapers to frontline health workers, 90% of whom were women, to enable them to work long shifts with COVID-19 patients without removing their PPE. Lack of protection was particularly a concern for nurses who were immunocompromised or pregnant.

The default health worker is a woman yet, by default, PPE is designed for men. There have been many reports of PPE not designed for women's bodies and physiological functions. PPE is often too large for women and designed so that it has to be completely removed to urinate and manage menstruation, which may not always be feasible. "One-size-fits-all" PPE is problematic during long shifts when ill-fitting equipment is painful and bruises the skin. Only 14% of respondents in WGH's survey of 1,000 women health workers in over 50 countries were able to use adequately fitted PPE. If women health workers are constantly in discomfort and readjusting their PPE, they cannot work effectively. With sliding goggles, ill-fitting masks, and large gowns, women risk impaired sight, increased risk of infection, and limited movement with fear of tripping and knocking down supplies or accidental contact with infected surfaces.

Despite the evident challenges, or the fact that women fail their fit tests for PPE, no recourse exists. Women are sometimes made to feel foolish for being concerned about ill-fitting PPE. Ill-fitting PPE has also added to anxiety about catching and transmitting COVID-19. Unsurprisingly, there's evidence that being able to contribute to decision-making regarding the types of PPE used increased nurses' sense of being supported by the health system.<sup>95</sup>

#### **VACCINES**

Global inequities in the COVID-19 vaccine roll out 96 also left the most vulnerable women health workers in LMICs at greatest risk, in roles with close patient and community contact without the protection of vaccines. By December 2021, only one in four African health workers were fully vaccinated against COVID-19, leaving the bulk of the workforce on the frontlines against the pandemic unprotected.97 In sharp contrast, 22 mostly high income countries reported that above 80% of their health personnel were fully vaccinated.98 Available data from 119 countries suggested that by September 2021, only 2 in 5 health and care workers were fully vaccinated on average.<sup>99</sup> Large inequities were observed, with low-income countries lagging behind. Despite their critical role in the response, the vaccine roll-out among women community health workers was not prioritized nor tracked.

Lastly, health systems in many countries failed to give adequate guidance and protection to pregnant women health workers (pregnancy increases risk of mortality from COVID-19), particularly, since it took time to establish the safety of COVID-19 vaccines because they had not been trialed on pregnant women.<sup>100</sup> Pregnant women health workers may have lost their lives needlessly because they were not offered the vaccine or had concerns.<sup>101</sup> <sup>102</sup>

COVID-19 has exposed inequalities including differences between and within countries in the protection of women health workers. It is critical to take an intersectional approach to understand the differential impact of the pandemic on different groups of women. Women working in under-resourced health systems and humanitarian emergencies have been the most heavily impacted, as have older workers, pregnant women and those with underlying health conditions, marginalized ethnicities and workers in lower status health and care professions.



#### LACK OF FAIR PAY AND SUPPORT

Global health rests on the **unpaid and underpaid work of women.** Health policies often naturalize health and care work as 'women's work'. <sup>103</sup> In 2015, the Lancet Commission on Women and Health estimated that women contribute \$3 trillion to global health annually, half in the form of unpaid work. <sup>104</sup> The pandemic has exposed the fragility of the care economy, by showing that it rests on the assumption that women will be the 'social shock absorbers' in any crisis, responding by increasing their hours of unpaid work. <sup>105</sup>

Over six million women, mostly community health workers, are unpaid or grossly underpaid via task-based stipends or non-monetary incentives, while working in core health systems' roles. 106 Their informal status and lack of professional recognition prevents career mobility and means they are excluded from the policy and decision-making processes that structure their work. 107

Occupational segregation by gender means women tend to be clustered into lower-status and low-paid sectors and specialisms in health, creating a gender pay gap in favor of men. 108 Women in the health sector earn 24% less on average than their male counterparts. 109 The gender pay gap results in lower lifetime income for women, reduced access to pay-related social and health benefits (where they exist), and increased poverty for women in older age. Equal pay for equal work legislation and strong collective bargaining, absent in many countries,

are essential for addressing the gender pay gap in the health sector, as is breaking down the gendered occupational segregation of the health sector. Typically, women in unpaid and underpaid health system roles will be disproportionately drawn from marginalized social groups in a society.

For health workers in formal sector jobs, pay was an important issue during the pandemic and one reason why health workers in over 100 countries took strike action. 110 Health workers were asking for pay levels that reflected both the increased hours and increased level of risk with COVID-19. In 2021 the British government offered a 1% pay raise for NHS workers, which was approximately 14% less than nurses' organizations had quoted as necessary to reach adequate remuneration.<sup>111</sup> In 2022, UK nurses went on strike for the first time in the 106-year history of the Royal College of Nursing.<sup>112</sup> In South Africa, public sector wage freezes threaten to effectively reduce nurses' real incomes.113 In Spain, private health system nurses, not involved in COVID-19 related work, were sacked instead of being reassigned to duties that could have helped alleviate the pressure on health services. 114 There are concerns that some governments might look to additional cuts to nurses' salaries and health budgets as a short-term strategy for economic recovery. 115 These snapshots from different contexts paint a picture of increasing economic hardship for women health workers, as well as increasing dissatisfaction with their terms of employment.



It is highly likely that women's unpaid or grossly underpaid work in health and the gender pay gap are a key reason for the disproportionate number of women who have left or are planning to leave the health workforce. Where women are paid less than men, they are less financially resilient in the face of shocks. It is often the case that women leave the the workforce because their pay (or unpaid work) could not cover increased COVID-19 related costs or, as the lowest earning member of their household, they were forced to give up work

due to pandemic related school, childcare, and elderly care facility closures. In Canada, women comprised 80% of the workforce in health and social assistance occupations before February 2020, yet they sustained 94% of the job losses during the first three months of the pandemic. 116 To accommodate for the rising pressures in their professional and home lives (e.g., increased fear of exposure/infection, loss of childcare, etc.) women were twice as likely to work primarily from home and voluntarily reduce their work hours. 117



"If you have to go off of work because you might be positive for COVID, we're not going to pay you for that either. It's going to come out of your sick [leave] or you get unpaid leave. So sorry about your luck."

Nurse, Canada<sup>118</sup>

For women health workers, workplace policies are often inflexible in responding to their competing demands of home and work responsibilities. In the Republic of Korea, 73% of surveyed nurses experienced unfair treatment, such as being forced to change shifts or take unpaid leave. 119 In Brazil, women doctors described a rigid work schedule that conflicted with their childcare responsibilities: COVID-19 shifts were not negotiable, and managers lacked understanding of the realities of their lives. 120 In Ireland nurses were forced to choose between caring for their children and reporting to work.<sup>121</sup> In one Canadian study, some women nurses requested more flexible work schedules in order to accommodate childcare, but their requests were denied. 122 Midwives in Canada noted that they, as well as colleagues, had to take time off from work, considered quitting, or left their jobs in part because of the absence of crucial support. 123

Women health workers have faced a challenging triple burden during the pandemic: exceptional pressure at work, increased unpaid work and childcare at home, and additional stress at community level, including support for older family members. Some countries kept schools

open for the children of key workers, including health workers during the pandemic, but with long shifts mothers reported challenges accessing childcare support. Schools and daycare services during the pandemic were either extremely limited or closed and family support was made impossible by lockdowns. This was more challenging still where health workers were single parents, or their partner was also an essential worker and could not share childcare responsibilities.

During the pandemic, women health workers have made huge sacrifices, but public applause and recognition have not translated into better wages, formal sector working conditions for many, or policies and protection fit for women. Despite the fact that the typical health worker in most countries is a woman, workplace policies are not tailored to take into account the reality of women's lives. A gender analysis of the needs of women health workers during the pandemic and in normal times – and listening to the perspectives of women health workers – would have benefited both women health workers and the health systems they work in.



"We applaud frontline health workers as heroes. We respect them but don't protect them.... We pray for them but don't pay for them."

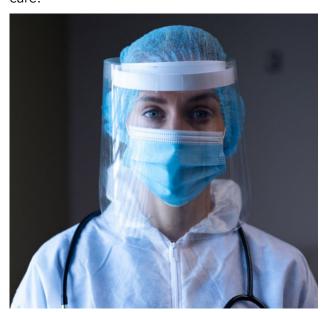
Dr Raj Panjabi, CEO Last Mile Health, 2020<sup>125</sup>

#### **MORAL INJURY**

Moral injury in the medical context is defined as a situation where health workers are expected to make choices that transgress their commitment to do no harm. Moral injury often results in moral distress. The levels of moral distress among health workers were high. During the pandemic, health workers were often asked to make choices they were not trained for and, due to the intensity of the crisis, were forced to compromise levels of patient care and safety.

A study conducted by the British Medical Association reported that the pandemic worsened the already high levels of moral distress. Contributing factors included surges in patients, insufficient staffing levels, increased working hours and lack of work-life balance. Even though moral injury is not classified as a mental health condition, it is associated with increased levels of burnout, post-traumatic stress disorder and in the worst-case, suicide. Moral injury has been reported as one of the greatest challenges faced by frontline health workers in the UK. 128 In the USA, moral injury among healthcare workers was estimated to be around 41%. 129

The conditions that led to moral distress among health workers also had severe implications for patient care and treatment. The patient-to-nurse ratios in critical care rose from 1:1 to 1:6 in hospitals across the UK in the first wave of the pandemic<sup>130</sup> and lack of medical equipment and supplies, including oxygen and ventilators led in many countries to a reduced quality of care.



Moral distress has been found to be higher among women health workers than men.131 This is linked to the gendered occupational segregation of health systems, where more women than men are in patient-facing roles but have less access to decision-making. 132 In Canada, 133 research on the 'double distress' of women health workers during the pandemic adopted a feminist political economy lens to illuminate how women health workers faced and resisted a double layering of moral distress both at work and at home. Moral conflict occurred when women felt those making decisions were too distanced from the realities of care work to understand the consequences of COVID-19 protocols. For example, when a hospital manager asked a superior, located in a city over 100 km away, if changes in a policy could be delayed until the following day as her colleagues were already stressed due to multiple disruptions and conflicting information, she was told "if people die it's your fault." At the time of the interview, the respondent was recovering from a heart attack, which she attributed to the pressure from such moral conflicts. Nurses described being instructed to spend as little time as possible with patients, to reduce risk of transmission, at the same time as patients needed greater emotional support because they had no family present.



"Women's own recognition of the importance of the care they provide, despite lack of formal recognition and support, compelled guilt when care burdens became impossible to manage... Masculine dominance in health system leadership combined with the command-and-control style of decision-making, common in emergency response, privileged hegemonic masculine norms that dismissed input, generating situations of moral conflict."

