

**Submission Id: 4773**

**Title**

*Psychological determinants of vaccination readiness in German primary care patients with chronic illness*

**Priority 1 (Research Category)**

Behavioral, psychosocial, and mental illness

**Presenters**

Simon Keppeler, Linda Sanftenberg, Marco Roos, MD, Philipp Sckopke, Jochen Stefan Gensichen, MPH

**Abstract**

Context: Vaccinations against COVID-19 and influenza provide good protection, especially for people with chronic illnesses. Chronically ill often suffer from psychiatric comorbidities like depression or anxiety and are diagnosed and treated in primary care.

Objective: We analyzed the association between vaccination readiness against COVID-19/influenza and symptoms of depression/anxiety disorder in chronically ill primary care patients.

Study Design and Analysis: This cross-sectional study was carried out via a paper-based survey in 2022 in Germany. Mixed-linear regression models were chosen for statistical analyses since data was clustered.

Setting: Eligible patients were approached via mail by their general practitioners.

Population Studied: Eligible patients were adults and suffered from at least one of the following chronic illnesses: bronchial asthma, COPD, diabetes type 1 or 2, coronary heart disease or breast cancer.

Instruments: We collected data on sociodemographics and psychological antecedents of vaccination (5Cs), depression (PHQ-9), and anxiety disorder (OASIS).

Outcome Measures: The 5Cs (Confidence, Complacency, Constraints, Calculation, and Collective Responsibility) for either vaccine served as dependent variables.

Results: n=795 patients were included. For COVID-19, depression was negatively associated with trust in vaccines (item „Confidence“,  $\beta = -0.04$ ,  $p = 0.010$ ) and positively associated with subjectively perceived structural barriers to vaccination (item „Constraints“,  $\beta = 0.02$ ,  $p = 0.041$ ). Depression did not show associations with readiness for influenza vaccination. General anxiety disorder showed no association with readiness to receive either vaccination. At the end of the influenza season, 94.5 % of the assessed patients received three or more vaccines against COVID-19, and 54.5 % received a flu shot in season 2022/23.

Conclusions: Although mental health seems to influence certain psychological antecedents of vaccination readiness, they do not exclusively influence the resulting vaccination rates. In further studies, the intention-behavior gap needs to be examined. In German primary healthcare, vaccines are free and available for everyone. Given that accessibility, primary health care should focus on targeted interventions for especially vulnerable groups like the chronically ill. Perceived access barriers might be approached with personalized reminder systems, which have been proven to be useful internationally.