

“If it ain’t broke don’t fix it”: Ontario dairy farmer attitudes and perceptions towards implementing recommended milking practices

Emilie Belage, MSc¹; **Stephanie L. Croyle**, DVM¹; **Andria Jones-Bitton**, DVM, PhD¹; **Simon Dufour**, DVM, PhD²; **David F. Kelton**, DVM, PhD, MSc¹

¹Department of Population Medicine, University of Guelph, Guelph, Ontario, Canada N1G 2W1

²Department of Pathology and Microbiology, Faculty of Veterinary Medicine, University of Montreal, 3200 Sicotte, St-Hyacinthe, Quebec, Canada, J2S 2M2

Introduction

A large part of preventing mastitis on dairy farms is achieved through the use of recommended milking practices (RMPs) that have been established and promoted by industry and milk quality organizations such as the National Mastitis Council and the Canadian Bovine Mastitis and Milk Quality Research Network. These practices include use of milking gloves, foremilk stripping, use of pre and post milking teat disinfectants, drying teats prior to milking, and use of automatic takeoffs on milking machines. However, many producers do not adopt these measures, or they only do so partially. This study aimed to explore the attitudes and perceptions of Ontario dairy farmers towards barriers for implementation of RMPs, and to investigate what motivates behavior change in relation to milking hygiene.

Materials and Methods

Participants were recruited from a list of 418 Ontario producers who participated in the Phase 1 Questionnaire of the National Dairy Study (NDS) conducted across Canada in 2015. As part of Phase 1 of the NDS, producers indicated which practices were part of their routine for milk harvest (Belage et al., 2017). The follow-up data for this study were collected using four focus groups with Ontario dairy producers. Focus groups were conducted by a trained moderator using a semi-structured questioning guide. Verbatim transcripts were analyzed using thematic analysis, and coded using QSR International NVivo 10 software. Codes were grouped in themes and then subthemes to develop a thematic map that accurately reflected the discussion during the focus groups. The Standards for Reporting Qualitative Research (SQRQ) guideline was used as the standard for reporting.

Results

Based on the Phase 1 NDS study, adoption of RMP’s was not uniform or complete (Belage et al, 2017). Two main categories of barriers to adoption of RMPs were identified: physical barriers and intrinsic barriers. Intrinsic barriers

included personal habits and/or convenience, not perceiving udder health as a priority on their farm, and lack of information with respect to the reasons for adopting RMP’s. Physical barriers included employee training and compliance, convenience of implementing RMPs, and time, money and labor barriers. The measure most often used by producers to assess the severity of udder health problems on farm was bulk tank somatic cell count (SCC). Those with lower SCC were less likely to prioritize udder health compared to peers with more elevated SCC or with more severe fluctuations in bulk tank SCC. Producers reported not using certain RMPs unless udder health issues arose, and felt they were not needed if they weren’t experiencing udder health issues on their farms. Other producers perceived RMPs as not meaningful or useful, seemingly due to a lack of education about the reasons behind RMPs implementation. However, some participants felt they would be motivated to implement more RMPs and work towards better udder health if it translated into monetary rewards for better quality milk, for instance with incentives for lower SCC milk.

Significance

Producers who understood the importance behind certain milking practices with relation to udder health were more motivated to implement them. Both physical and intrinsic barriers drive non-adoption in these producer groups, but some may be overcome by milk quality incentives and increasing efforts in knowledge translation. The latter should include programs to re-train current practices, as well as establish best practices by explaining to producers the reasoning behind them.