Smith et al, 2023<sup>134</sup>



Artwork by Dr. A Dhaliwal, 2021

#### **GENDER BASED VIOLENCE AND STIGMA**

The pandemic exacerbated a long-standing problem of violence and sexual harassment at work<sup>135</sup> in the health and care sector. In an analysis of over 330,000 health workers before the pandemic, 62% reported they had experienced a form of violence or harassment in the past year.<sup>136</sup> A study in Australia suggested that nearly 97% of the women doctors had suffered some kind of harassment at the hands of male perpetrators.<sup>137</sup> Nurses in Pakistan report being sexually harassed and exploited by male doctors, paramedics, hospital administrators, owners, patients and their attendants.<sup>138</sup>

Women health workers are disproportionately targeted for sexual harassment, including from colleagues, male patients and members of the community. On average, nurses are three times more likely to experience violence in the workplace than other occupational groups. <sup>139</sup> Official statistics, however, vastly underestimate incidence. For example, only 12% of health workers in one survey on violence and harassment had formally reported an incident they had experienced. <sup>140</sup>

Although health and care workers have been praised for their work, incidents of violence and harassment have been reported from all regions. In 2020 WHO highlighted an alarming rise in reports of verbal harassment, discrimination and physical violence among health workers in the wake of COVID-19.141 Since the start of the pandemic, 44% of registered nurses in the USA reported experiencing physical violence at least once from their patients, visitors, or family members. 142 In the UK, a campaign was launched by female doctors against the misogynistic culture of medicine and sexual exploitation of female doctors following a survey that found 91% had experienced sexism at work within the past two years (2020/2021).143

Despite the grave and far-reaching consequences of this abuse for women and for health systems delivery, only 37% of countries report having measures in place to prevent attacks on health workers and around 43 countries worldwide lack any legal protection against sexual harassment in the workplace.<sup>144</sup>

Anxiety and misinformation about the pandemic increase the risk for frontline health and care workers in health facilities and also those undertaking outreach work in communities.<sup>145</sup> In 2021 violence and abuse increased in some countries as a consequence of the COVID-19 vaccination roll out. Health workers distributing vaccines were abused in person and online by anti-vaccination protestors, who falsely accused health workers of promoting an untested or dangerous vaccine. 146 In many places, the pandemic created a hostile environment for health workers who were stigmatized as spreading the disease or abused for not providing care in situations where health facilities were short of beds and treatments, such as oxygen.<sup>147</sup> Health workers have been

impacted in their personal lives, with some workers abused in shops, while travelling to work and in their homes. In some cases, health workers have been evicted from their homes and their families targeted for abuse.<sup>148</sup>

Violence and harassment in health and social care has heavy costs for the women affected and for health systems, communities and societies. Health workers distracted by harassment are more likely to make medical errors, produce lower quality work, and be absent from work. In one study in India, nearly 80% of ASHA women community health workers, reported that lack of safety at work negatively impacted their performance at work.<sup>149</sup>



### ILO CONVENTION 190 – WORK FREE FROM VIOLENCE AND HARASSMENT

On 25 June 2021 a landmark UN Convention came into force. ILO Convention No. 190 (C190) is the first international labor standard to address violence and harassment at work. Together with ILO Recommendation No. 206, it provides a framework for action and a unique opportunity to shape a future of work based on dignity and respect. Thirty-two countries ratified the Convention as of October 2023. <sup>150</sup> C190 applies to all sectors and to workers of all genders in all sectors. Since violence and harassment in the health and care workforce disproportionately impacts women workers, ratification and implementation at national level of C190 stands to benefit women in the sector significantly.



#### GLOBAL HEALTH SECURITY DEPENDS ON WOMEN

#### IMPACT OF COVID-19 ON WOMEN HEALTH AND CARE WORKERS



Left out of leadership and decision-making in the health systems they know best.



High risk of infection, long term health impacts and death, risk heightened for some ethnicities and older workers and where PPE inadequate.



Safety at work, increased attacks on frontline health workers. Increased Gender Based Violence at home.



Mental stress from sudden increase in COVID-19 cases and deaths, PTSD, risk of depression and suicide.



Women Health and
Care Workers feel
pride and
professional
satisfaction at
playing a critical
role for health,
society and global
health security.



Risk of infecting family, especially vulnerable relatives. Stigmatized in the community for being a health worker exposed to COVID- 19



Fear of financial hardship.
Over 6 million women are
unpaid or grossly underpaid.
Women health workers earn
24% less than male
counterparts on average.



Managing childcare and home schooling during lockdown. No access to nurseries, schools and extended family support for childcare.



Long hours wearing PPE, exhaustion and need to manage the **burden of domestic work** falling disproportionately on women.

Figure 1: Impact of COVID-19 on Women Health and Care Workers

# RESIGNATIONS AMONG WOMEN HEALTH WORKERS

All the conditions above, driven by the pandemic, have created a perfect storm for women, causing many to reconsider their status as health workers. The pandemic exacerbated and exposed existing gender inequities within health systems. Women clustered into sectors in health given lower status and lower pay found themselves excluded from leadership and often last in the queue for PPE, despite being on the frontline in patient facing roles. Feeling unsupported and undervalued has been a significant contributor to burnout, especially in conjunction with reduced job satisfaction resulting from COVID-related restrictions and surges in patient numbers.

There are multiple reasons why women health workers are resigning from their jobs. The reasons will be as individual as the women themselves. It is clear from surveys that low pay and heavy pandemic workloads are key issues for many but feeling valued and listened to is equally important.

The data is imperfect. Surveys are recording burnout and mental stress, but we do not always know how many of the health workers actually resign. There is little detail on plans to resign within different health cadres and within different social groups e.g., by sex, age, dis/ability, race, ethnicity, gender identity. This information is key for planning human resources for health.

Similarly, there is no clear picture of where women health workers who resign from their jobs are going e.g., whether they are leaving the workforce (sometimes driven by mental or physical illness) or moving to another job elsewhere in the health sector which might have more flexible hours and less stressful conditions. Given labor shortages in the health sector in many high-income countries, it is possible some women health workers are moving to better paid jobs in the sector.

All the while, the global nursing workforce is ageing. One in six nurses is expected to retire in the next 10 years.<sup>151</sup> A percentage of women health workers who have left the sector in the pandemic in high-income countries retired early to avoid the risk of the virus.



There is considerable stigma amongst health workers in most contexts about seeking help for mental health issues. The burden of mental ill health therefore may go unreported and health workers leave the workforce when they might have been supported to remain in their jobs.

The large backlog of unmet medical need created by the disruption of the pandemic means that the stress on health workers has continued even after acute surges of COVID-19 cases have reduced. In the UK, 7.5 million people out of a population of 67 million, are currently on hospital waiting lists for treatment. Health workers may be more likely to resign where they cannot see an end to heavy workloads and stress.

Not all stressed health workers with low morale will be able to resign. Many women will have financial pressures and not be able to give up their income. We might expect more resignations in high-income countries where workers have social safety nets and a greater chance of alternative employment. If health workers stay in jobs when they feel exhausted and stressed, then it is likely to have a very negative impact on morale and patient care.

"The disregard for nurses' expertise on safe staffing and nurses' lives in regards to workplace violence is further compounded by the downward pressures on nursing wages, illustrating one of many effects of structural violence towards nurses. This trinity of disrespect of the expertise, safety, and livelihood of nurses has decimated nursing ranks.

Bortolussi-Courval et al, 2023<sup>153</sup>



#### THE GREAT MIGRATION



"It is not only the great resignation that our country is facing, but also the great migration of our female healthcare workers."

#### **Dr. Lourdes Capito**

Obstetrician and Gynecologist, Committee Chair, FIGO - International Federation of Gynecology and Obstetrics



There is increasing evidence that the pandemic is increasing health worker migration. In 2021-22, 37,815 Indian nurses qualified to work in the UK, up from 28,192 the previous year and a jump from 17,730 four years ago.<sup>154</sup> In Zimbabwe more than 1,200 nurses resigned in 2021 to emigrate, which was three times the number that had left in 2019. Ghana has recorded a 43% increase in the resignation rate of nurses compared to 2018, likely because of planned migration.<sup>155</sup>

High-income countries with high levels of vacancies are currently actively advertising for health workers in LMICs and removing barriers to inward migration. <sup>156</sup> The government of Italy is making agreements with countries to 'import' health workers, for instance nurses from India. The province of Ontario in Canada has directed its licensing bodies to streamline the integration processes for immigrants with a nursing or medical credential in the province. <sup>157</sup>

The province of Québec launched an international recruitment drive to hire over 1,000 French-speaking nurses in February 2022.<sup>158</sup> Austria has reformed immigration policies to help attract more than 15,000 skilled workers from non-EU countries each year by 2027 to help fill shortages in health and other sectors.<sup>159</sup> The Philippines considers Austria as a "promising labor market" for Filipino health and care workers.<sup>160</sup>



"In the UK, new rules make it easier for medical regulators to register those who have qualified abroad. If the change proves successful it will help pave the way for more nurses and dentists coming to work in Britain from countries such as India, Sri Lanka, Kenya, the Philippines, and Malaysia."

McCarey et al, 2022<sup>161</sup>

The WHO Code encourages all member states to act in solidarity, produce sufficient health workers domestically and invest in supporting countries with vulnerable health systems to strengthen their health workforce. Yet new analysis in the WHO report on the global health worker mobility of 64 destination countries revealed that countries on the WHO Health Workforce Support and Safeguards List were among the top source countries. For example, two countries (Nigeria and Pakistan) are among the top 20 source countries for medical doctors; and three countries (Ghana, Haiti and Nigeria) are among the top 20 source countries for nursing personnel.

New Brunswick Province, Canada sent nurse recruiters to Senegal and Ivory Coast, both countries on the WHO Support and Safeguards List. Health workers are also leaving Nigeria, another country on the list, with devastating consequences for doctor-to-patient ratios and health system delivery.

66

"...the Nigerian Medical Association recently revealed that up to 50 doctors leave Nigeria to foreign countries every week, leaving only 24,000 doctors to practice in the country. This, therefore, puts the doctor-to-patient ratio in Nigeria to approximately one doctor to more than 9,000 patients. This is not limited to doctors, as other cadres of health workers – nurses, and even community health extension workers are similarly affected – working in difficult working conditions forcing many to seek opportunities abroad. The Nigerian Association of Nurses and Midwives has reported that Nigeria now has a nurse-to-patient-ratio of one nurse to about 1,160 patients compared to the World Health Organization recommendation of one nurse to five patients."

Oreh A., 2023<sup>163</sup>

The UK government has incorporated the WHO Support and Safeguards List into its own code of practice - calling it the 'red list'. However, the BBC has documented how the government sponsored British Council is supporting recruitment events in Nigeria and other 'red list' countries (Ghana, Sudan, Pakistan and Bangladesh). There are also loopholes in the Code that mean, for example, that because the governments made an agreement, it is permitted to actively send nurses from Nepal to the UK, despite the shortages in Nepal. 165

Health worker unions in high-income countries are calling for their governments to develop alternative strategies for health workforce strengthening, moving away from the practice of international recruitment.<sup>166</sup>

A paradox of the global health worker shortage, however, is that some LMICs, depending on the methodology and definitions, can have health worker shortages and unemployed health workers at the same time. Unemployed physicians and nurses have been documented in several countries including Ethiopia, Malawi, Zambia and Democratic Republic of Congo. 167



# WOMEN HEALTH WORKERS AND MIGRATION

Current evidence shows that women health workers are migrating from high-income countries and LMICs. The data is not comprehensive and where it does exist, it is not generally sex disaggregated. However, one UK study of migrating physicians concluded that women were migrating at the same rate as men.<sup>168</sup>

In 2018, 89% of the nursing supply gaps identified were concentrated in LMICs. 169 The countries with the largest gaps were Bangladesh, India, Indonesia, Nigeria, and Pakistan. Yet in India and Philippines, a "train for export" model exists, whereby the countries themselves encourage their trained nurses to work abroad as part of their economic strategy. 170 Furthermore, smaller countries in the Caribbean and the Pacific, and post-conflict countries in Africa have amongst the highest emigration rates with more than half their nurses working in high-income OECD countries. 171

The migration of women health workers is driven by multiple 'push' and 'pull' factors. Push factors include low pay, poor conditions,

66

"Many midwives are likely emigrating from LMICs to feel empowered, to gain more respect than in their home country. They want more professional autonomy"

Sandra Orayzo, President, International Confederation of Midwives

Before the pandemic, there was an estimated global shortage of 5.9 million nurses<sup>177</sup> and 900,000 midwives. Nurses, midwives<sup>178</sup> and physicians will tend to be most mobile health cadres. Not all health worker cadres are internationally mobile, however. Community health workers, the majority of whom are women, generally do not have qualifications recognized outside their home countries.

