Dairy farmer's perception of udder health consulting quality from the herd veterinarian

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STØTTET AF

Mælkeafgiftsfonden

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These bullets are what I want to share today

The demands for today's dairy veterinarian

Literature

The aim of the project

Research questions

Material & Methods

Data analysis

Preliminary results

Discussion and take-home message

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Everyday life for many dairy veterinarians

- New demands of service challenge the herd veterinarian in udder health consulting: reduction in the use of antimicrobials, foreign labor, communication in a multilanguage environment, cost-effective preventive medicine, e.g.

- Increasing access to sensors monitoring udder health and automated milking – potential data overload

- To an increasing extent, dairy farms depend on employees – the dairy farmer manages the cows through employed people

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Everyday life for many dairy veterinarians

- New demands of service challenge the herd veterinarian in udder health consulting: redu... ...ealth... ...lli...

  envi...

- Incre... ...l data

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Has the dairy veterinarian adapted to this structural development – and delivering quality herd specific consulting to improve udder health?

- To an increasing extent, dairy farms depend on employees – the dairy farmer manages the cows through employed people

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Literature

- The role of the dairy veterinarian has changed from individual animal treatment to proactive herd health management (LeBlanc et al., 2006).

- Most dairy farmers believe the dairy veterinarian is a crucial partner in udder health consulting (Kuiper et al., 2005)

- The successful herd veterinarian must identify herd-specific goals and targets and ensure that communication is tailored to the specific dairy farmer (Jansen et al., 2010)

- When the dairy farmer discuss udder health issues, the most frequent consultant mentioned is the herd veterinarian (Falkenberg et al., 2019)

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The aim of the research project

- Get an up-to-date status in terms of the quality of herd-specific udder health consulting in Denmark

- Identify potential association between udder health consulting, and Bulk Tank Somatic Cell Count (BTSCC) at herd level

- Identify potential gaps in consulting that needs addressing to improve the perceived quality of consulting
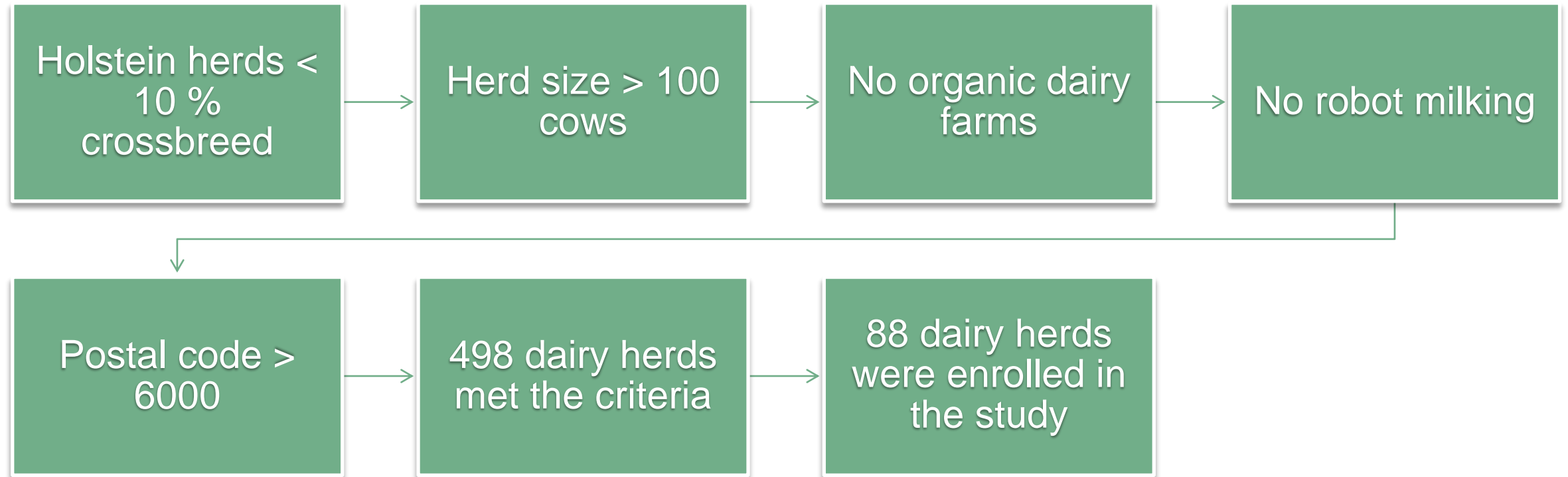
Research questions

RQ 1: What is the agreement in the perception of quality of the provided udder health consulting between the dairy farmer and herd veterinarian

RQ 2: Does the quality of consulting and agreement between the dairy farmer and herd veterinarian affect the BTSCC, reflecting the udder health situation of the farm

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Materials – selection criteria of dairy farms

| Holstein herds < 10 % crossbreed | → | Herd size > 100 cows | → | No organic dairy farms | → | No robot milking |

| Postal code > 6000 | → | 498 dairy herds met the criteria | → | 88 dairy herds were enrolled in the study |

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RQ 1 – Perception of consulting quality

- Likert scale principles with 5-7 answers on an ordinal scale, as recommended by (Preston & Colman, 1999)

- The survey included dairy farmers and their corresponding herd veterinarian

- Questionnaire with (N = 40 questions for the dairy farmer) and (N = 37 questions for the herd veterinarians)

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RQ 2 – Association to BTSCC – five construct

