

## Urine foaming test, a promising diagnostic test for COVID-19 infection

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To the Editor,

We read with interest the article published by Kurtulmus et al. [1] titled: The urine foaming test in COVID-19 as a useful tool in diagnosis, prognosis, and follow-up: Preliminary results discussing a point of care, easily done urine test to detect COVID-19 infection. We applaud the researchers' effort in presenting a low-cost test at a time when the world is in the edge of global recession because of the COVID-19 pandemic where such tests are highly needed by the financially challenged health-care systems globally. The researchers depended on a physical character of the urine, namely, foam formation that can instantly be quantified visually which would identify COVID-19-specific metabolites and metabolic degradation products as a result of reacting with a newly developed reagent for this purpose.

Foam formation in this study ought to be interpreted with caution since several factors can contribute to foam formation and can simply be overlooked in such studies. First, concentrated urine which is expected in subjects who have recent viral illness resulting in poor oral intake can lead to foam formation. This is a consequence of an increase in the concentrations of the normally present amphipathic substances responsible for foam formation in the urine resulting from dehydration following poor oral intake [2]. Second, alkaline urine for any reason can interfere with foam formation by decreasing surface tension and give a falsely negative results [3]. Third, the authors excluded subjects with diabetes mellitus and nephrotic disorders but nevertheless, subjects with low-grade proteinuria can still form a foamy urine which could have affected result interpretation.

Finally, we acknowledge that the study by Kurtulmus et al. [1] remains to be important and time sensitive. We do advise considering our critique in their future multi-center observational study as they suggested.

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## Adaptation of the knowledge about childhood autism among health workers questionnaire aimed for usage in Turkey

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To the Editor,

We would like to read and contribute to the research article titled "Adaptation of the Knowledge about Childhood Autism among Health Workers (KCAHW) Questionnaire aimed for usage in Turkey" written by

Özdemir et al. [1] published in North Clinics of Istanbul. The KCAHW is a scale developed by Bakare et al. [2] consisting of four areas and 19 items which measure knowledge level of health workers on autism.

During the scale adaptation process, it was seen that the writers excluded the 1<sup>st</sup> item since all participants answered it accurately and the 4<sup>th</sup> area as a whole (6 items as a whole) for a reason that is not easily understandable such as to avoid misunderstandings of the physicians about autism spectrum disorder and the scale was reduced to three areas. As a result, the scale consisting of four areas and 19 items were reduced to three areas and 12 items without the presentation of sufficient psychometric reasons.

In the process of developing a new scale, adding or excluding an item in line with analysis results might be in question [3]. However, while doing scale validity and reliability studies, excluding items can cause the loss of certain concepts and thus “the loss of content validity.” A scale which does not have content validity cannot claim to measure anything. Excluding items from a scale can only be possible in psychometric studies only with an exploratory approach and require objective hypothesis and accurate and sufficient psychometric methods (IRT and Differential Item Functioning, etc.). It is apparent that the objective in Özdemir et al.’s study is not to test the content validity of the original scale. In fact, there is a need to develop a new scale rather than test the content validity of a scale which has previously been developed, because items are prepared within the framework of theoretical structure (conceptual content) while developing a scale. In addition, the exclusion of any item requires certain statistical approaches. The approaches used here to exclude items from a scale are insufficient.

In the other cultural adaptation and validity study of the same scale published by Gürbüz Özgür et al. [4], sticking to the original version of the scale, the validity and reliability of the KCAHW, which includes all four areas and all 19 items, without needing any items to be removed, has been demonstrated for Turkish culture and Turkish.

It will be a more scientifically correct approach to use the Turkish version of this scale adapted by sticking to the original, in the field of health services.

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## Time to collaborate: Objectives, design, and methodology of PeRA-Research Group

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To the Editor,

Pediatric rheumatic diseases are a diverse group of