As well as potential opportunities, migrant

low job prospects, sexual harassment, and violence. Pull factors include perceptions of a better life, better equipment and resources, shorter working hours, career advancement and learning in the new country. In some cases, women health workers migrate to escape political instability and conflict. <sup>172</sup>

India produces approximately 200,000 new nurses every year, but 40-50 % leave the country within two years of graduation. Low salaries, poor working conditions and lack of opportunities for career growth are cited as reasons. Higher pay is a major cause elsewhere of health worker migration. The starting salary in 2015 for a nurse in Jamaica was \$8000 compared to \$65,000 in the USA. Conflict and crises are also a cause of migration, especially in the Eastern Mediterranean region: In Lebanon, around 30% of nurses have left due to the country's economic crisis.

The motivations to move from one's own country are individual as well as systemic:



"The system [in Ghana] is such that physicians are handicapped in carrying out their duties. It is like working in a jungle. So, for me practicing medicine in Ghana is frustrating. Coming [to the United States] makes medicine more fulfilling because I am at least able to practice medicine at the comfort level that I want."

Doctor, Ghana<sup>176</sup>

women health workers face many risks. In 2019, 200 Filipino nurses won a human trafficking lawsuit in which they alleged that the owners of a group of New York nursing homes did not pay the wages promised in their contracts and that they were forced to work in unsafe conditions with inadequate staffing.<sup>179</sup> This example is not an isolated phenomenon and migrant female health workers have unique challenges that need to be studied in more detail.

Caribbean nurses who have migrated to HICs have also reported experiences that demonstrate "clear patterns of institutionalized racism, marginalization, discrimination, and devaluing of prior credentials and knowledge." These examples reaffirm the migrating healthcare workers' fear of being treated as "second-class" workers in their destination countries. These patterns of marginalization intersect with the gendered barriers nurses already face in the workplace..<sup>181</sup>



"...nurses from LMICs are being recruited to work in identical conditions that pushed out existing nurses. Unsafe staffing ratios and workplace violence against nurses will simply affect a different population of nurses, but the same structural issues will remain. Nurses migrating from LMICs to HICs for work are at an increased risk of exploitation, including unfair wages and stressful visa or immigration barriers. This can take many forms, including but not limited to excessive demands to work overtime, lower wages than their domestically trained counterparts, threats of deportation if they do not comply with excessive demands, withholding of immigration documents, delaying payment, or the obligation of paying excessive fees if they breach their contract"

Peters M., 2023<sup>182</sup>

"Nurses from LMICs enter a healthcare system plagued with longstanding systemic problems, and their own experience is compounded with the systemic racism they face at every turn; from barriers to obtaining their nursing license to racist violence from patients, colleagues and management"

Bortolussi-Courval et al, 2023<sup>183</sup>

Research by Amnesty International has revealed exploitation of women migrant care workers in Austria, with poor pay, discrimination and excessively long hours pushing some to the brink of collapse. The vast majority of those who work as live-in carers for older people are currently women migrant workers from Central and Eastern Europe, who are often subjected to various intersecting forms of discrimination and abuse. Care workers told Amnesty International that unfair wages, lack of sick pay

and inadequate breaks were a daily reality even before the pandemic, but COVID-19 made working conditions unbearable.<sup>184</sup>

The effect of women's migration on their own country and family is multifaceted. When women leave, the remaining female family members take on additional caregiver responsibilities. Many women who migrate leave their children behind, and although they may send financial support for childcare, there is an emotional cost to this family separation.<sup>185</sup>



# IMPACTS OF THE GREAT RESIGNATION AND MIGRATION

Low and middle-income countries are potentially facing a double crisis. The Great Resignation of health workers is coupled with an ongoing Great Migration, where they are losing many qualified workers – worsening national labor shortages and jeopardizing UHC goals. In countries with fragile health systems, migration impacts the ability to provide basic health services and have effective primary health care and there may be delays in the detection of outbreaks and epidemics.

#### **RESIGNATIONS AND MIGRATION IN PHILIPPINES**<sup>186</sup>

The Philippines is the largest supplier of nurses to the OECD with an outflow of 15,000-20,000 nurses per year despite the shortages within their own health workforce. The high nurse-to-patient ratio and low wages are reported as common reasons for Filipino nurses leaving to work in other countries. This 'great migration' has given rise to a valuable global diaspora of Filipino nurses. In 2017, \$31 billion personal remittances from Filipino workers overseas accounted for 10% of gross domestic product. But it has also resulted in a low number and unequal distribution of nurses in the Philippines.

Resignation and migration among Filipino nurses accelerated during the pandemic. One year into the pandemic, recent news reports in the Philippines highlighted that Filipino nurses were resigning to work abroad. In the first two to three weeks of October 2021 alone, it was noted that about 5% to 10% of nurses working in private hospitals resigned. It is nother 2021 news report, a hospital director in one city mentioned that their nursing staff had decreased from 200 to 63 over the past year. Overall, about 40% of nurses in private hospitals have resigned since the pandemic began. The Philippines government responded by banning and limiting nurses from living and working abroad, so they could serve as a "reserve force" as the country navigated the pandemic. This deployment ban was questioned as possibly being unconstitutional, violating the right to travel and earn a living wage and having negative effect on the Philippine economy.

The Great Migration costs LMICs an estimated \$15.86 billion annually in excess mortality. 193 The greatest costs are borne in India, Nigeria, Pakistan and South Africa. To increase capacity to the recommended nursing levels required, many of these countries would need an average increase of 8.8% in the number of nurses graduating annually. 194

If, as it seems clear, the pandemic has driven a significant resignation of women health workers from the sector, then the implications for staffing health systems and achieving UHC in LMICs look unpromising. There was a serious global shortage of trained health workers, especially nurses and midwives, before the pandemic and a geographical maldistribution between and within countries. High-income countries have five or six times more health workers per capita than low-income countries.<sup>195</sup>

"Africa has a 4% share of the global workforce despite shouldering a quarter of the global disease burden. Growing migration of health workers to high-income countries threatens to further weaken health systems across 55 countries in the 2023 WHO health workforce support and safeguard list."

Dr Tedros Adhanom Ghebreyesus et al, 2023<sup>196</sup>



Health worker shortages, caused by resignation, migration or another cause has a serious impact on the workloads of the health workers trying to manage larger numbers of patients and on the quality of care.



"Nurses have been fighting for safe staffing ratios for decades. The categorical refusal to listen to nurses' clinical expertise about their own capacity to provide safe care is not only dangerous, but also a form of disrespect. For each additional patient to a nurse's workload, the patient's odds of dying within 30 days of admission increase by 7%."

Bortolussi-Courval, et al., 2023<sup>197</sup>

Studies have come from several countries documenting the negative impact on health systems and patients of health worker shortages, particularly during or in the aftermath of the pandemic. Based on an assessment of 27 studies in LMICs, one review concluded that lower nurse-to-patient ratios and higher nurse workloads are linked to in-hospital mortality, hospital-acquired infections, medication errors among patients, high levels of burnout, needlestick and sharps injuries, absenteeism, and intention to leave their job among nurses.<sup>198</sup> In Canada, a high-income country, due to health worker shortages, more than one in five Canadians — an estimated 6.5 million people — do not have a family physician or nurse practitioner they see regularly.<sup>199</sup>



#### **RECOMMENDATIONS**

# 1. Governments must fulfil their commitments ('the Code') to retain and train health workers to address the global shortage and maldistribution of health workers between and within countries.

The health and care workforce is projected to grow to 84 million with a 10 million global shortage by 2030.<sup>200</sup> The most acute shortages are in low-income countries, rural areas and humanitarian contexts with the greatest need for health services and trained health workers. Health worker shortages are a long-term problem, caused by chronic underinvestment;

and increased demand driven by changing demographics and burdens of disease. As outlined in this report, health workers have been lost to COVID-19, its long-term mental and physical impacts, and to resignation and migration. At the same time, health systems are challenged by unprecedented backlogs of delayed treatment, vaccinations, and screening.

- Governments must prioritize immediate investment to retain and attract trained health
  workers back into the health sector. This will require urgent attention to the decent working
  conditions described in the WHO Global Compact and will require urgent action described
  below on gender equity in the health workforce.
- Governments must adhere to the commitments made in the 2010 Global Code of Practice on the International Recruitment of Health Personnel (the Code), especially the commitment to produce sufficient trained health workers to meet national demand. It is critical that all countries, especially high-income, put in place long-term health workforce plans that do not rely on international recruitment.
- Governments must deliver the commitment in the Code to co-invest in strengthening health systems and the health workforce in the 55 countries on the WHO's Support and Safeguard List. Active international recruitment from countries with low health worker density and low UHC coverage, is strongly discouraged under the Code which calls for ethical international recruitment of health workers by all actors, including the private sector. There is evidence that health workers are being actively recruited from Support and Safeguard List countries with highly vulnerable health systems. Member states must review strengthening accountability under the Code.
- Governments with **unemployed trained health workers** should urgently institute policy measures to engage them to fill vacancies. This may entail assistance from other member states in the spirit of global solidarity advocated under the Code.
- Governments must strengthen national data on health workers, disaggregated by sex and other relevant factors to track attrition, enable national workforce planning, and enable WHO and ILO to monitor trends in international health worker recruitment and migration. This data will show where urgent action is needed by health worker profession, indicate countries heavily dependent on international recruitment and facilitate monitoring of compliance with the Code.



"We're healthcare heroes, but no. We're not actually treated as heroes by our actual employer. Not like you want to be treated like a hero... [but] we don't even have access to free coffee and tea, or a fridge."

Nurse, Canada<sup>201</sup>

# 2. Operationalize the WHO Global Health and Care Worker Compact and ensure safe, dignified, and decent work for all health workers.

The decision of many women health workers to leave their jobs has not been prompted solely by the stress of surging patient numbers and workloads. The 'final straw' was often treatment that made them feel undervalued and even expendable e.g. being excluded from decision-making; given inadequate PPE; expected to work long shifts without bathroom breaks

and provision of food; no additional pay to cover additional expenses; no protection from violence and harassment; and no mental health support.

The policy recommendations from nurses from British Columbia, Canada (see box below) illustrate this well.

