

Abstract

Recent medical research suggested that antidepressants, particularly Selective Serotonin Reuptake Inhibitors (SSRIs), might potentially exhibit antiviral properties against COVID-19. The opinions about repurposing antidepressants as a form of COVID-19 treatment vary markedly among scientific and medical professionals, especially when one considers the wide range of side effects that antidepressants may induce. The aim of this thesis is to examine the effect of SSRIs on the severity of COVID-19. Our analysis will specifically target the individuals who use antidepressants actively and regularly, i.e., those who were not prescribed SSRIs intentionally due to COVID-19. To evaluate the impact of SSRIs, we will perform logistic regression and utilize the zero-inflated negative binomial model. The results reveal a significant association between the use of SSRIs and increased probability of both hospitalisation and death due to COVID-19. The effect is rather small, however, we find the effect is statistically significant. Additionally, our analysis discovered no significant evidence that SSRIs affect the length of hospital stay. Our results thereby do not support the hypothesis that SSRIs provide protective effects against COVID-19 or function as a form of long-term preventive antiviral pharmaceuticals.