

Sociocultural aspects of antimicrobial use in dairy farming in Alberta, Canada

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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. Many of the current research and policy initiatives focus on knowledge translation and behavioral change mechanisms as ways to achieve absolute reductions in antimicrobial use across all health sectors. However, the current approach fails to address underlying drivers of practice and is narrowly focused on achieving an arbitrary numeric goal. This study will examine the social, cultural, economic, and geographic factors that are related to use of antibiotics. An in-depth understanding of the value systems of the cultures in which antibiotics are situated, the societal infrastructure that supports them, the geographic and economic constraints of the relevant communities, and the increased vulnerability experienced by adopting new practices would allow for the development of more sustainable antibiotic stewardship initiatives. Qualitative methods will be used to address these objectives. Specifically, this will include participation in on-farm activities (i.e., milking) and observations of relevant interactions (i.e., herd health exams) on dairy farms in Central Alberta. Interviews will also be conducted with dairy farmers and veterinary practitioners.

Implications. This research will allow the farmers to make their voices heard with regard to the development of an antibiotic stewardship initiative. It will also serve to redistribute decision-making power as it pertains to ongoing research in the community.