### Policy recommendations: Nurses During COVID-19 in British Columbia, Canada<sup>202</sup>

- 1. Supply frontline healthcare workers with continual access to adequate, **high-quality PPE** to reduce the risk of COVID-19 infection.
- 2. Provide **paid leave and benefits** to healthcare workers who experience COVID-19 infection or mental health problems or have to provide care to dependents affected by COVID-19.
- 3. Offer **training and education** opportunities for healthcare workers to keep up to date with changing protocols while minimizing potential increases to their work burden, such as by providing paid education days.
- 4. **Hire more nurses** to help reduce workloads and burnout and ensure healthcare workers can take time off when needed.
- 5. Increase women healthcare workers' representation in health care leadership and participation in decision-making opportunities to enable them to advocate for policies that meet their needs and those of their patients and clients.
- 6. Arrange **childcare support** in a manner that is accessible and considers the schedules and needs of frontline healthcare workers, such as by offering onsite childcare.
- 7. Encourage **flexibility in working hours** and opportunities to work from home whenever possible to allow healthcare workers to better balance their paid and unpaid caregiving roles.
- 8. Run public awareness campaigns **that combat misinformation** around COVID-19 to reduce stigma towards healthcare workers.
- 9. Establish programs and opportunities for healthcare workers to access **fresh and healthy meals** during their work shifts.
- 10. Offer proactive **support to tackle mental ill-health and burnout**, such as burnout prevention activities or providing mental health professionals onsite for debriefing and counseling.

In 2022 the WHO Global Health and Care Worker Compact<sup>203</sup> was adopted by the World Health Assembly to protect health and care workers and safeguard rights enshrined in global agreements. The Compact sets out comprehensive management and policy actions in four areas: preventing harm; providing support; inclusivity; and safeguarding rights.

The contexts and conditions for health workers vary widely within and between countries. Wherever they work, however, to attract and retain health workers, they must be provided with safe and decent working conditions, fair remuneration, safeguards for their rights as workers and protection from discrimination, as recommended in the Global Compact.

# 3. Prepare for, prevent and respond to pandemics and health emergencies.

Since the pandemic there have been numerous assessments of what worked and what could have been done better in terms of prevention preparedness, and response. We recommend lessons are incorporated into preparation for future pandemics in the following areas:

- Health emergency planning led by health workers: Health workers have valuable experience and perspectives to contribute at all levels of health systems' hierarchies, including community health workers, and should lead health emergency planning for Governments before their knowledge is lost. Women should have equal leadership and participation in all such planning.
- **Surge capacity:** Governments should share innovative approaches to surge capacity in health emergencies e.g. some countries enlisted retired health workers, pharmacists etc. This can reduce the strain on the current health workforce.
- Vaccine equity and global solidarity: Although WHO called for health workers everywhere
  to have priority for COVID-19 vaccines, global inequity in supply meant that general
  populations in some high-income countries received multiple doses before health workers
  in some low-income countries received a first dose of vaccine. Health workers lost their lives
  and others have longer term impacts of the virus.
- **PPE available and fit for women:** Global planning is needed on scaling up PPE supply rapidly in a global emergency to avoid the shortages in many countries and health systems that left health workers at risk at the start of the pandemic. In particular, the fit and design of PPE must accommodate the needs of women (the majority of health workers). Much PPE is currently modelled on the male body.<sup>204</sup>
- **Training and information:** Health workers resigning often report not being trained to respond to a pandemic and not being kept informed during the pandemic.
- Fair remuneration: The global situation varied widely with health workers in many countries striking over pay and conditions. Some, such as ASHA women community health workers in India, were calling for increased ad hoc stipends and to have their roles formalized into the health system.<sup>205</sup> In other cases, health workers called for pandemic pay for increased work, job scope and risk. Elsewhere, health workers demanded paid sick leave and compensation for families if health workers died.
- **Mental health support:** Mental health services should be accessible to all health workers to assist to cope with anxiety, stress, depression, and avoid burnout in a health emergency. Active measures should be taken to reduce stigma.



"We were not prepared. They all talked about 'Oh, pandemic planning, we're all prepared from the start.' No, we failed. We sucked. We did a horrible job, and the healthcare workers are going to pay for it mentally for many years after this. We even have nurses at stake... There's a lot of people who are like, 'I'm only staying for my colleagues and as soon as this pandemic is over, I'm no longer going to be a nurse."

Nurse focus group, Canada<sup>206</sup>



# 4. Engage all sectors and stakeholders in health workforce planning.

Although governments have the primary duty to ensure the rights to health and life of their citizens, several sectors and multiple actors play a critical role in delivery of health systems. Governments should engage the following in planning health systems and the health workforce to avoid health worker attrition and prepare for health emergencies:

- Private sector health service providers: In many countries the majority of health services are
  delivered by private sector providers. In some countries, women resigning from government
  health services are moving to the private sector. It is therefore essential that health sector
  data includes the private sector and that policies, including ethical international recruitment,
  are understood to apply equally to the private sector.
- **Not-for-profit sector health service providers:** Similarly, national data on health workers must include not-for-profit providers. In some countries, community health workers engaged by NGOs, the majority of whom are women, are not included in statistics.<sup>207</sup>
- **Health worker professional associations:** global and national health workers professional associations (nurses, midwives, physicians, pharmacists etc.) are critical sources of knowledge, data and experience. Increasingly, these now include community health worker networks.
- Community-based organizations: In many contexts, community-based organizations, especially women led, are providing health services, often unpaid and underpaid. They are often experts in the health of their communities.

#### 5. Intentionally address gender equity in the health workforce.

Since 70% of health workers are women, the Great Resignation of health workers can only be addressed by acknowledging the gender inequities in the health workforce that are driving women to leave. The default health worker is a woman but laws, organizational policies and cultures in health are often based on the life patterns and needs of a default man. Even medical PPE, used mostly by women, is largely modelled on a male body and causes higher risk and indignity to women because of its fit and design. Stopping the loss of trained women health workers requires gender transformative policies that address the root causes of gender inequity:

- **Gender equal leadership and decision-making is non-negotiable:** Women hold only 25% senior leadership roles in the sector and lost ground in leadership during the pandemic.<sup>208</sup> A key theme running through the Great Resignation is that women health workers feel they have been ignored in decision-making and that patient care suffered because their professional expertise was marginalized.
- Women health workers must be paid and fairly paid: The 24% gender pay gap reported by WHO in the health sector must be eliminated.<sup>209</sup> The six million women community health workers currently unpaid and grossly underpaid must be moved into formal sector roles and work recognized, recorded and fairly rewarded.<sup>210</sup>
- Workplace policies must be modeled on the lives of women health workers in that context.
   Family-friendly policies and work environments must be designed around women where, as in the pandemic, they are balancing increased work hours and childcare responsibilities. Paid childcare, keeping schools open for children of key workers and flexible work schedules were solutions put in place in some countries to enable women health workers to do their jobs.
- Women health workers must be protected from occupational health risks, including violence and sexual harassment, which increased in the pandemic.<sup>211</sup>
- Women health workers should be asked what they need: They know the solutions to the challenges they face.



#### The Gender Equal Health and Care Workforce Initiative led by France and Women in Global Health

The Gender Equal Health and Care Workforce Initiative, launched in 2021, aims to increase visibility, dialogue, and commitment to action on gender equity in the health and care workforce, focusing on safe and decent work, unpaid work and the gender pay gap, equal opportunities in health and care occupations, an end to violence and harassment and equal participation of men and women in the sector in leadership and decision making.

The Gender Equal Health and Care Workforce Initiative is convening the international community to implement existing global commitments and agree on practical steps to achieve gender equity in the health and care workforce. Governments, international agencies and NGOs are invited to support the Initiative which will focus on women's unpaid work in health systems, along with other gender equity issues. As of September 2023, 18 governments have joined GEHCWI, bringing the total number of supporters to over 50.

For more information please contact: GenderEqualHCW@womeningh.org Website: www.genderequalhcw.org



#### **CONCLUSIONS**

The global health worker shortage is now the global health emergency. Manifested in the Great Resignation and subsequent Great Migration of women health workers, it threatens global health security, health systems' delivery and achievement of UHC. Countries competing for increasingly scarce trained health workers challenge the principles of global solidarity and ethical international recruitment, enshrined in global agreements like the WHO Code.

Health workers take years, sometimes over a decade to train, so lead times are long for producing the millions of new health workers needed to fill the gap. The urgent issue now is retaining trained health workers and reversing attrition from the sector. Replacing domestic health workers with international recruits may just be putting new recruits into the same broken systems that caused the domestic health workers to leave.

Coordinated action by governments is needed urgently to address health worker attrition in the short term and plan longer term to fill health worker shortages sustainably without reliance on unethical international recruitment. The central role played by women health workers in the pandemic, along with the health and psychological impacts they endured in the course of their work, has placed a spotlight on their needs. Gender transformational change is needed to fix health workforce inequities and retain and attract back the women who are leaving. Women in the health workforce need a new social contract based on equal leadership, safe, decent and fairly paid work, to enable them to deliver health for all.



## ABOUT WOMEN IN GLOBAL HEALTH

Women in Global Health (WGH) was founded in 2015 when four women in the health sector met on social media outraged that women are the majority in the sector but hold only a minority of global health leadership roles. Today, we are a registered 501(c)(3) nonprofit organization with 51 Chapters in 48 countries, over 6,000 members. We are the largest and loudest women-led movement demanding gender equity in leadership, career opportunities, and pay; safe and decent working conditions; and gender equity in universal health coverage and health emergency preparedness and response. We build alliances and our own movement so women in global health will be heard. We are working towards a world that enables women from all regions to be leaders in global health and catalysts for better health for all.





## REFERENCES

- <sup>1</sup> Director-General's opening remarks at the World Health Assembly 24 May 2021 [Internet]. www.who.int. 2021 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/V9Nz">https://bitly.ws/V9Nz</a>
- <sup>2a</sup> World Health Organization, International Labour Organization. The gender pay gap in the health and care sector: a global analysis in the time of COVID-19. 2022. Available from: <a href="https://www.who.int/publications/i/item/9789240052895">https://www.who.int/publications/i/item/9789240052895</a>.
- <sup>26</sup> United Nations Population Fund, International Confederation of Midwives, World Health Organization. State of the World's Midwifery 2021 [Internet]. UNFPA. 2021. Available from: <a href="https://www.unfpa.org/sowmy">https://www.unfpa.org/sowmy</a>
- <sup>3</sup> Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health Workers | [Internet]. Women in Global Health. Women in Global Health; 2021 Nov [cited 2023 Sep 18]. Available from: <a href="https://womeningh.org/wp-content/uploads/2022/11/WGH-Fit-for-Women-report-2021.pdf">https://womeningh.org/wp-content/uploads/2022/11/WGH-Fit-for-Women-report-2021.pdf</a>
- <sup>4</sup> World Health Organization, International Labour Organization. The gender pay gap in the health and care sector. World Health Organization; 2022. Available from: https://www.who.int/publications/i/item/9789240052895
- <sup>5</sup> Women in Global Health. Subsidizing Global Health: Women's Unpaid Work in Health Systems | [Internet]. Women in Global Health; 2022 Jun [cited 2023 Sep 18]. Available from: <a href="https://womeningh.org/wp-content/uploads/2022/07/Pay-Women-Report-July-7-Release.pdf">https://womeningh.org/wp-content/uploads/2022/07/Pay-Women-Report-July-7-Release.pdf</a>
- <sup>6</sup> WHO. Global Strategy on human resources for health: workforce 2030. WHO. 2021. Available from: <a href="https://apps.who.int/gb/ebwha/pdf">https://apps.who.int/gb/ebwha/pdf</a> files/WHA75/A75 15-en.pdf
- <sup>7</sup> Smiley RA, Allgeyer RL, Shobo Y, Lyons KC, Letourneau R, Zhong E, et al. The 2022 National Nursing Workforce Survey. Journal of Nursing Regulation. 2023 [cited 2023 Oct 16];14(1):S1–S90.
- <sup>8</sup> Ungoed-Thomas J. Revealed: record 170,000 staff leave NHS in England as stress and workload take toll [Internet]. the Guardian. The Guardian; 2023 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTRd">https://bitly.ws/XTRd</a>
- <sup>9</sup> Health workforce [Internet]. World Health Organization: WHO; 2019 [cited 2023 Oct 16]. Available from: <a href="https://www.who.int/health-topics/health-workforce#tab=tab">https://www.who.int/health-topics/health-workforce#tab=tab</a> 1
- <sup>10</sup>Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage? 2022.
- <sup>11</sup>Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage? 2022.
- <sup>12</sup> Health Workforce [Internet]. World Health Organization. 2022 [cited 2023 Oct 16]. Available from: <a href="https://www.who.int/data/gho/data/themes/health-workforce">https://www.who.int/data/gho/data/themes/health-workforce</a>
- <sup>13</sup> Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage?. 2022.
- <sup>14</sup>Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic [Internet]. The International Centre on Nurse Migration; 2022 Jan [cited 2023 Sep 18].
- <sup>15</sup>Buchan J, Catton H. Recover to Rebuild: Investing in the Nursing Workforce for Health System Effectiveness. [Internet]. The International Council of Nurses; 2023 [cited 2023 Oct 16]. Available from: <a href="https://www.icn.ch/sites/default/files/2023-07/ICN">https://www.icn.ch/sites/default/files/2023-07/ICN</a> Recover-to-Rebuild report EN.pdf
- <sup>16</sup> Education and Labour Market for Nurses: Challenges and opportunities. [Internet]. World Bank Group, ECSSCON, ICN, Jhpiego. 2021. [cited 2023 Oct 16]. Available from: https://www.icn.ch/sites/default/files/2023-06/WBG\_ECSA%5B12%5D.pdf
- <sup>17</sup> Koyasu D. The Catch-22 of the Nursing Shortage [Internet]. Medscape. Medscape; 2022 [cited 2023 Oct 16]. Available from: <a href="https://www.medscape.com/viewarticle/981765?form=fpf">https://www.medscape.com/viewarticle/981765?form=fpf</a>
- <sup>18</sup> Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. 2022.
- <sup>19</sup> United Nations Population Fund. State of the World's Midwifery 2021 [Internet]. Unfpa.org. 2021. Available from: <a href="https://www.unfpa.org/sowmy">https://www.unfpa.org/sowmy</a>
- <sup>20</sup> United Nations Population Fund. State of the World's Midwifery 2021.
- <sup>21</sup> WHO. Global Strategy on human resources for health: workforce 2030. WHO. 2021. Available from:

