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**Title**

*Cultural differences in COVID-19 knowledge, perceptions, and behaviors: mixed-method study of Turkey and the United States*

**Priority 1 (Research Category)**

Population health and epidemiology

**Presenters**

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**Abstract**

Context: April 2020, beginning of the COVID 19 pandemic.

Objective: Political, social, and health professionals at every level are responsible for mass transference of information and guidance regarding major health crises. It is important to recognize how cultural differences affect adherence to health guidelines. This study explores similarities and differences in knowledge, perception, and behaviors regarding the COVID-19 pandemic between adults in the United States and Turkey.

Study Design and Analysis: This convergent, mixed methods study compared 99 Turkish respondents to a 1:1 matched U.S. cohort. Thematic analysis was applied to data collected in their original language. Quantitative approaches (t-test and  $\chi^2$ test) were used to compare responses.

Dataset: Penn State – CHIME COVID Messaging Survey (PS-CHIME) with over 18,000 respondents.

Population studied: A Turkey cohort of 99 adults with a matched cohort of US adults totaling 198 individuals.

Intervention/Instrument: Mixed methods survey designed to explore COVID-19 knowledge, attitudes, perceptions, intent to comply with mitigation behaviors, risk perception, trust in health information sources, and preferred health information sources.

Outcome Measures: Quantitative survey results were from a 5-point Likert scale and qualitative teams used pragmatic, inductive coding process to conduct descriptive analysis.

Results: Intent to comply five COVID-19 public health recommendations among Turkish adults was greater than in the US cohort (4.87/5 vs 4.75/5,  $p < 0.001$ ). Qualitative analysis revealed cultural differences that contextualize these quantitative differences. Similarities were confusion and distrust in information. Differences were Turkish respondent concerns about the health of their loved ones, likely

increasing compliance, while US respondent concerns about disruption to normalcy, likely decreasing compliance.

Conclusions: This study provides insight into cultural, social, and political differences that contribute to cross-cultural differences in health behaviors. A greater understanding of culturally driven motivations behind adherence to COVID-19 mitigation behaviors may improve development of multi-cultural efforts to address future catastrophic health events.