

Factors influencing facial protective equipment use by rehabilitation providers in home care during the COVID-19 pandemic

Facial protective equipment (FPE), including masks, face shields, and goggles, is critical for slowing the spread of COVID-19 in health care settings, including home-based care. Rehabilitation providers are important members of home care teams. However, researchers involved in this project found no previous studies that investigated factors affecting the use of FPE by rehabilitation providers in any setting.

Use of FPE by rehabilitation providers in home care was affected by different factors than those found to influence home care nurses and personal support workers. Factors associated with lower use of FPE among rehabilitation providers included having experienced negative mental health impacts of COVID-19 and being an occupational therapist (in contrast with physiotherapists, and occupational and physiotherapy assistants). Further research can explore the reasons for these differences to support optimal FPE use among rehabilitation providers in home care and beyond.

Project Overview

Facial protective equipment (FPE), including masks, face shields, and goggles, is an important component in preventing the spread of COVID-19 in healthcare settings. Home-based healthcare creates distinct challenges related to infection prevention and control: home care providers have less easy access to protective equipment, and less experience in its use, than their

colleagues in hospitals, long-term care homes, and other facilities.

A recent study explored the factors influencing FPE use among nurses and personal support workers in Ontario during the COVID-19 pandemic. It found that 71% of participants always use FPE as required, with 89% always using masks as required and 73% always using

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eye protection as required. Factors associated with increased adherence included: greater knowledge of how to use FPE, belief in its effectiveness, and perceived risk of exposure to COVID 19; lower education; and lack of personal barriers like discomfort or communication challenges when using FPE.(1)

Recognizing the home health care workforce extends beyond the nursing and personal support workforce, we explored whether there were any published studies that addressed FPE adherence in rehabilitation providers. Not only was there no published literature on rehab provider FPE adherence in home health care, but none could be found specific to any health care setting. Rehabilitation providers are a critical part of home care teams, enabling clients to recover, maintain, or adapt their performance of daily activities. Rehabilitation providers conduct different care tasks than nurses and personal support workers and may have differing prior exposure to the use of FPE. As such, their needs relating to FPE adherence warrant specific focus.

What did we do?

160 rehabilitation providers from two home care organizations completed an online questionnaire. This questionnaire was adapted from a homecare and COVID-19 specific Facial Protective Questionnaire, originally developed for use by personal support workers and nurses. Statistical models were used to identify the effect of different factors on self-reported FPE use. These factors included demographics, individual experiences such as exposure to COVID-19, and organizational attributes such as supportiveness of supervisors or managers. We also analyzed participant responses to a free-text question asking their recommendations for supporting FPE among rehabilition providers in future pandemics or emergencies.

What did we find?

Rehabilitation providers in home care had high rates of self-reported use of FPE during the COVID-19 pandemic. However, FPE adherence was lower in occupational therapists when compared to other rehabilitation providers. FPE adherence was also lower for those who experienced greater adverse mental health impacts of

COVID-19. While counter-intuitive, this aligns with research in the general population finding that "pandemic fatigue" (i.e., a decline in adherence to COVID-19 precautions) is greater amongst those who had a history of COVID-19 infection and greater COVID-related stress.(2)

When asked for recommendations to support FPE adherence, participants suggested making FPE easily accessible (e.g., through offering delivery by mail or remunerating providers for travel time to pick up supplies); offering high-quality FPE that fits a range of needs (e.g., N95-rated masks, and eye protection that can be worn with glasses); and ensuring that adequate supplies are maintained in case of future crises. Participants also expressed support for clear guidelines and continuous education for FPE use.

What will the impact be?

Supporting FPE adherence in rehabilitation providers is an important component of holistic infection prevention and control during the ongoing COVID-19 pandemic. However, the factors affecting FPE use in rehabilitation providers were not the same as factors found to affect nurses and personal support workers in previous research. As such, this study demonstrates that rehabilitation providers have unique experiences and needs relating to FPE and highlights areas for investigation so these needs can appropriately be met.

References

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