Identifying mental wellbeing needs for non-health essential workers during recent epidemics and pandemics: An integrative review

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- Essential workers were the most exposed group of individuals to COVID-19
- They were the hardest hit population group by COVID-19
- Essential services are often overrepresented by otherwise vulnerable population groups such as immigrants, refugees, and visible minority people
- · Non-health essential workers are often hidden under the shadow of healthcare essential workers
- · They are the 'unsung heroes' of the pandemic
- · Many non-health essential jobs are underpaid and the workers struggle financially and live in fear of losing jobs
- Essential workers are those "who conduct a range of operations and services that are typically essential to continued critical infrastructure viability."1

PRISMA flow diagram Articles identified through Articles identified through publication database search grey literature source search (n = 9.353)(n = 502)Articles after duplicates removed (n = 8.434)Articles identified after title and abstract screening (n = 209)Articles excluded (n = 8,225)Full-text articles assessed for eligibility Full-text (n = 209)articles excluded (n = 175)Eligible articles identified (n = 34)Articles added through Articles included in information synthesis (n = 34)

Funding acknowledgement

Canada

Research questions

- What research has been done on effects of recent epidemics and pandemics on non-health essential workers?
- What mental health issues they have encountered due to recent epidemics and pandemics and how they were addressed?

Methods

- Followed Whittemore and Knafl's (2005) integrative review method that allows combination of diverse methodologies
- Systematic search of both academic (MEDLINE, PsycInfo, CINAHL, Sociological abstracts, and Web of Science) and grey literature (Google Scholar) sources.
- We included articles describing any mental health-related issues/interventions on non-health essential workers during the past epidemics and pandemics since 2000.
- The six recent epidemics and pandemics: Severe Acute Respiratory Distress Syndrome, H1N1 Influenza, Ebola, Zika virus, Middle East Respiratory Syndrome, and COVID-19).

Results

Study characteristics:

- 16 studies were quantitative, 13 studies were qualitative, and five studies were mixed
- Almost all articles were about COVID-19 except one on Ebola.
- · Most of the studies regarding COVID-19 were conducted during March-June 2020 (24 out of 34)

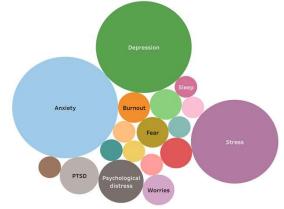


Figure 1. Types of mental health issues/symptoms among non-health essential workers





Categories	Occupations	Main findings	Factors	Coping mechanism
Factory and Production Occupations	Production Workers Factory Workers Electronic Device Watchmaking Beverage Manufacturing Biotech Production Biopharmaceutical Related Industry Workers	Increased mental health problems among factory workers were found that general population (5.6% vs. 2.4%) Olifferent sources of information exposure has differing effects on mental health and behavioral outcomes	 Higher exposure via unofficial web-based media and face-to-face communication was associated with higher depressive symptoms. Age, maristia status, education level, monthly personal income, and factory type were significantly, associated with depressive symptoms and sleep quality 	• N/R
Farming, Fishing, Agriculture, and Forestry Occupations	• Farmers	Fear and worry were expressed by many women farmers They were afraild of getting sick and unable to take care of children Bringing virus from work to home Desperation, anxiety and stress	Poor physical health Being female	 Applying active copin strategies (being constructive of behar actively acquiring knowledge and apply etc.) were found successful
Food Preparation and Serving Occupations	Butchers Balkers Drinking Water Dealers Catering Sector Workers Food and dairy Mestpacking industry Restaurants Hospitality workers Hotel Employees Hospitality	high Workers with anxiety reported less consistent mask use Workers with depression were less likely to practice social distancing consistently and more likely to commuted by public transporter blotted employees reported severe symptoms of anxiety and depression		Talking or virtually connecting with frier and family Positive outlook
Installation, Maintenance, Cleaning, and Repair Workers	Cleaning Domestic workers Landscape workers Domestic Helpers	 Level of distress were different based on level of engagement, work satisfaction, and coherence 	Lower the engagement, coherence, satisfaction higher the distress Lack of PPE	 Daily exercise, yoga meditation, hobbies Not watching news/statistics abou COVID-19
Protective Service Occupations	Police Officers Firefighters Military Personnel Civil Guards	Fear of contracting COVID-19 and passing infection to family members increased feelings of sadness and at risk for anxiety and depression Burnout, emotional exhaustion, and depersonalization Reluctance to ask for help or get treatment	No daily allowance No Personal Protective Equipment	
Sales and Related Occupations	Grocery retail Cashiers Booth Attendants Fashion Retailing Workers	 Over 65% of grocery workers showed severe psychological impact and a higher impact level than general population 	 Direct customer exposure Public transport, shared-rides and exposure to COVID-19+ customer 	 Support received fro company/workplace
Social care practice and support	Child Care/Weifare Workers Geriatric Caregivers Community Volunteers Social Workers Informal Caregivers Managers Of Nursing Homes Aid Workers	Child care providers were in mild to severe distress Social isolation declines mental health	Not married Poor financial status Being non-heterosexual Concerns with keeping family members safe Financial uncertainty	Keeping emotional distance from elderly Maintaining own web being and kindness
Transportation and Delivery Occupations	Distribution And Sales Logistics and Cargo Services Workers Transportation Rickshaw Puller	These non-health essential workers reported higher levels of depression, anxiety, and stress than healthcare workers They also reported lower quality of life relative to healthcare workers	Coupled with insufficient safety protocols Uncertainties of undertaking a risky occupation Limited job stability and financial incentives	N/R
Other	Media Professionals Non-specific health care essential workers	 Media professionals followed healthcare workers and grocery workers in sadness scale Media personnel were less concerned about getting infected 	No gender difference was found for media professionals	• N/R

