Covid-19 pandemic has had a negative impact on mental health, including stress. The goal of our study was to design and psychometrically validate the Stress Scale for Transmissible Diseases (APA scale). The discriminative item analysis test allowed the elimination of four items, leaving the final test with 10 items. Likewise, the convergent validity using the Social Anxiety Questionnaire (SAQ) was $r = .377$. Confirmatory factor analysis confirmed the two-component structure: general stress and stress in the face of Covid-19. Multivariate correlations between items were obtained using the fit indices according to the expected model. Reliability indices were good (Cronbach's $\alpha = .841$ and McDonald's $\omega = .848$) and percentile norms were established by sex with a sample of 1,000 university students, with 28% of women and 22.9% of men having a high level of stress in the face of transmissible diseases. These results of validity and reliability of the APA scale show its usefulness in assessing stress in the face of transmissible diseases.