- <sup>22</sup> Salisbury H. Retention, not just training, is key. BMJ. 2023 [cited 2023 Oct 16];p1272–2.
- <sup>23</sup>WHO report on global health worker mobility [Internet]. World Health Organization; 2023 [cited 2023 Oct 16]. Available from: <a href="https://www.who.int/publications/i/item/9789240066649">https://www.who.int/publications/i/item/9789240066649</a>
- <sup>24</sup>World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020 [Internet]. WHO. 2020. Available from: <a href="https://www.who.int/publications/i/item/9789240003279">https://www.who.int/publications/i/item/9789240003279</a>
- <sup>25</sup>World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>26</sup> Nazareno J, Yoshioka E, Adia A, Arjee Restar, Operario D, Catherine Ceniza Choy. From imperialism to inpatient care: Work differences of Filipino and White registered nurses in the United States and implications for COVID19 through an intersectional lens. Gender, Work and Organization. 2021 Apr 16 [cited 2023 Oct 16];28(4):1426–46
- <sup>27</sup> Baker C. NHS staff from overseas: statistics [Internet]. House of Commons Library. 2023 [cited 2023 Oct 16]. Available from: <a href="https://commonslibrary.parliament.uk/research-briefings/cbp-7783/">https://commonslibrary.parliament.uk/research-briefings/cbp-7783/</a>
- <sup>28</sup> WHO report on global health worker mobility. 2023.
- <sup>29</sup> Bourgeault IL, Walton-Roberts M. The ethics of recruiting international health-care workers: Canada's gains could mean another country's pain [Internet]. The Conversation. 2023 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/V9Pt">https://bitly.ws/V9Pt</a>
- <sup>30</sup>WHO health workforce support and safeguards list 2023 [Internet]. WHO. 2023 [cited 2023 Sep 18]. Available from: <a href="https://www.who.int/publications/i/item/9789240069787">https://www.who.int/publications/i/item/9789240069787</a>
- <sup>31</sup>WHO health workforce support and safeguards list 2023.
- <sup>32</sup>WHO health workforce support and safeguards list 2023.
- <sup>33</sup> Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage?.
- <sup>34</sup>WHO health workforce support and safeguards list 2023.
- <sup>35</sup>Women in Global Health, Global Health Security Depends on Women [Internet], Women in Global Health. 2020 [cited 2023 Oct 16]. Available from: http://covid5050.org/Global-Health- Security-Depends-on-Women-WGH.pdf
- <sup>36</sup> Boniol M, McIsaac M, Xu L, Wuliji T, Diallo K, Campbell J. Gender equity in the health workforce: analysis of 104 countries. WHO [Internet]. 2019 [cited 2023 Sep 18]; Available from: <a href="https://apps.who.int/iris/handle/10665/311314">https://apps.who.int/iris/handle/10665/311314</a>
- <sup>37</sup> World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>38</sup> van Daalen KR, Bajnoczki C, Chowdhury M, Sada S, Khorsand P, Socha A, et al. Symptoms of a broken system: the gender gaps in COVID-19 decision-making. BMJ Glob Health. 2020;5(10): 003549.
- <sup>39</sup> Gender Equality in Public Administration [Internet]. UNDP, University of Pittsburgh. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTRy">https://bitly.ws/XTRy</a>
- <sup>40</sup> White Paper: Hacking Diversity with Inclusive Decision Making [Internet]. Cloverpop. n.d. [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTRF">https://bitly.ws/XTRF</a>
- <sup>41</sup> Mukherjee TI, Khan AG, Dasgupta A, Goleen Samari. Reproductive justice in the time of COVID-19: a systematic review of the indirect impacts of COVID-19 on sexual and reproductive health. Reproductive Health BMC. 2021 Dec 1 [cited 2023 Oct 16];18(1).
- <sup>42</sup> UNDP and UN Women "Global Factsheet: COVID-19 Global Gender Response Tracker." https://bitly.ws/XTRW
- <sup>43</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. Gender & Public Health Emergencies [Internet]. Gender & COVID-19. 2021 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/V9NM">https://bitly.ws/V9NM</a>
- <sup>44</sup> National Academy of Medicine. Clinician well-being is essential for safe, high-quality patient care. [Internet]. n.d [cited 2023 Sep 18]. Available at: <a href="https://nam.edu/initiatives/clinician-resilience-and-well-being/">https://nam.edu/initiatives/clinician-resilience-and-well-being/</a>

- <sup>45</sup> ICD-11 for Mortality and Morbidity Statistics [Internet]. World Health Organization. 2023 [cited 2023 Oct 16]. Available from: <a href="https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/129180281">https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/129180281</a>
- <sup>46</sup> Čartolovni A, Stolt M, Scott PA, Suhonen R. Moral injury in healthcare professionals: a scoping review and discussion. Nursing ethics. 2021 [cited 2023 Oct 16];28(5):590-602.
- <sup>47</sup> Nuti S. I worry that burnout can't be reversed and has fundamentally changed me as a doctor and a person [Internet]. STAT. 2021 [cited 2023 Oct 16]. Available from: https://www.statnews.com/2021/11/05/has-burnout-fundamentally-changed-part-of-me-as-a-doctor/
- <sup>48</sup> National Academies of Sciences, Engineering, and Medicine. Taking action against clinician burnout: a systems approach to professional well-being. 2019 [cited 2023 Oct 16].
- <sup>49</sup> Maunder R. et al. Burnout in Hospital-Based Healthcare Workers during COVID-19 [Internet]. Ontario COVID-19 Science Advisory Table. 2021 [cited 2023 Oct 16]. Available from: https://bitly.ws/XTSn
- <sup>50</sup> Greenberg N, Docherty M, Gnanapragasam S, Wessely S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ. 2020. [cited 2023 Oct 16].
- <sup>51</sup> Ghahramani S, Lankarani KB, Yousefi M, Heydari K, Shahabi S, Azmand S. A systematic review and metaanalysis of burnout among healthcare workers during COVID-19. Frontiers in psychiatry. 2021 [cited 2023 Oct 16].
- <sup>52</sup>Rahim HF, Fendt-Newlin M, Al-Harahsheh ST, Campbell J. Our duty of care: A global call to action to protect the mental health of health and care workers [Internet]. World Health Organization, Qatar Foundation. 2022 [cited 2023 Oct 16]. Available from: <a href="https://www.who.int/publications/m/item/wish\_report">https://www.who.int/publications/m/item/wish\_report</a>
- <sup>53</sup> De Kock J, Latham H, Leslie S, Grindle M, Munoz SA, Eliis L, Polson R, O'Malley C. A rapid review of the impact of COVID-19 on the mental health of healthcare workers: implications for supporting psychological well-being. BMC Public Health [Internet]. 2021 Jan 9 [cited 2023 Oct 16];21(1). Available from: <a href="https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-10070-3">https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-10070-3</a>
- <sup>54</sup> Vizheh M, Qorbani M, Arzaghi SM, Muhidin S, Javanmard Z, Esmaeili M. The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. Journal of Diabetes & Metabolic Disorders [Internet]. 2020 Oct 26 [cited 2023 Oct 16];19(2):1967–78. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/33134211/">https://pubmed.ncbi.nlm.nih.gov/33134211/</a>
- <sup>55</sup> Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsi E, Katsaounou P. Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. Brain Behavior and Immunity [Internet]. 2020 Au 1 [cited 2023 Oct 16];88:901–7. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/32437915/">https://pubmed.ncbi.nlm.nih.gov/32437915/</a>
- <sup>56</sup> Liu Z, Han B, Jiang R, Huang Y, Ma C, Wen J, et al. Mental Health Status of Doctors and Nurses During COVID-19 Epidemic in China. Social Science Research Network [Internet]. The Lancet. 2020 Jan 1 [cited 2023 Oct 16]; Available from: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3551329">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3551329</a>
- <sup>57</sup> COVID-19 and the female health and care workforce survey update Survey of health and care staff for the Health and Care Women Leaders Network (February March 2021) [Internet]. Health and Care Women Leaders Network NHS Confederation. 2021 [cited 2023 Oct 16]. Available from: <a href="https://www.nhsconfed.org/system/files/2021-05/COVID19">https://www.nhsconfed.org/system/files/2021-05/COVID19</a>
- <sup>58</sup> Ching, S. M., Ng, K. Y., Lee, K. W., Yee, A., Lim, P. Y., Ranita, H., Devaraj, N. K., Ooi, P. B., & Cheong, A. T.. Psychological distress among healthcare providers during COVID-19 in Asia: Systematic review and meta-analysis. PLoS ONE. 2020 [cited 2023 Oct 16]. 16(10).
- <sup>59</sup> Greenberg N, Docherty M, Gnanapragasam S, Wessely S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic BMJ 2020; 368:m1211 doi:10.1136/bmj.m1211
- <sup>60</sup> Ali SK, Jasmit S, Talib Z. COVID-19 and mental well-being of nurses in a tertiary facility in Kenya. PLoS One [Internet]. 2021 [cited 2021 Oct 1];16(7):1–10. Available from: <a href="https://doi.org/10.1371/journal.pone.0254074">https://doi.org/10.1371/journal.pone.0254074</a> 12.
- <sup>61</sup> Kwobah EK, Mwangi A, Patel K, Mwogi T, Kiptoo R, Atwoli L. Mental Disorders Among Health Care Workers at the Early Phase of COVID-19 Pandemic in Kenya; Findings of an Online Descriptive Survey [Internet]. Front Psychiatry. 2021 [cited 2023 Oct 16];12. Available from: <a href="https://www.frontiersin.org">www.frontiersin.org</a>
- <sup>62</sup> Onchonga D, Omwoyo J, Nyamamba D. Assessing the prevalence of self-medication among healthcare workers before and during the 2019 SARS-CoV-2 (COVID-19) pandemic in Kenya. Saudi Pharm J. 2020 [ cited Oct 16]. 1;28(10):1149–54.

