

The voice of dairy farmers: Implementation of ethnographic field methods to address antibiotic use

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Antibiotic resistance, or the ability of a microbe to withstand treatment with antibiotics, is an emerging health issue that has been largely attributed to the inappropriate use of antibiotic treatments. The aim of this research is to understand dairy farmers' perceptions of antibiotic use (AMU), resistance (AMR), and regulation in Central Alberta and interpret them in light of the broader context. Current approaches aimed at addressing AMR have been focused on behavioral change interventions as a means to achieve absolute reduction in use. This project offers a new approach to tackling this issue by working to understand the underlying contextual drivers of antibiotic use, including the belief systems and values of the farmers. Ethnography was employed to address the above aim. Ethnography is an immersive field method traditionally used in cultural anthropology. By immersive, we mean that data collection is done in natural settings and involves direct interaction or close involvement with the people or animals of interest for extended periods of time. To apply this method, the researcher resided in Ponoka, a dairy farming community in Central Alberta for approximately three months. During that time, participant and direct observation were used to gather information on the everyday life of the community and to absorb their mode of reasoning. The implementation of these methods will shed light on which values and beliefs are most important to this community. Semi-structured interviews were also conducted with members of the dairy farming community on topics related to antimicrobial use, resistance, and regulation. **Implications.** 1) This research will allow the farmers to make their voices heard with regard to the development of an antibiotic stewardship initiative. 2) Through this project, we will gain a more in-depth understanding of the sociocultural context in which decisions concerning antibiotics are made. 3) This will provide policymakers with context-specific information to develop locally-appropriate and sustainable strategies to improve stewardship in the dairy sector in Central Alberta.