Discussion

- This study gives a brief understanding of the extent of mental health effects of a pandemic on non-health essential workers
- Most of these studies non-health essential workers were part of a bigger study population and often not the focus of the research questions
- · Understanding the factors associated with different sub-groups and their coping mechanism will help develop appropriate support strategies for their quick recovery/rehabilitation

References

Available upon request



Background

- Essential workers were the most exposed group of individuals to COVID-19
- They were the hardest hit population group by COVID-19
- •Essential services are often overrepresented by otherwise vulnerable population groups such as immigrants, refugees, and visible minority people
- Non-health essential workers are often hidden under the shadow of healthcare essential workers
- They are the 'unsung heroes' of the pandemic
- Many non-health essential jobs are underpaid and the workers struggle financially and live in fear of losing jobs
- •Essential workers are those "who conduct a range of operations and services that are typically essential to continued critical infrastructure viability." 1





Research questions

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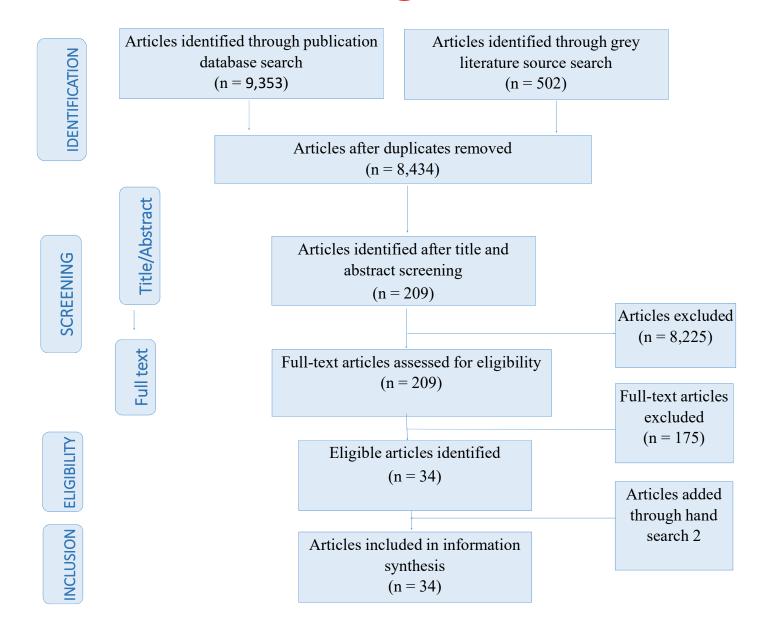
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PRISMA flow diagram











