Awareness and the value of information in controlling subclinical mastitis

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Adoption and implementation of more efficient subclinical mastitis control practices at farm level is an action of behavioral change, which is notoriously difficult to achieve and sustain, even when studies report substantial production and economic losses. Providing farmers additional information on a regular basis may motivate them to implement more efficient and effective control practices. The objective of this study is therefore to identify whether farmers are aware of production losses and to determine whether incorporating loss estimations into the monthly milk production records is valuable to them.

The conceptual behavioral model (Figure 1) explains the implemented subclinical mastitis control practices. The pathway differentiates between intention and action and describes the influence of perception, risk attitude and farm specific factors on obtaining intent. Besides intent, also efficient control strategies need to be feasible before behavior change can be expected. The value of information notion stipulates that information adds to the knowledge of the person receiving it, enabling him to make improved decisions. Within this framework, additional information will make the decision maker more aware of an event. A farmer who knows that subclinical mastitis causes production inefficiencies can be motivated to act. In the current research an information tool that provides objective loss estimations is incorporated into the monthly milk production records and it is tested whether this alters his intent to reduce cell count.

Figure 1: A conceptual behavioral model to mimic the road map to subclinical mastitis control.

A total of 20 dairy farmers enrolling in the monthly milk production recording will be interviewed. At the farm visit, the farm-specific and cow-specific production and economic losses are appended to the monthly milk production recording of the previous month. Initially, losses and strategies at the whole-farm level are discussed before exploring the control measure applied for each individual attention cow with increased somatic cell count. Thus also the perceived deprived production of attention cows, the associated loss and the chosen current control practices are listed. By eliciting whether intentions and actions to implement control strategies alter, the impact of the provided information is ascertained.