





WHAT WILL MASTITIS MANAGEMENT LOOK LIKE IN 10 YEARS?

The inaugural Global Milk Quality Expert Forum played host to a very interactive and animated session at the close of day one titled 'What will mastitis management and therapy look like in 10 years'.

Each delegate was asked to prepare a single slide, anonymously, giving their view and opinion on the matter and debate soon followed.

Therapy and diagnostics

A common theme was that therapy, whether for dry or lactating cows, will become much more selective and strategic. Several contributors felt there may be little or no dry cow therapy and comments were also made about the effectiveness of therapy.

There was widespread agreement that cow-side testing to identify the pathogen involved was desirable and then more strategic prescribing is likely to take place. Two delegates also felt that this approach could also assist with developing either short or extended treatment regimes. This also led on to a discussion around the fact that it is extremely unlikely that new antimicrobials will be available to treat mastitis.

Along the theme of the responsible use of antimicrobials, all agreed that aiming for a bacteriological cure rather than just a clinical one would be best practice, as it has the outcome of reduced antibiotic use in the long term.

Data, whether cell count data or MIC data would be used more widely, said three speakers and the role of early testing, perhaps in the form of conductivity testing came under some scrutiny also.



Breeding and immune system support

Moving away from the details of mastitis diagnostics and treatment, two areas were projected to be important by several delegates.

The first was breeding. Acknowledging that genetic progress has looked for yield above everything else, scope for selecting for mastitis resistance was discussed. Could the breeding companies look for this as a priority, possibly incorporating the Norwegian Red into breeding plans?

Last, but by no means least, came the debate around immune system support. In 10 years time, the group agreed, that the use of immune modulation products to assist the cow to fight off pathogens will be relatively common. Supporting and enhancing the immune system means lower levels of infection and, so, antibiotic use, the session concluded.

EFFECTIVE COMMUNICATION TO FARMERS UNDERPINS SUCCESSFUL MASTITIS MANAGEMENT

World-leading vets and academics attending the recent Global Milk Quality Expert Forum shared their learnings and views on the responsible use of antimicrobials in the management of mastitis. Drawing on comparisons between countries, delegates went on to discuss how mastitis management may change in the future as well as examining effective farmer communication.

Responsible use of antimicrobials

The subject of political intervention and public opinion around antimicrobial resistance was explored by several speakers. It became clear that countries including Denmark and the UK were some way along the journey, while representatives from other countries felt the debate was at the beginning in their country.

The 'journey' that several speakers referred to was explained as the shift from business as usual through to academics with an interest in antimicrobial resistance becoming engaged. After this, pressure groups, NGOs, and the general public show a proactive interest followed by politicians who need to react to the debate going on around them.





It was interesting to hear how some countries have made relatively slow and steady progress on the journey and now find themselves with politicians bringing in legislation. This compared to other delegates who felt that the debate was slow to start in their countries. That said, they did predict that the agenda would be escalated to the legislation phases as politicians, the public and pressure groups looked to see what was happening elsewhere in the world.

Another significant area of comparison was the rigidity and structure of national guidelines. As will be discussed later, some countries have adopted a very broad approach, with a focus on training the vet to communicate in such a way as to facilitate change. Elsewhere, perhaps in countries in the earlier stages of the journey, more detailed programmes have been developed.

In Spain for example, the national plan is made up of six strategic lines, with 24 measures and 54 action points. Perhaps, as one speaker acknowledged, this is a reflection on the fact that the majority of vets are not engaged with the antimicrobial debate and so need a more rigid framework.

It was generally agreed that the responsible use of antimicrobials must address several areas:

- Only use an antimicrobial if appropriate
- Use the right antimicrobial for the illness
- Use the right dose for the weight of the animal
- Complete the course
- Use antimicrobials prophylactically with caution
- Do not use modern antibiotics such as 3rd/4th generation cephalosporins or fluoroquinolones as first line treatment where older antibiotics would work
- Use in accordance with the label
- Use under the cascade with great care
- Use as little as possible and as much as necessary

The implementation of the guidelines above can differ significantly from country to country with the Danish example of training vets in communications to better facilitate farmer discussions examined. With the general public also more engaged with the debate on milk production, 3rd and 4th generation cephalosporins were voluntarily phased out prior to the political establishment becoming interested.

Improving vet-farmer communication

All delegates could appreciate how understanding the behaviour and attitude of the do-it-yourself farmer compared to the info-seeker, and the traditionalist versus the wait-and-see-er, has equipped the vet to have meaningful discussions with clients, and change behaviour.

The role of auditing was also discussed as a tool to assist the vet to affect change. Used alongside health planning and client education, a clear pathway to where disease (in this case mastitis) management will be in the future can be developed.

While, yes, there is an EU plan made up of 12 points supported by a (guideline) five year period to develop the plan, each country has viewed this in a different way.

When asked, all the delegates said that the veterinary profession communicates regularly with farmers. But how effective is this? Communication training for vets is variable and many times, vets can be heard saying 'but he's not doing what I told him to'. Why is this?

New Zealand's handy guides include Smart SAMM (Seasonal Approach to Minimising Mastitis) which comprises 26 sections and combines guidelines and technical notes underpinning each. MRST is another ally for the vet (Mark, Record, Separate, Treat) and aims to assist with selecting the most appropriate antibiotic and is often featured on an in-parlour poster.

Plans such as these must always be SMART (specific, measurable, achievable, realistic and time bound) in order to succeed. And, as was pointed out, examples of reduced use of antibiotics in cases of mastitis and the increased use of teat sealants with an overall fall in mastitis incidence rates and improved BMSCC can be directly linked back to the implementation and successful uptake of such guides.

Elsewhere, a broad guideline of the three Rs was discussed:

- Reduce
- Refine
- Replace

Farmer attitude was also examined with some agreement reached on the fact that many farmers (perhaps the majority) still feel mastitis is a condition that needs treating, not preventing. And the fundamental question – is it the vet's responsibility to push the farmer to change their behaviour – remained a hot topic throughout the rest of the forum.

Some time was devoted to how to best make the information a vet wants to impart accessible to the farmer. Segmenting information, re-packaging it and giving handy, easy-to-use names was agreed as a positive step forward.