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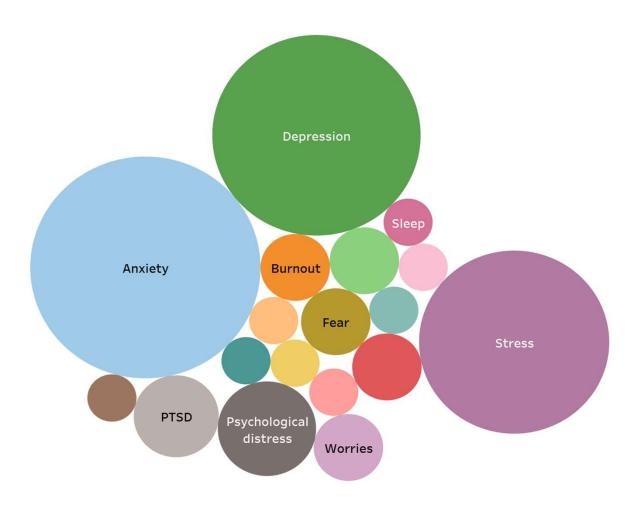


Figure 1. Types of mental health issues/symptoms among non-health essential workers





Table 1: Different groups of non-health essential workers and their mental health issues, factors, and coping mechanisms

Categories	Occupations (non-health essential workers	Main findings	Factors	Coping mechanisms
Factory and Production Occupations	Production Workers Factory Workers Electronic Device Watchmaking Beverage Manufacturing Biotech Production Biopharmaceutical Related Industry Workers	 Increased mental health problems among factory workers were found that general population (5.6% vs 2.4%) Different sources of information exposure has differing effects on mental health and behavioral outcomes 	Higher exposure via unofficial web-based media and face-to-face communication was associated with higher depressive symptoms Age, marital status, education level, monthly personal income, and factory type were significantly associated with depressive symptoms and sleep quality	● N/R
Farming, Fishing, Agriculture, and Forestry Occupations	• Farmers	 Fear and worry were expressed by many women farmers They were afraid of getting sick and unable to take care of children Bringing virus from work to home Desperation, anxiety and stress 	Poor physical healthBeing female	 Applying active coping strategies (being constructive of behaviour, actively acquiring knowledge and applying etc.) were found successful
Food Preparation and Serving Occupations	Butchers Bakers Drinking Water Dealers Catering Sector Workers God and dairy Meatpacking industry Restaurants Hospitality workers Hotel Employees Hospitality	High likelihood of stress in service sector Anxiety and depression level is also high Workers with anxiety reported less consistent mask use Workers with depression were less likely to practice social distancing consistently and more likely to commute by public transport Hotel employees reported severe symptoms of anxiety and depression	Increased work hours Increased expenditure on cleaning and food Ability to do social distancing correlated negatively for anxiety Public transport, shared-rides and having an exposure to a confirmed case were correlated positively with depression Lower income and lower level of education	 Physical activities Spending time outdoors Talking or virtually connecting with friends and family Positive outlook
Installation, Maintenance, Cleaning, and Repair Workers	Cleaning Domestic workers Landscape workers Domestic Helpers	 Level of distress were different based on level of engagement, work satisfaction, and coherence 	Lower the engagement, coherence, satisfaction higher the distress Lack of PPE	 Daily exercise, yoga and meditation, hobbies Not watching news/statistics about COVID-19
Protective Service Occupations	 Police Officers Firefighters Military Personnel Civil Guards 	Fear of contracting COVID-19 and passing infection to family members Increased feelings of sadness and at risk for anxiety and depression Burnout, emotional exhaustion, and depersonalization Reluctance to ask for help or get treatment	Being unable to spend time with family No daily allowance No Personal Protective Equipment Lack of management support from the management	 Accepting the stressful events Sense of accomplishment of doing the crucial services Alcohol use Social avoidance
Sales and Related Occupations	Grocery retail Cashiers Booth Attendants Fashion Retailing Workers	 Over 65% of grocery workers showed severe psychological impact and a higher impact level than general population 	Being a grocery worker and women Direct customer exposure Public transport, shared-rides and exposure to COVID-19+ customer	Support received from company/workplace
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Discussion

- •This study gives a brief understanding of the extent of mental health effects of a pandemic on non-health essential workers
- Most of these studies non-health essential workers were part of a bigger study population and often not the focus of the research questions
- •Many sub-groups exist among these population and the factors vary between groups.
- Keeping these various essential worker groups in focus more research need to be done
- •Understanding the factors associated with different sub-groups and their coping mechanism will help develop appropriate support strategies for their quick recovery/rehabilitation