Opening question for the dairy farmer

1. How the dairy farmer is engaged in the discussion regarding udder health

2. The frequency udder health is discussed and problem identification
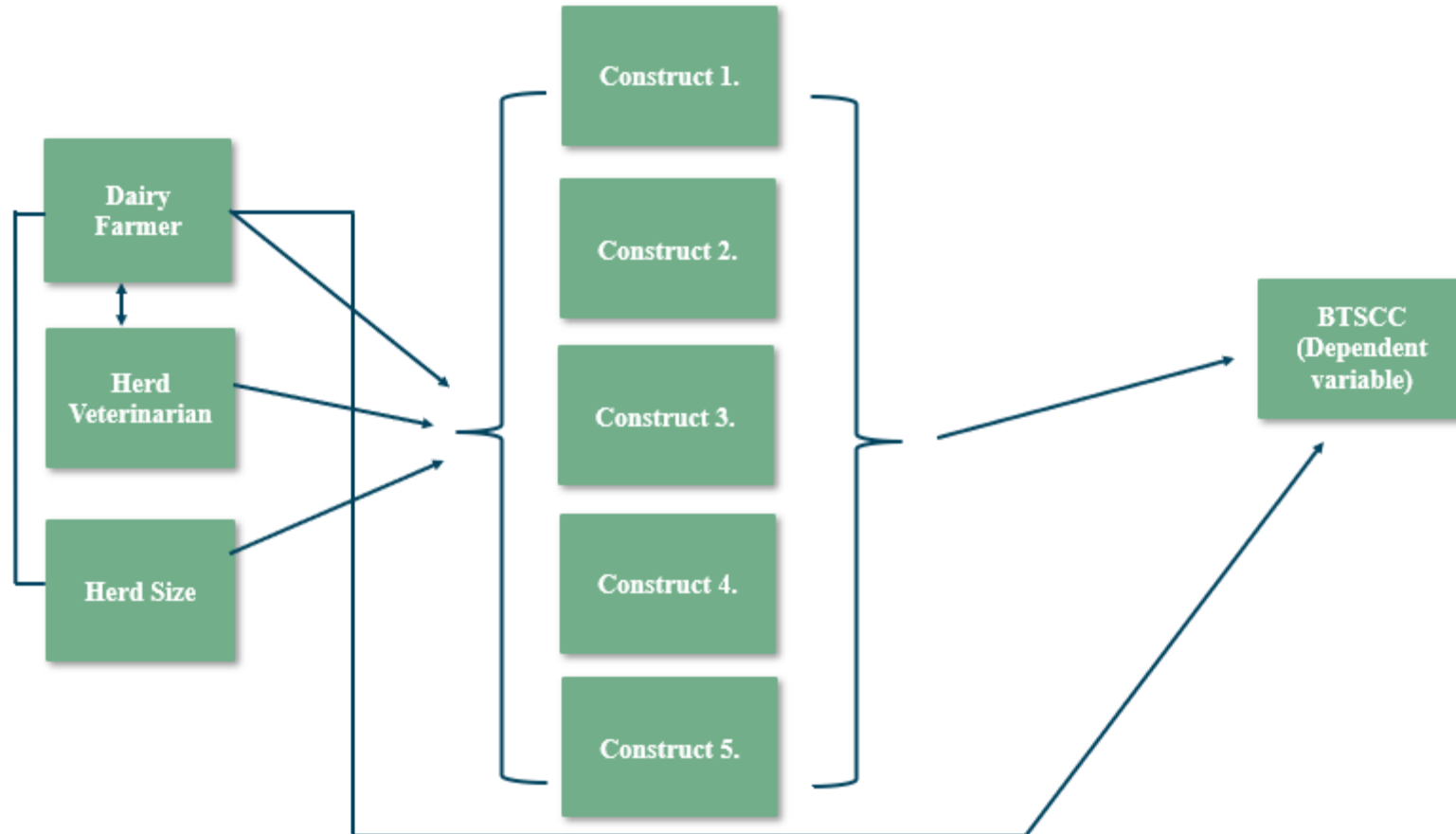
3. SMART action plans

4. Cooperation dairy farmer / herd veterinarian

5. Attitude towards udder health, antimicrobials and consumer perception

Examples of question pairs

- To what extent do you agree that you always receive satisfactory and complete answers to your questions to the herd veterinarian solving udder health problems?

- To what extent do you agree that a clear written action plan with division of responsibilities and tasks is always drawn up when it is decided to improve udder health?

- In general, I have good success in convert scientific facts into operational measures in improving udder health at herd level

The regression model based on the five constructs

Data analysis

- We analyzed data in two steps;

  - First, we applied Cohen`s weighted kappa to assess the agreement on the perceived quality of udder health consulting between the dairy farmer and the herd veterinarian

  - The answers were weighted as described by (Houe et al.,2004)

  - Second, we analyzed construct 1-5 in a regression model to identify any association with BTSCC

Discussion from the literature

- Negative mood in the last two weeks before answering has an influence on answering (Sato & Kawahara, 2011)

- Areas of negative social acceptance suffer from respondent bias (Bauhoff, 2014; Anvari et al., 2023)

- With increased intervention, an increase in the new infection rate was recorded (Stevens et al., 2019)

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Discussion of the results

- The agreement of perceived quality from the dairy farmer in the provided consulting is poor☹

- Regularly scheduled follow-up, based on herd data with impact on udder health, is associated with decreased BTSCC☺

- "Good" cooperation with the herd veterinarian in terms of udder health consulting is associated with higher BTSCC😐

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Take home message

- The dairy veterinarian need to rethink consulting in udder health, because the agreement of quality between the dairy farmer`s and the herd veterinarian result in poor to slight agreement

- Continually and scheduled follow up by the herd veterinarian, is associated with significant lower BTSCC

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Thanks for your attention!

Questions and comments will be highly appreciated

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Connecting research and researchers

Photo: Lærke Boye Astrup