- <sup>63</sup> Regenold N, Vindrola-Padros C. Gender Matters: A Gender Analysis of Healthcare Workers' Experiences during the First COVID-19 Pandemic Peak in England. Social sciences [Internet]. 2021 [cited 2023 Oct 16];10(2):43–3. Available from: <a href="https://www.mdpi.com/2076-0760/10/2/43">https://www.mdpi.com/2076-0760/10/2/43</a>
- <sup>64</sup> Yunitri N, Chu H, Kang XL, Jen HJ, Pien LC, Tsai HT, Kamil AR, Chou KR. Global prevalence and associated risk factors of posttraumatic stress disorder during COVID-19 pandemic: A meta-analysis. International journal of nursing studies. 2022 [cited Oct 16]. 126:104136.
- <sup>65</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>66</sup> Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. 2022.
- <sup>67</sup> Buchan J, Catton H. Recover to Rebuild: Investing in the Nursing Workforce for Health System Effectiveness. 2023.
- <sup>68</sup> Downey E, Fokeladeh S, Catton H. What the COVID-19 Pandemic Exposed: The Findings of Five Global Health Workforce Protections. World Health Organization, World Health Professionals Alliance. [Internet]. [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTSA">https://bitly.ws/XTSA</a>
- <sup>69</sup> Global Health 50/50, ICRW, African Population and Health Research Center. The Sex, Gender and COVID-19 Project [Internet]. The Sex, Gender and COVID-19 Project. [cited 2023 Sep 18]. Available from: <a href="https://globalhealth5050.org/the-sex-gender-and-covid-19-project/">https://globalhealth5050.org/the-sex-gender-and-covid-19-project/</a>
- <sup>70</sup> Op-ed: Personal Protective Equipment standards must respond to women's needs to ensure the safety of all frontline workers during the COVID-19 pandemic [Internet]. UN Women Europe and Central Asia. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTSE">https://bitly.ws/XTSE</a>
- <sup>71</sup>World Health Organization. The impact of COVID-19 on health and care workers: a closer look at deaths. [Internet] World Health Organization. 2021 [cited 2023 Sep 18]. https://apps.who.int/iris/handle/10665/345300.
- <sup>72</sup> Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity: U.S. Bureau of Labor Statistics [Internet]. 2023 [cited 2023 Oct 16]. Available from: <a href="https://www.bls.gov/cps/cpsaat11.htm">https://www.bls.gov/cps/cpsaat11.htm</a>
- <sup>73</sup> Sins of Omission: How Government Failures to Track Covid-19 Data Have Led to More Than 1,700 Health Care Worker Deaths and Jeopardize Public Health [Internet]. National Nurses United. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTST">https://bitly.ws/XTST</a>
- <sup>74</sup> Marsh S, McIntyre N. Six in 10 UK health workers killed by Covid-19 are BAME [Internet]. the Guardian. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTSY">https://bitly.ws/XTSY</a>
- <sup>75</sup>Tipping S, Murphy V, Yeates N, Montoro C, Ismail G, Ismail N. Migrant health worker deaths during Covid-19: a methodological exploration and initial estimates [Internet]. The Open University-Public Services International, Milton Keynes/Ferney Voltaire. 2022 [cited 2023 Sep 18]. Available from: <a href="https://oro.open.ac.uk/85720/">https://oro.open.ac.uk/85720/</a>
- <sup>76</sup> Ayoubkhani D, Gaughan C, Jenkins J. Update on long COVID prevalence estimate [Internet]. ONS. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTT6">https://bitly.ws/XTT6</a>
- <sup>77</sup> Waters A. Long covid: the doctors' lives destroyed by an illness they caught while doing their jobs. BMJ [Internet]. 2023 [cited 2023 Oct 16];p1983–3. Available from: <a href="https://www.bmj.com/content/382/bmj.p1983">https://www.bmj.com/content/382/bmj.p1983</a>
- <sup>78</sup> Cox D. Why are women more prone to long Covid? The Guardian [Internet]. 2021 Jun 13 [cited 2023 Sep 18]; Available from: <a href="https://bitly.ws/V9NW">https://bitly.ws/V9NW</a>
- <sup>79</sup> Hazfiarini A, Akter S, Homer CSE, Zahroh RI, Bohren MA. "We are going into battle without appropriate armour": A qualitative study of Indonesian midwives' experiences in providing maternity care during the COVID-19 pandemic. Women and Birth. 2021 [cited 2023 Oct 16];35(5).
- <sup>80</sup> Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health and Care Workers. 2021.
- <sup>81</sup> Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health Workers. 2021.
- <sup>82</sup> Press C. Coronavirus: The NHS workers wearing bin bags as protection [Internet]. BBC News, 2020 [cited 2023 Oct 16]. Available from: <a href="https://www.bbc.com/news/health-52145140">https://www.bbc.com/news/health-52145140</a>
- <sup>83</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.

- <sup>84</sup> Ballard M, Bancroft E, Nesbit J, Johnson A, Holeman I, Foth J, et al. Prioritising the role of community health workers in the COVID-19 response. BMJ Global Health [Internet]. 2020 [cited 2023 Oct 16];5(6):e002550–0. Available from: https://gh.bmj.com/content/5/6/e002550
- <sup>85</sup> Protecting Community Health Workers: PPE Needs and Recommendations for Policy Action [Internet]. Center For Global Development | Ideas to Action. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/KRug">https://bitly.ws/KRug</a>
- <sup>86</sup> Srivastava S. India's Army of 600,000 Virus-Hunting Women Goes on Strike [Internet]. Bloomberg; 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTTi">https://bitly.ws/XTTi</a>
- <sup>87</sup> Smith J, Korzuchowski A, Memmott C, Oveisi N, Tan HL, Morgan R. Double distress: women healthcare providers and moral distress during COVID-19. Sage Nursing Ethics. 2022 [cited 2023 Oct 16];30(1):46–57.
- 88 Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health Workers. 2021.
- <sup>89</sup> Royal College of Nursing Submission: Women and Equalities Inquiry into the unequal impact of COVID-19 on Black, Asian and minority ethnic (BAME) people. Royal College of Nursing. 2020 [cited 2023 Oct 18].
- <sup>90</sup>Wenham C. Gender and Race on the Frontline: Experiences of Health Workers in Brazil during the COVID-19 Pandemic. Social Politics [Internet]. 2021 [cited 2023 Oct 16];29(4):1144–67. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/36533212/">https://pubmed.ncbi.nlm.nih.gov/36533212/</a>
- <sup>91</sup> UNFPA delivers medical equipment, personal protective equipment (PPE) and sanitary items to Hubei in support of the national response to the coronavirus outbreak [Internet]. UNFPA China. 2020 [cited 2023 Oct 16]. Available from: <a href="https://china.unfpa.org/en/news/20022401">https://china.unfpa.org/en/news/20022401</a>
- 92 Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health Workers. 2021.
- <sup>93</sup> Ascott A, Crowest P, Eleanor de Sausmarez, Khan MA, Abhijoy Chakladar. Respiratory personal protective equipment for healthcare workers: impact of sex differences on respirator fit test results. British Journal of Anaesthesia [Internet]. 2021 [cited 2023 Oct 16];126(1):e48–9. Available from: <a href="https://www.bjanaesthesia.org/article/S0007-0912(20)30851-5/fulltext#%20">https://www.bjanaesthesia.org/article/S0007-0912(20)30851-5/fulltext#%20</a>
- 94 Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health Workers
- <sup>95</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>96</sup> Tatar M, Shoorekchali JM, Faraji MR, Seyyedkolaee MA, Pagán JA, Wilson FA. COVID-19 vaccine inequality: A global perspective. Journal of Global Health. 2022 [cited 2023 Oct 18].
- <sup>97</sup> Only 1 in 4 African health workers fully vaccinated against COVID-19 [Internet]. WHO | Regional Office for Africa. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTTs">https://bitly.ws/XTTs</a>
- <sup>98</sup> Bryden D, Campbell J, Catton H, Duggan C, Ghebreyusus T, et al. Joint Statement on WHO's Estimate of Health and Care Worker Deaths Due to COVID-19 [Internet]. Steering Committee for the International Year of Health and Care Workers | WHO. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTTH">https://bitly.ws/XTTH</a>
- 99 Joint Statement on WHO's Estimate of Health and Care Worker Deaths Due to COVID-19. 2021.
- <sup>100</sup> Rabin R. Covid Worsened a Health Crisis Among Pregnant Women. The New York Times [Internet]. 2023 Mar 16 [cited 2023 Sep 18]; Available from: <a href="https://bitly.ws/V9NZ">https://bitly.ws/V9NZ</a>
- <sup>101</sup> Burke M. Unvaccinated pregnant nurse, unborn baby die after she contracts Covid [Internet]. NBC News; 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTTS">https://bitly.ws/XTTS</a>
- <sup>102</sup> Pramod Madhav. Covid-19 claims 8-month pregnant doctor, two nurses in Tamil Nadu [Internet]. India Today; 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTTX">https://bitly.ws/XTTX</a>
- <sup>103</sup> King, T, Hewit, B, Crammond, B, Sutherland, G, Maheen, H, Kavanagh, A. Reordering gender systems: can COVID-19 lead to improved gender equality and health? The Lancet. 2020 [cited 2023 Oct 16].
- <sup>104</sup> Langer A, Meleis A, Knaul FM, Atun R, Aran M, Arreola-Ornelas H, et al. Women and health: the key for sustainable development. The Lancet. 2015 [cited 2023 Oct 16]. ;386(9999):1165-1210.
- <sup>105</sup> UN Secretary-General's policy brief: The impact of COVID-19 on women [Internet]. UN Women. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/IV54">https://bitly.ws/IV54</a>
- <sup>106</sup> Women in Global Health. Subsidizing Global Health: Women's Unpaid Work in Health Systems. 2022.
- <sup>107</sup> Andrews D, Timm S, and Paremoer L. Community Health Workers: Nothing About Us Without Us. Afrika Grupperna. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTU9">https://bitly.ws/XTU9</a>

