

ABSTRACT

The aim of this study was to find the prevalence of β -haemolytic *Escherichia coli* in milk, as well as their sources, and their sensitivity to antibiotics. *E. coli* was isolated from samples of cow and camel milk, cow and camel udder surfaces, and milking persons' hands. The organisms were identified using API20E biochemical kit. Haemolytic activity was tested on 7% defibrinated sheep blood agar while antibiotic sensitivity was tested using the Kirby-Bauer disc diffusion method. The prevalence of β -haemolytic isolates from cow and camel milk was 25% and 32% respectively. None of the isolates from the udder swabs, the milking persons' hands, or water was β -haemolytic. In cow milk, the prevalence of isolates resistant to Ampicillin, Cefotaxime, and Cefepime was 25, 37.5 and 12.5% respectively, while in camel milk it was 52.4, 23.8 and 28.6% respectively. Prevalence of β -haemolytic and multidrug resistant isolates to the three antibiotics was 12.5% for cow milk and 19% for camel milk. None of the isolates was resistant to Ciprofloxacin, Piperacillin/Tozobactam, Amikacin, and Imipenem. The prevalence of *E. coli* resistant to Cefotaxime and Cefepime indicates growing resistance of the microorganisms to drugs that are supposed to be effective against them. The presence of β -haemolytic isolates in milk and their absence on the animals' udder surface and hand swabs could indicate their better survival in the udder from which they are shed into the milk. This is a public health concern especially for pastoral communities who have a preference for consumption of raw milk.