Implementing pedagogic strategies between vets and farmers to create synergies in udder health management: Project Mammipack®

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Introduction

Udder health is usually considered as a the main economic problem for dairy farmers. We now consider that mastitis is the result of many factors related to the environment, the pathogen and the host. Nowadays, the **main interface with mastitis is the farmer**, and their knowledge about mastitis is very heterogeneous. We tried to show a group of dairy farmers that mastitis could take several different forms from one farm to another, in term of **incidence, pathogens and clinical forms**. One other purpose is to show the difficulty to have **bacteriological cure**, even when **physical cure** has happened. To accomplished that we created the Mammipack®, designed for farmers and vets to increase their **ability to collaborate on mastitis management** through most dairy chain actors' expertise.

Material and Methods

- **Epidemiological survey**

  25 farmers / 12 veterinarians during 3 months

  Questionnaires about their main practices (25 points) mastitis knowledge (15points), personality and satisfaction

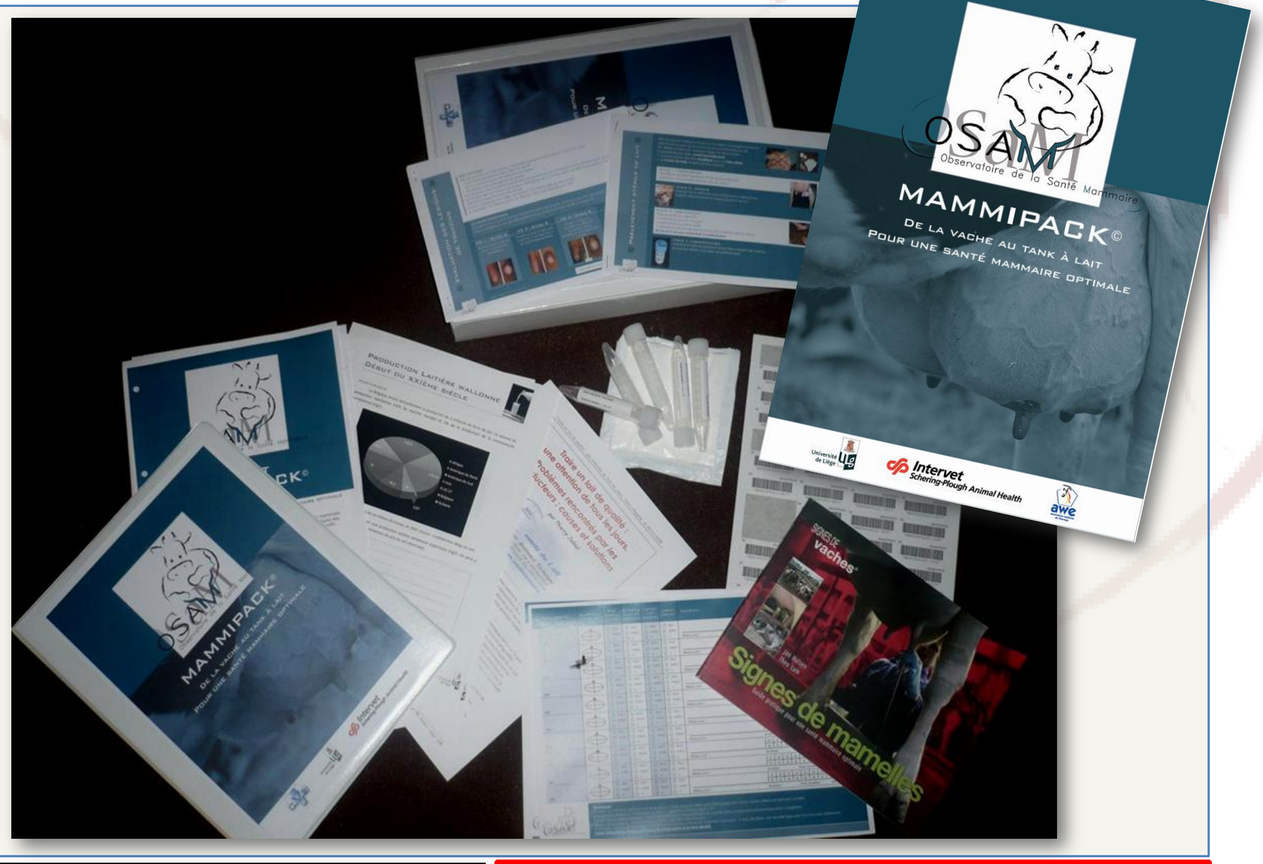
- **Dairy improvement health records and bacteriological survey**

  Clinical questionnaire and bacteriology at day 0 and day 21

  Half of the farmers representing 51 cows had somatic cell counts (SCC)