- <sup>108</sup> Delivered by Women, Led by Men: A Gender and Equity Analysis of the Global Health and Social Workforce [Internet]. Women in Global Health, World Health Organization, Global Health Workforce Network. 2019 [cited 2023 Oct 16]. Available from: https://bitly.ws/XTUd
- <sup>109</sup> World Health Organization, International Labour Organization. The gender pay gap in the health and care sector. World Health Organization; 2022. Available from: <a href="https://www.who.int/publications/i/item/9789240052895">https://www.who.int/publications/i/item/9789240052895</a>
- <sup>110</sup> Essex R, Burns C, Evans TR, Hudson G, Parsons A, Weldon SM. A last resort? A scoping review of patient and healthcare worker attitudes toward strike action. Nursing Inquiry. 2022 [cited 2023 Oct 16].
- <sup>111</sup> Walker P, Allegretti A, Quinn B. Anger grows at offer of 1% pay rise for NHS staff [Internet]. The Guardian. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTUj">https://bitly.ws/XTUj</a>
- <sup>112</sup> Gregory A, Grierson J. Nurses across UK to strike for first time on 15 and 20 December [Internet]. The Guardian. 2022 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTUn">https://bitly.ws/XTUn</a>
- <sup>113</sup> Why South Africa's public wage bill is a problem [Internet]. Reuters. 2020 [cited 2023 Oct 16]. Available from: <a href="https://www.reuters.com/article/safrica-budget-wages-explainer-idlNKBN27D2E6">https://www.reuters.com/article/safrica-budget-wages-explainer-idlNKBN27D2E6</a>
- <sup>114</sup>La sanidad privada recorta plantilla y cierra centros en plena pandemia (26/03/2020). [Internet]. SAS. 2020 [cited 2023 Oct 16]. Available from: https://bitly.ws/XTUv
- <sup>115</sup> "A Political Economy Analysis of the Impact of Covid-19 Pandemic on Health Workers: Making power and gender visible in the work of providing care" | People's Health Movement [Internet]. People's Health Movement. 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTUC">https://bitly.ws/XTUC</a>
- <sup>116</sup> Sharma L, Smith J. Women in a COVID-19 recession: Employment, job loss and wage inequality in Canada [Internet]. Gender and COVID-19. Gender and Public Health Emergencies; 2021 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/V9P9">https://bitly.ws/V9P9</a>
- <sup>117</sup> Sharma L, Smith J. Women in a COVID-19 recession: Employment, job loss and wage inequality in Canada. 2021.
- <sup>118</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>119</sup> Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. 2022.
- <sup>120</sup> Wenham C, Fernandez M, Corrêa MG, Lotta G, Schall B, Rocha MC, Pimenta DN. Gender and Race on the Frontline: Experiences of Health Workers in Brazil during the COVID-19-19 Pandemic. Social Politics. 2021 [cited 2023 Oct 16].
- <sup>121</sup> World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>122</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>123</sup> Memmott C, Smith J, Korzuchowski A, Tan HL, Oveisi N, Hawkins K, et al. "Forgotten as first line providers": The experiences of midwives during the COVID-19 pandemic in British Columbia, Canada. Midwifery [Internet]. Midwifery. 2022 [cited 2023 Oct 16];113:103437–7. Available from: <a href="https://www.sciencedirect.com/science/article/pii/S0266613822001887?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S0266613822001887?via%3Dihub</a>
- <sup>124</sup>Women in Global Health. The State of Women and Leadership in Global Health. 2023.
- <sup>125</sup> Panjabi, R. "Investing in COVID-19 Vaccines & Primary Health Care Delivery Systems." Speech at the World Bank and IMF Annual Meeting. 2020 Oct [cited 2023 Oct 16]. Available at: https://lastmilehealth.org/2020/10/22/vaccines-health-workers-covid19\_
- <sup>126</sup> Čartolovni A, Stolt M, Scott PA, Suhonen R. Moral injury in healthcare professionals: a scoping review and discussion. 2021.
- <sup>127</sup> Moral distress and moral injury: Recognising and Tackling it for UK doctors [Internet]. British Medical Association. 2021 [cited 2023 Oct 16]. Available from: <a href="https://www.bma.org.uk/media/4209/bma-moral-distress-injury-survey-report-june-2021.pdf">https://www.bma.org.uk/media/4209/bma-moral-distress-injury-survey-report-june-2021.pdf</a>
- <sup>128</sup> Williamson V, Murphy D, Phelps A, Forbes D, Greenberg N. Moral injury: the effect on mental health and implications for treatment. The Lancet Psychiatry [Internet]. 2021[cited 2023 Oct 16];8(6):453–5. Available from: <a href="https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(21)00113-9/fulltext">https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(21)00113-9/fulltext</a>

- <sup>129</sup> Mantri S, Lawson JM, Wang Z, Koenig HG. Identifying moral injury in healthcare professionals: The moral injury symptom scale-HP. Journal of Religion and Health. 2020 [cited 2023 Oct 16] t;59(5):2323-40.
- <sup>130</sup> Hill, B. Changes to nurse-to-patient ratios in intensive care during the pandemic. British Journal of Nursing. 2020 [cited 2023 Oct 16].
- <sup>131</sup> Pinquart M and S<sup>\*</sup>orensen S. Gender Differences in Caregiver Stressors, Social Resources, and Health: An Updated Meta-Analysis. Journals Gerontol. 2006 [cited 2023 Oct 16]; 61(1): P33–P45.
- <sup>132</sup> Morgan R, George A, Ssali S, et al. How to do (or not to do) gender analysis in health systems research. Health Policy Plan. 2016 [cited 2023 Oct 16]; 31(8): 1069–1078.
- <sup>133</sup> Smith J, Korzuchowski A, Memmott C, Oveisi N, Tan HL, Morgan R. Double distress: women healthcare providers and moral distress during COVID-19. 2022.
- <sup>134</sup> Smith J, Korzuchowski A, Memmott C, Oveisi N, Tan HL, Morgan R. Double distress: women healthcare providers and moral distress during COVID-19. 2022.
- <sup>135</sup> Women in Global Health. Health Too: Ending Sexual Violence and Harassment of Women Health Workers | [Internet]. Women in Global Health. Women in Global Health; 2022 Dec [cited 2023 Sep 18]. Available from: <a href="https://womeningh.org/healthtoo/">https://womeningh.org/healthtoo/</a>
- <sup>136</sup> Liu J, Gan Y, Jiang H, Li L, Dwyer R, Lu K, Yan S, Sampson O, Xu H, Wang C, Zhu Y, Chang Y, Yang T, Chen Y, Song F, Lu Z. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med. 2019 [cited 2023 Oct 16];76(12):927-937.
- <sup>137</sup> Finnegan J. In more than half of sexual harassment complaints, doctors say organizations fail to act [Internet]. Fierce Healthcare. 2018 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTUY">https://bitly.ws/XTUY</a>
- <sup>138</sup> Syed S. How the government fails the nation's nurse [Internet]. Dawn. 2016 [cited 2023 Oct 16]. Available from: <a href="https://www.dawn.com/news/1285737">https://www.dawn.com/news/1285737</a>
- <sup>139</sup> di Martino V. Workplace Violence in the Health Sector : Country Case Studies, Brazil, Bulgaria, Lebanon, Portugal, South Africa, Thailand and an Additional Australian Study: Synthesis Report. ILO. 2002 [cited 2023 Oct 16].
- <sup>140</sup> Arnetz JE, Hamblin L, Ager J, Luborsky M, Upfal MJ, Russell J, Essenmacher L. Underreporting of Workplace Violence: Comparison of Self-Report and Actual Documentation of Hospital Incidents. Workplace Health & Safety | Sage. 2015 [cited 2023 Oct 16].
- <sup>141</sup> Keep health workers safe to keep patients safe: WHO [Internet]. World Health Organization: WHO; 2020 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTVb">https://bitly.ws/XTVb</a>
- <sup>142</sup> Byon HD, Sagherian K, Kim Y, Lipscomb J, Crandall M, Steege L. Nurses' experience with type II workplace violence and underreporting during the COVID-19-19 pandemic. Workplace health & safety | Sage. 2022 [cited 2023 Oct 16] 70(9):412-20.
- <sup>143</sup> Abdul G. Female doctors launch campaign against harassment in UK healthcare [Internet]. The Guardian. 2022 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTVf">https://bitly.ws/XTVf</a>
- <sup>144</sup> Women's Workplace Equality Index [Internet]. Council on Foreign Relations. n.d. [cited 2023 Oct 16]. Available from: <a href="https://www.cfr.org/legal-barriers/">https://www.cfr.org/legal-barriers/</a>
- <sup>145</sup>WHO calls for healthy, safe and decent working conditions for all health workers, amidst COVID-19 pandemic [Internet]. World Health Organization: WHO; 2020 [cited 2023 Oct 16]. Available from: <a href="https://www.who.int/news/item/28-04-2020-20200428">https://www.who.int/news/item/28-04-2020-20200428</a> protect workers
- <sup>146</sup> Fighting back: the struggle with anti-vaxxers [Internet]. British Medical Association. 2021 [cited 2023 Oct 16]. Available from: <a href="https://www.bma.org.uk/news-and-opinion/fighting-back-the-struggle-with-anti-vaxxers">https://www.bma.org.uk/news-and-opinion/fighting-back-the-struggle-with-anti-vaxxers</a>
- <sup>147</sup> Attacks on health care in the context of COVID-19 [Internet].
  World Health Organization. 2020 [cited 2023 Oct 16]. Available from:
  <a href="https://www.who.int/news-room/feature-stories/detail/attacks-on-health-care-in-the-context-of-covid-19">https://www.who.int/news-room/feature-stories/detail/attacks-on-health-care-in-the-context-of-covid-19</a>
- <sup>148</sup> Rodríguez-Bolaños R, Cartujano-Barrera F, Cartujano B, Flores YN, Cupertino AP, Gallegos-Carrillo K..The Urgent Need to Address Violence Against Health Workers During the COVID-19 Pandemic. Med Care. 2020 [cited 2023 Oct 16].
- <sup>149</sup> Debbarma P, Kaur S, Kaur S. Factors influencing the performance of accredited social health activists in district Sirmour, Himachal Pradesh. International Journal Of Community Medicine And Public Health. 2021 [cited 2023 Oct 16]; 8(6): 2962-2968.

