**Human behavioral influences and milk quality control programs**

L. N. Freitas1, P. H. R. Cerqueira2 H. Z. Marques1, R. A. Leandro2, P. F. Machado1

**Supplementary Material S1**

**Fogg behavioral model variables**

***Motivation - Pain***

1. I know how much money I'm losing due to mastitis.
2. Milk income represents [ ]% of my total income (0 to 25% - 1; 26 to 50% - 2; 51 to 75% - 3; 76 to 100% - 4).
3. Mastitis is my main concern on the farm.
4. Losing money due to mastitis bothers me a lot.

***Motivation - Fear***

1. I'm afraid of having my milk rejected by my industry due to mastitis.
2. I'm afraid of exceeding the law limits concerning milk quality (regulation 62).
3. I'm afraid of losing cows due to mastitis.
4. I'm afraid of decreasing milk production because I cannot control mastitis.

***Motivation - Social pressure***

1. I know who has the best milk quality in the region.
2. I know the BTSCC of my neighbors.
3. I know the limits for BTSCC that my industry determines.
4. I know the limits imposed by the law (regulation 62).

***Barriers - Time***

1. I do not check the milking room every day.
2. I do not study mastitis.
3. I do not check my mastitis results.

***Barriers - Money***

1. Investing in mastitis control does not bring satisfying economical results.
2. Controlling mastitis is too expensive.
3. I do not analyze bacteriological culturing because it is too expensive.
4. To reduce mastitis, I must discard cows and it is too expensive.
5. I do not analyze individual cow SCC because it is too expensive.

***Barriers – Physical/mental effort***

1. Improving BTSCC is very hard.
2. Analyzing bacteriological culturing is too hard and demands too much work to collect and send the samples.
3. Analyzing individual cow SCC is too hard and demands too much work to collect and send the samples.
4. I do not know what to do with BTSCC and bacteriological culturing results.
5. I cannot collect clinical mastitis data.
6. Collecting clinical mastitis data demands too much work.

***Barriers - Knowledge***

1. Buying cows is not one of the main factors related to high BTSCC.
2. It is not possible to eliminate *Streptococcus* *agalactiae.*
3. The pre-dipping process is not crucial in controlling coliforms.
4. Using gloves is not fundamental in contagious mastitis control.
5. Antibiotics are not only effective for gram-positive bacteria.