## **Preliminary Knowledge Synthesis Report**

**Title:** Stress, burnout and depression in women in health care during COVID-19 Pandemic: Rapid Scoping Review

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### **SUMMARY OF FINDINGS**

### **OBJECTIVE OF ANALYSIS**

The overall objectives of this rapid review are to (a) synthesize the common triggers of stress, burnout, and depression faced by women in health care during the COVID-19 pandemic, and (b) identify individual, organizational-, and systems-level interventions that can support the well-being of women HCWs during a pandemic.

### **RATIONALE**

The spread of a pandemic such as COVID-19 subjects the healthcare system and healthcare workers (HCWs) to increased stress (Mock, J, 2020.,). Stress, burnout, and depression can lead to substance abuse and suicidal ideations (Oreskaovich, MR et al, 2012., West, CP et al, 2018). The recent reports of suicides among HCWs managing the COVID-19 pandemic have prompted concern about the mental health of HCWs (Orr, C, 2020). Further, reports show COVID-19 has socially, psychologically, and economically affected women disproportionately compared to men because of their primary caregiving roles as caregivers (UN). In Canada, 80% of our health workforce is made up of women (Porter, A et al., 2017).

# **GUIDING QUESTIONS**

What are the common triggers of stress, burnout, and depression faced by women in health care during the COVID-19 pandemic? What individual-, organizational-, and systems-level interventions can support the well-being of women HCWs during a pandemic?

### **RESEARCH METHODS**

The rapid review was conducted in accordance with the WHO Rapid Review Guide (Tricco, A et al 2017). The review protocol is registered in PROSPERO (CRD42020189750) and OSF (https://osf.io/y8fdh/?view\_only=1d943ec3ddbd4f5c8f6a9290eca2ece7).

A systematic search of literature databases was conducted up to June 1, 2020. We searched the following electronic databases: Medline (via OVID), Embase (via Ovid), CINAHL (via EBSCOHost), PsycINFO (via Ovid), and ERIC (via ProQUEST). Two reviewers independently assessed full-text articles according to following inclusion and exclusion criteria.

### Inclusion

- Review articles and primary studies where data were collected and analyzed using quantitative, qualitative, and mixed methods.
- All studies that reported on stress, burnout, and depression in HCWs
- Primarily focused on women; and that included the percentage or number of women included.
- All English language studies from any geographical setting where COVID-19 has affected the population were reviewed.

### Exclusion

We excluded editorials and opinion pieces unless the authors shared their personal experiences.

### PRELIMINARY FINDINGS

Of the 2,803 papers found, 32 are included in this scoping review. Our preliminary findings are grouped under three categories:

### Who is at risk?

- Women HCWs are at increased risk for stress, burnout, and depression during the COVID-19 pandemic (Al Sulais et al, 2020, Huang, et al, 2020., Elbay, et al, 2020., Xiao, et al, 2020., Yin, et al, 2020., Yuan, et al 2020., Zhu, et al, 2020)..
- Younger women and mid-career women are more vulnerable to anxiety, stress, depression and burnout 19 (Elbay, et al., 2020., Li, et al., 2020, Song et al., 2020).
- Less working experience and self-perception about lack of competency to care for COVID-19 patients was associated with increased prevalence of stress and burnout (Elbay, et al., 2020, Song et al., 2020)

### What are the common triggers?

- Lack of access to personal protective equipment (Cai, et al, 2020, Felice, et al, 2020, Huang, et al, 2020, Xiao, et al, 2020, Zhang, et al, 2020, Almaghrabi, et al, 2020, De Stefani et al, 2020)
- Fears of getting infected with COVID-19 and putting family members at risk (Al Sulais, et al, 2020, Almaghrabi, et al, 2020, Cai et al, 2020)
- Lack of infection control guidelines and protocols (Elbay, et al, 2020, Cai, et al, 2020, De Stefani, et al, 2020, Wu et al, 2020)
- Long working hours and increased workload (Elbay,et al, 2020, Song, et al, 2020, Felice, et al, 2020)

### What can help?

- Very few studies have discussed potential interventions to support women in health care with COVID-19 related stress, anxiety, and mental health.
- Regular exercise is considered a protective factor for depression and anxiety (Li et al, 2020).
- Mental health services such as online resources, psychological assistance hotlines, and group activities for stress reduction are poorly utilized by HCWs (Kang et al., 2020).
- Online-push messages of mental health self-help and self-help books are mostly preferred by women HCWs (Kang et al., 2020).
- Provision of rest areas for sleep and recovery (Yin et al, 2020, Kang et al, 2020).
- Training programs to improve resiliency (Zhu et al, 2020)
- Information on protective measures (Kang et al., 2020),

### **NEXT STEPS**

Our preliminary review highlights the increased mental health burden faced by women in health care. A rapid review protocol is registered in the International prospective register of systematic reviews (PROSPERO CRD42020189750). We will analyze the data to understand the contextual factors that shape the triggers stress, anxiety, insomnia and depression in Women HCWs during COVID-19. We will also complete subgroup analysis by professional group (doctors, nurses and allied health professionals).

We noticed, there is a significant gap in the evidence base. We recommend that health system decision-makers, hospitals, and professional organizations support research studies that measure the long-term impact of COVID-19 on women in health care and support high-quality studies that measure the effects of various mental health interventions and resources supporting women in health care. Given the complex nature of these interventions, we urge future research studies to provide contexts in which the interventions were implemented and mechanisms that shape successful responses.

## Keywords

Coronavirus, COVID-19, women in health care, stress, burnout, depression

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