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Prevalence of comorbidities in the *Middle East respiratory syndrome coronavirus* (MERS-CoV): A systematic review and meta-analysis

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Middle East respiratory syndrome coronavirus (MERS-CoV) is associated with life threatening severe illnesses and a mortality rate of ~35%, particularly in patients with underlying comorbidities. Systematic analysis of 637 MERS-CoV cases suggests that diabetes and hypertension are equally prevalent in ~50% of the patients. Cardiac diseases and obesity are present, respectively in 30% and 16% of the cases. These conditions down-regulate the synthesis of pro-inflammatory cytokines and impair the host's innate and humoral immune systems. In conclusion, the protection against MERS-CoV and other respiratory infections can be improved if public health vaccination strategies are tailored to target persons with chronic disorders.

Biography

Alaa Badawi is affiliated to the Public Health Agency of Canada, Canada.

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