- **The Mammipack®**
  - **A pedagogical file** upon main aspects of udder health
  - **Small laminated sheets**

    for quick access on Milk sampling and teat lesions
  - **Sterile sampling tubes**
  - **A mastitis clinical record pad**
  - **Book Udder Health®**



Results

We collected 124 mastitis events, 244 bacteriology and 102 SCC. Most results are descriptive statistics, (Fig. 1a, 1b, 1c, 1d). Bacteriological cure (58%) was assessed when either there were no pathogen found at J0 and J21 or no pathogen at J21. Tissular cure (57%) was assessed if the SCC was under 250.000 the month after mastitis. The rate of Cured/ill is maximized when using label treatment, with a parenteral treatment on an acute case (Odds-ratio 3.4, $p<0.05$. Fig. 2a, 2b).

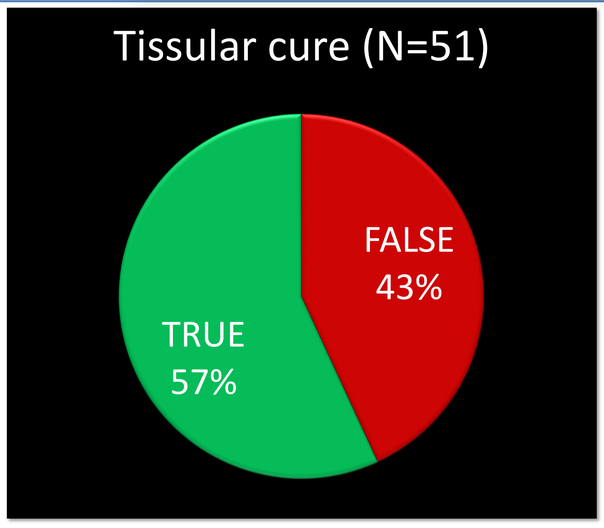


Figure 1c – Tissular cure regarding SCC the month after

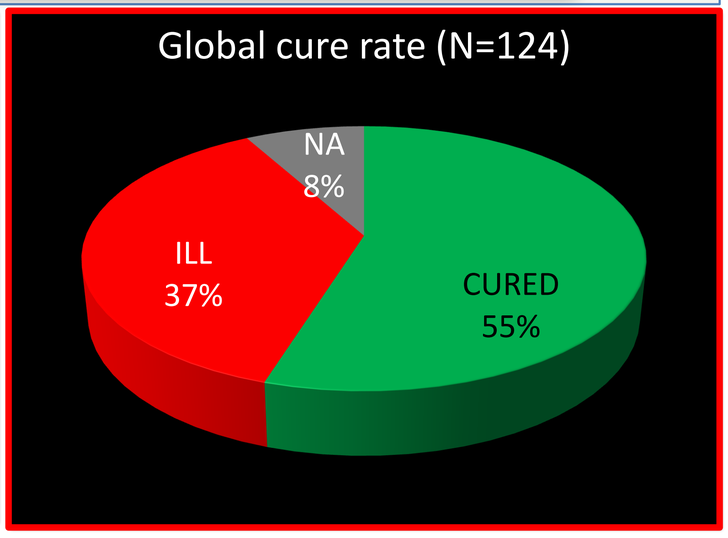


Figure 1d – Global cure rate including bacterilogical and SCC data

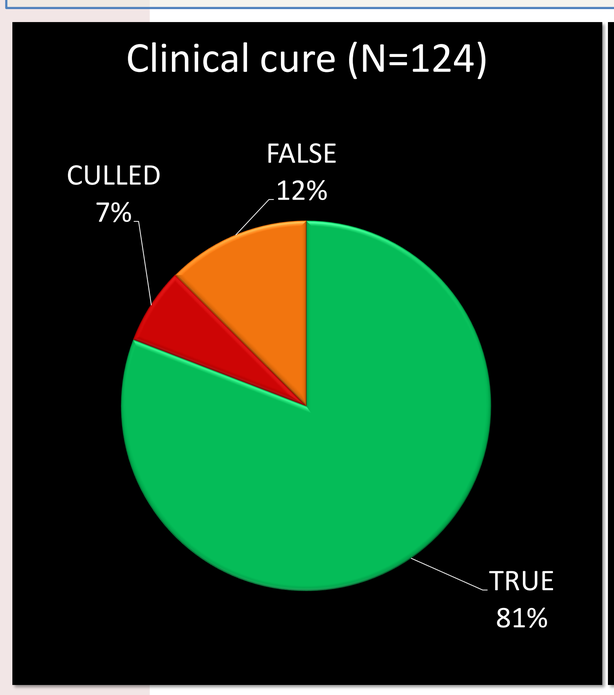


Figure 1a – Clinical cure rate according farmer.

