

The Impact of COVID-19 Health Measures on Adults with Multiple Chemical Sensitivity

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Abstract : Multiple chemical sensitivity (MCS) is a chronic medical condition characterized by intolerances to chemical substances. Since the arrival of the COVID-19 pandemic and associated health measures, people experiencing MCS (PEMCS) are at a heightened risk of environmental exposures associated with cleaners, disinfectants, and sanitizers. Little attention has been paid to the well-being of PEMCS in the context of the COVID-19 pandemic. Objective: This study assesses the lived experiences of Canadian adults with MCS in relation to their living environment, access to healthcare, and levels of perceived social support before and during the pandemic. Methods: A total of 119 PEMCS completed an online questionnaire. McNemar Chi-Squared and Wilcoxon Signed Rank tests were used to evaluate if there were statistically significant changes in participants' perception of their living environment, access to healthcare, and levels of social support before and after March 11, 2020. Results: Both positive and negative outcomes were noted. Participants reported an increase in exposure to disinfectants/sanitizers that entered their living environment ($p < .001$). There was a reported decrease in access to a family doctor during the pandemic ($p < 0.001$). Although PEMCS experienced increased social isolation ($p < 0.001$), they also reported an increase in understanding from family ($p < 0.029$) and a decrease in stigma for wearing personal protective equipment ($p < 0.001$). Conclusion: PEMCS reported experiencing: increased exposure to disinfectants or sanitizers, a loss of social support, and barriers in accessing healthcare during the pandemic. However, COVID-19 provided an opportunity to normalize the living conditions of PEMCS, such as wearing masks and social isolation. These findings can guide decision-makers on the importance of implementing nontoxic alternatives for cleaning and disinfection, as well as improving accommodation measures for PEMCS.

Keywords : covid-19, multiple chemical sensitivity, MCS, quality of life, social isolation, physical environment, healthcare

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