

A Review: Polypharmacy and Medication Adherence in Patients with COVID-19 Diseases

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Abstract: Surveys of community based elderly patients' shows that 2 to 9 prescription medications on average are taken per day. By survey 57% of US women aged >65 years took more than 4 prescription medication and 12% took more than 9 prescription medication.^[1] On random day 8.3 % of the population were exposed to minor polypharmacy and 1.2% to major polypharmacy. The prevalence of polypharmacy increased with the age and from the age of 70 years, two third of all drug users were polypharmacy users. An elderly patient is at greater risk for adverse drug reactions and drug-drug interactions because the physiologic changes that occur with aging make the body more sensitive to the effects of medications. The burden of polypharmacy, may enhance the risk of morbidity and mortality, especially in cases of acute infections. The Middle East respiratory syndrome (MERS-CoV), severe acute respiratory syndrome (SARS-CoV), SARS- related coronavirus-2 (SARS-CoV-2), and corona virus disease (COVID-19) are members of the same family as coronavirus. Various studies reported that COVID-19 has a similar pathogenic potential to cause respiratory complications, disability, and death as SARS-CoV and MERS-CoV. Medication non-adherence includes delaying prescription fills, failing to fill prescriptions, cutting dosages, and reducing the frequency of administration. Non adherence with medication is a complex and multidimensional health care problem. The causes may be related to the patient, treatment, and/or health care provider.

Keywords: Polypharmacy, Factors of Polypharmacy, Consequence of Polypharmacy, Prevention of Polypharmacy, Medication Adherence, Types of non-medication adherence, Role of Pharmacist, Covid-19 Disease.

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