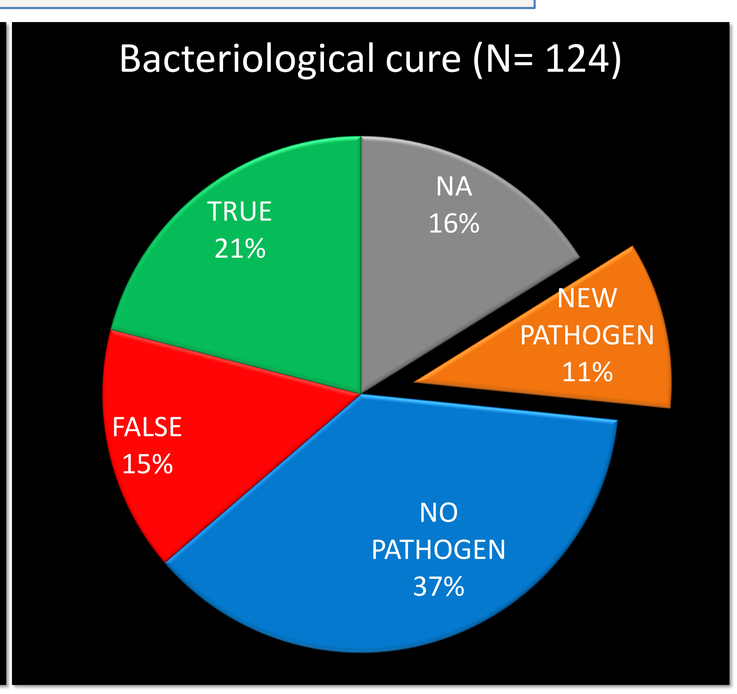


Figure 1b – Bacteriological cure rate between J0 and J21

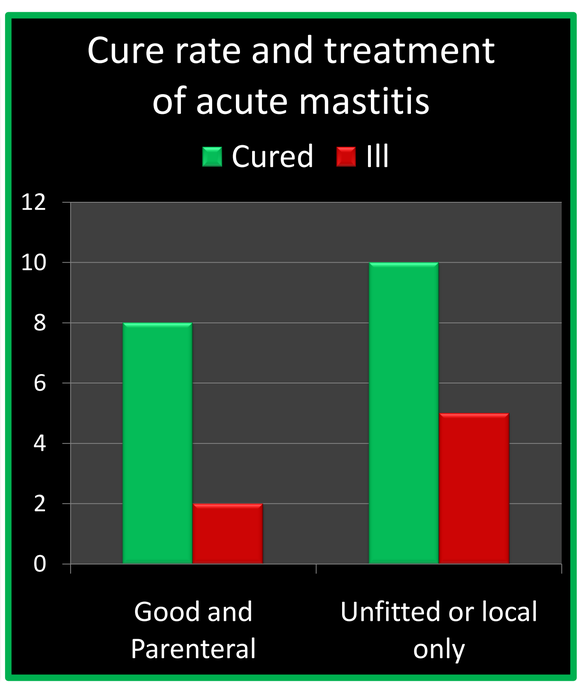


Figure 2a – Cured animals experiencing a true acute cas

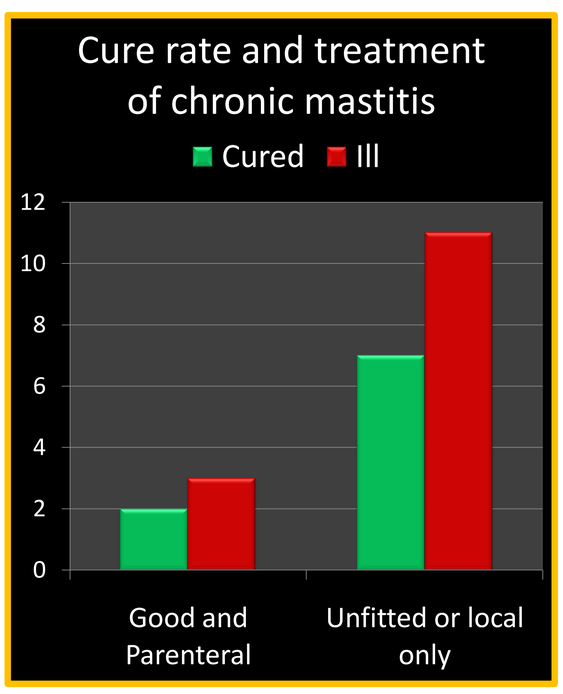


Figure 2b – Cured animals showing chronic cases

Discussion

Regarding the results, we can still tell that a good treatment is quick, long and hard enough. There is still a lack of diagnosis of this common pathology, resulting in a increase use of unfitted treatment on chronic mastitis. More than ever, practionners and farmers should put the stress on collaboration on mastitis control, by increasing dialogue and tasks repartition.

Recommended literature

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