- <sup>150</sup> ILO Ratifications of C190 Violence and Harassment Convention, 2019 (No. 190) [Internet]. Available from: <a href="https://www.ilo.org/dyn/normlex/en accessed 7 December 2021">https://www.ilo.org/dyn/normlex/en accessed 7 December 2021</a>
- <sup>151</sup> World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>152</sup> Baker C. NHS Key Statistics: England, July 2023: How long is the the waiting list for hospital treatment? [Internet]. House of Commons Library. UK Parliament ; 2023 Jun [cited 2023 Sep 18]. Available from: <a href="https://commonslibrary.parliament.uk/research-briefings/cbp-7281/">https://commonslibrary.parliament.uk/research-briefings/cbp-7281/</a>
- <sup>153</sup> Bortolussi-Courval E, Stake-Doucet N, Umaigba B. Incentivizing an exodus: The implications of recruiting nurses from low-middle income countries to high-income countries [Internet]. PLOS global public health. 2023 [cited 2023 Oct 16];3(9):e0002355–5. Available from: <a href="https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0002355">https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0002355</a>
- <sup>154</sup> Indian nurses drive UK's health service foreign intake [Internet]. The Times of India. 2022 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTVo">https://bitly.ws/XTVo</a>
- <sup>155</sup> Moeti M, "The 'Great Resignation' of Health and Care Workers." Speech at the Women in Global Health Side-event at the World Health Summit. 2022 [cited 2023 Oct 16].
- <sup>156</sup> Bourgeault IL, Walton-Roberts M. The ethics of recruiting international health-care workers: Canada's gains could mean another country's pain. 2023.
- <sup>157</sup> Bourgeault IL, Walton-Roberts M. The ethics of recruiting international health-care workers: Canada's gains could mean another country's pain. 2023.
- <sup>158</sup> Bourgeault IL, Walton-Roberts M. The ethics of recruiting international health-care workers: Canada's gains could mean another country's pain. 2023.
- 159 Swaton C. Austria bets on immigration to tackle labour shortages [Internet]. EURACTIV. 2023 [cited 2023 Oct 16]. Available from: https://www.euractiv.com/section/politics/news/austria-bets-on-immigration-to-tackle-labour-shortages/
- <sup>160</sup> Philippines keeps in mind local healthcare sector as Austria seeks workers [Internet]. Philstar.com. 2023 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTVw">https://bitly.ws/XTVw</a>
- <sup>161</sup> McCarey M, Dayan M, Jarman H, Hervey T, Fahy N, Bristow D and Greer SL (2022) Health and Brexit: six years on. Research report, Nuffield Trust. Available from: https://www.nuffieldtrust.org.uk/sites/default/files/2022-12/1671199514-health-and-brexit-web.pdf
- <sup>162</sup> Bourgeault IL, Walton-Roberts M. The ethics of recruiting international health-care workers: Canada's gains could mean another country's pain. 2023.
- <sup>163</sup> Oreh A. Nigeria's health workforce crisis and future of healthcare delivery Daily Trust [Internet]. 2023 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/V9PL">https://bitly.ws/V9PL</a>
- <sup>164</sup> Kenyon P. "Exploited" foreign doctors worry about risk to UK patients [Internet]. BBC News. 2022 [cited 2023 Oct 16]. Available from: <a href="https://www.bbc.co.uk/news/uk-63141929">https://www.bbc.co.uk/news/uk-63141929</a>
- <sup>165</sup> Hayward E. NHS calls in Nepalese nurses to plug holes in staffing [Internet]. The Times. 2022 [cited 2023 Oct 16]. Available from: <a href="https://www.thetimes.co.uk/article/nhs-calls-in-nepalese-nurses-to-plug-holes-in-staffing-zlbh9b09v">https://www.thetimes.co.uk/article/nhs-calls-in-nepalese-nurses-to-plug-holes-in-staffing-zlbh9b09v</a>
- <sup>166</sup> Peoples Health Dispatch. Health workers in Sweden demand workforce policies that do not rely on international recruitment: Peoples Dispatch [Internet]. Peoples Dispatch. 2023 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTVM">https://bitly.ws/XTVM</a>
- <sup>167</sup> Tankwanchi, A et al. Health Worker Unemployment in Low and Middle- Income Countries with Shortage, WHO Technical Report 2019. Available from: <a href="https://bitly.ws/V9PR">https://bitly.ws/V9PR</a>
- <sup>168</sup> Brennan, N. et al., 2021. Drivers of international migration of doctors to and from the United Kingdom (GMC 966). General Medical Council. <a href="https://bitly.ws/V9PW">https://bitly.ws/V9PW</a>
- <sup>169</sup> World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>170</sup> Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. 2022.

- <sup>171</sup> Contribution of migrant doctors and nurses to tackling COVID-19 crisis in OECD countries. OECD policy responses to coronavirus (Covid-19) [Internet]. 2020 May 13 [cited 2023 Oct 16]; Available from: <a href="https://bitly.ws/XTW7">https://bitly.ws/XTW7</a>
- <sup>172</sup> Kamarulzaman A, Ramnarayan K, Mocumbi AO. Plugging the medical brain drain [Internet]. The Lancet. 2022 Oct 1 [cited 2023 Oct 16];400(10362):1492–4. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9612885/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9612885/</a>
- <sup>173</sup> Ghosh A. Govt moves to address shortage of nurses, likely to permit foreign graduates to work in India [Internet]. ThePrint. theprint; 2022 [cited 2023 Sep 15]. Available from: <a href="https://bitly.ws/XTWb">https://bitly.ws/XTWb</a>
- <sup>174</sup>Ghosh A. Govt moves to address shortage of nurses, likely to permit foreign graduates to work in India [Internet]. The Print. 2022 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTWb">https://bitly.ws/XTWb</a>
- <sup>175</sup> Edwards RL, Patrician PA, Bakitas M, Markaki A. Palliative care integration: a critical review of nurse migration effect in Jamaica. BMC Palliat Care. 2021 [cited 2023 Oct 16];20(1):155.
- <sup>176</sup> Tankwanchi ABS. Oppression, liberation, wellbeing, and ecology: organizing metaphors for understanding health workforce migration and other social determinants of health. Globalization and Health. 2018 [cited 2023 Oct 16];14.
- <sup>177</sup> World Health Organization, International Council of Nurses. State of the World's Nursing Report 2020.
- <sup>178</sup> United Nations Population Fund. State of the World's Midwifery 2021.
- <sup>179</sup> Cachero P. From AIDS to COVID-19, America's Medical System Has a Long History of Relying on Filipino Nurses to Fight on the Frontlines. The Time. 2021 [cited 2023 Oct 16]. Available from <a href="https://time.com/6051754/history-filipino-nurses-us/">https://time.com/6051754/history-filipino-nurses-us/</a>
- <sup>180</sup> Shamel Rolle Sands, Ingraham K, Salami B. Caribbean nurse migration—a scoping review [Internet]. Human Resources for Health | BMC. 2020 [cited 2023 Oct 16];18(1). Available from: <a href="https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00466-y">https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00466-y</a>
- <sup>181</sup> Tankwanchi A, Hagopian A, Vermund, S. African Physician Migration to High-Income Nations: Diverse Motives to Emigrate ("We Are not Florence Nightingale") or Stay in Africa ("There Is No Place Like Home"); Comment on "Doctor Retention: A Cross-sectional Study of How Ireland Has Been Losing the Battle." International Journal of Health Policy and Management. 2021 [cited 2023 Oct 16] 10(10), 660-663.
- <sup>182</sup> Peters M. Time to solve persistent, pernicious and widespread nursing workforce shortages. International Nursing Review. 2023 [cited 2023 Oct 16];70(2):247–53.
- <sup>183</sup> Bortolussi-Courval E, Stake-Doucet N, Umaigba B. Incentivizing an exodus: The implications of recruiting nurses from low-middle income countries to high-income countries. 2023.
- <sup>184</sup> Austria: Women migrant care workers demand rights [Internet]. Amnesty International. 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTWn">https://bitly.ws/XTWn</a>
- <sup>185</sup>Lu Y. Parental Migration and Education of Left-Behind Children: A Comparison of Two Settings. J Marriage Fam. 2014 [cited 2023 Oct 16];76(5):1082-1098.
- <sup>186</sup> Alibudbud R. When the "heroes" "don't feel cared for": The migration and resignation of Philippine nurses amidst the COVID-19 pandemic. Journal of Global Health [Internet]. 2022 [cited 2023 Oct 16];12. Available from: <a href="https://jogh.org/wp-content/uploads/2022/05/jogh-12-03011.pdf">https://jogh.org/wp-content/uploads/2022/05/jogh-12-03011.pdf</a>.
- <sup>187</sup> Buchan J, Catton H. Covid-19 and the International Supply of Nurses [Internet]. The International Council of Nurses; 2020 [cited 2023 Sep 18]. Available from: <a href="https://bitly.ws/XTWr">https://bitly.ws/XTWr</a>
- <sup>188</sup> Cachero P. From AIDS to COVID-19, America's Medical System Has a Long History of Relying on Filipino Nurses to Fight on the Frontlines. 2021.
- <sup>189</sup> Mendoza R. Nurses leaving in droves PHA [Internet]. The Manila Times. The Manila Times; 2021 [cited 2023 Oct 16]. Available from: <a href="https://bitly.ws/XTWw">https://bitly.ws/XTWw</a>
- $^{190}$  Agence France-Presse. "Burned out:" Philippine nurses battle Covid-19, resignations [Internet]. The Manila Times. 2021 [cited 2023 Oct 16]. Available from:  $\frac{\text{https://bitly.ws/qCCc}}{\text{https://bitly.ws/qCCc}}$
- <sup>191</sup> Mendoza R. Nurses leaving in droves PHA. 2021.
- 192 Locsin pushes IATF to lift deployment ban on nurses or "pay big money" [Internet]. CNN. 2020 [cited 2023 Oct 16]. Available from: https://www.cnnphilippines.com/news/2020/8/28/Healthcare-workers-nurse-deployment-ban-Locsin.html

- <sup>193</sup> Saluja S, Rudolfson N, Massenburg BB, et al. The impact of physician migration on mortality in low and middle-income countries: an economic modelling study. BMJ Global Health. 2020 [cited 2023 Oct 16];5:e001535.
- <sup>194</sup> Buchan J, Shaffer F. Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. 2022.
- <sup>195</sup>Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage? 2022.
- <sup>196</sup> Kwaku Agyeman-Manu, Tedros Adhanom Ghebreyesus, Maait M, Alexandru Rafila, Tom L, Nísia Trindade Lima, et al. Prioritising the health and care workforce shortage: protect, invest, together. Lancet Global Health. 2023 [cited 2023 Oct 16].
- <sup>197</sup> Bortolussi-Courval E, Stake-Doucet N, Umaigba B. Incentivizing an exodus: The implications of recruiting nurses from low-middle income countries to high-income countries. 2023.
- <sup>198</sup> Assaye, A. M., Wiechula, R., Schultz, T. J., & Feo, R. (2021). Impact of nurse staffing on patient and nurse workforce outcomes in acute care settings in low-and middle-income countries: a systematic review. JBI evidence synthesis, 19(4), 751-793.
- <sup>199</sup> Duong D, Vogel L. National survey highlights worsening primary care access. CMAJ [Internet]. 2023 Apr 24 [cited 2023 Jul 15];195(16):E592–3. Available from: https://www.cmaj.ca/content/195/16/E592
- <sup>200</sup> Boniol M et al. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and "universal" health coverage?.
- <sup>201</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>202</sup> Oveisi et al. The experiences of nurses during COVID-19 in British Columbia, Canada. 2021.
- <sup>203</sup> WHO. Global health and care worker compact: technical guidance compilation. 2022. https://www.who.int/publications/m/item/ carecompact#\_
- <sup>204</sup> Women in Global Health. Fit for Women? Safe and Decent PPE for Women Health and Care Workers. 2021.
- <sup>205</sup> Women in Global Health. Subsidizing Global Health: Women's Unpaid Work in Health Systems. 2022.
- <sup>206</sup> Oveisi et al. The Experiences of Nurses in British Columbia, Canada during COVID-19. Gender and COVID-19 Project. 2021.
- <sup>207</sup> Community Health Worker Central. Health for the People: National Community Health Worker Programs from Afghanistan to Zimbabwe. Perry B., Henry (ed). Community Health Worker Central; 2021. Available from: <a href="http://bitly.ws/KLeN">http://bitly.ws/KLeN</a>.
- <sup>208</sup> Women in Global Health. The State of Women and Leadership in Global Health. 2023.
- <sup>209</sup> World Health Organization. The gender pay gap in the health and care sector: a global analysis in the time of COVID-19. 2022. Available from: <a href="https://www.who.int/publications/i/item/9789240052895">https://www.who.int/publications/i/item/9789240052895</a>.
- <sup>210</sup> Women in Global Health. Subsidizing Global Health: Women's Unpaid Work in Health Systems. 2022.
- <sup>211</sup>Women in Global Health. Health Too: Ending Sexual Violence and Harassment of Women Health Workers. 2022.

For more information: www.womeningh.org

Contact us: info@womeningh.org

Follow us:

in f X  $\odot$ 



