

Dairy animals have always been one of the most studied animal species in terms of animal welfare [1],
Nonetheless, there are important welfare issues that have yet to be resolved. The purpose of this
research was to determine the existence of infecting microorganisms and their antibiotic resistance
patterns in the dairy farm environment, which could pose veterinary and public health risks by infecting
animals and contaminating milk, water, and feces with antimicrobial-resistant avian strains as a result of
poor milking hygiene. The most common disease-causing bacteria in the milk are *Mycobacterium bovis*,
Salmonella spp., *Corynebacterium* spp., *Coxiella burnetii*, *Clostridium perfringens*, *Brucella*,
Staphylococcus spp., *Yersinia enterocolitica*, *Campylobacter jejuni*, *Mycobacterium avium*, *Escherichia*
coli, *Listeria* spp., and coliforms [4, 5], as Gram-negative opportunistic environmental bacteria, have
been classified. During the twentieth century, antibiotics significantly reduced mortality associated with
infectious diseases; however, their widespread and repeated use in animal farming has resulted in the
emergence of bacterial multidrug resistance (MDR); as a result, the presence of antibiotic-resistant
populations transforms infections that were once treatable into potentially life-threatening events. Mastitis
caused by *E. coli* is typically sporadic, with symptoms ranging from mild to severe and even fatal
[6]. Meal-borne infection, on the other hand, is caused by ingesting viable pathogenic bacteria along with
the food [3]