



Title: Participatory approaches

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- Hello, and welcome to the RCVS Knowledge Farm Vet Champions course, and the module Participatory Approaches to Change. My name is Lisa Morgans, and I'm gonna be sharing some insights from my research on participatory approaches to change. I'm Head of Livestock at Innovation for Agriculture. We're a knowledge exchange charity that aims to bridge the gap between science and practise. So I hope this will be as practical and useful for you as possible. I'm a trained vet and used to be in practise down in Cornwall. So I'll share some of my insights there. But then got lured into the world of research and hence ended up in knowledge exchange. And here are your four learning objectives.

So by the end, I hope you will be able to explain the different approaches to change in behaviour, with examples of bottom-up versus top-down. Explain the principles of peer to peer learning and describe some published examples. Describe how a participatory farmer led approach works and what the role of a facilitator is. And finally, establish how you could adopt a participatory farmer-led model in your advisory toolkit to inspire and support changes to practise, especially on antimicrobial stewardship. And this could be with your farming clients, but it could also be within your practise.

Now I'm going to come at this from the angle of, "Why won't my clients listen to me?" When I was in practise, I got quite frustrated at the lack of change, the lack of progress on many of my client's farms. And then I started realising there was better ways to do this. Once I started organising things like farm walks. And that's what led me into my research area. But whilst I was researching, I did quite a lot of interviews with vets and found that they also were experiencing similar frustrations. This was not something I was feeling on my own about. And on your screen, some of the quotes that I got from vets that I interviewed describing the sort of the big challenge in trying to convince people to change, convince farmers to change. Now, this is partly down to the fact that human behaviour is extremely messy and complex and challenging to change. You'll get a lot more detail, in another module, about human behaviour change. But just here on your screen I'm trying to give you an idea of all the different interacting factors that influence a person's behaviour, or the motivators and drivers to do something and make a decision and cause some of the confounding variables and barriers that people face.

People are motivated by lots of different things, have different belief systems and attitudes, and there's lots of things in our immediate environment that can make a certain behaviour more easy, or hinder certain actions. And critically, as shown by those sort of red symbols, there's a whole world out there around us, all those contextual factors, that influence our behaviour whether that's the weather, cultures, people or politics. What I'd like to do is just to broadly categorise some of the approaches to change in behaviour into top down versus bottom up. Now, which way is better?

Hard to say. Likely a combination of both. Each has its pros and cons, and they're fit for very different purposes.

So top down are things like legislation, bans, and rules against things, regulations such as Red Tractor, and also advisor or expert led programmes and initiatives. So vet led disease control programmes are top down. And this is characterised by this kind of one way flow of information and knowledge from a position of expertise or an outsider down to what the literature calls the lay person. And there's very little incorporation of that lay person's experiences and concerns and knowledge in that process. It's been the dominant form of knowledge transfer and agricultural extension for many years, basically since World War II. But in recent decades it's been heavily criticised as not been fit for purpose in these more complex challenges we find ourselves.

This gave birth, really, to bottom up approaches, or grassroots approaches, that really prioritise the knowledge and experiences of those that we are trying to influence and change. Now, one aspect of a bottom up approach, or one example, is fostering peer-to-peer learning. Now I'm sure you're all familiar with how much respect farmers have for another farmer's advice, or how they've tackled a certain problem. And this is true, of course, of most of us. And in the vet world, we learn and bounce off of our colleagues. We read and appreciate other vet colleagues' work and ideas. We relate to one another, as we have this common shared experience. And the same is true for farmers.

The quote on your screen, "No one knows a farm, better than a farmer." Really just encapsulates that idea of prioritising the knowledge that farmers have of their environment plus in-depth knowledge of what goes on on their farms. Now the key principles of peer to peer learning is firstly, open dialogue between the group of like-minded equal peers. So in this context, farmers. That quite often should transcend any kind of sector boundaries. It'd be quite interesting to see what people can learn from different livestock sectors and systems. And learning should transcend boundaries. Secondly, farmer-lead. This refers to the direction of travel that needs to be farmer led. Farmers should be at the heart of the decision-making in these kinds of approaches, and not just consulted at odd points or asked for feedback at the end. Thirdly, common experiential learning. And this is about prioritising the expertise in a room or on a farm; valuing farmer knowledge, put it on even footing with vet knowledge in a kind of symbiotic relationship. Yes, farmers do have gaps in their knowledge, and there are things that they get wrong. But that is true of vets, as well. This doesn't mean the things that they know are kind of any less valuable. So it's working together. And fourthly, self-determination and empowerment. And this will be covered, I'm sure, much more in other modules. But letting farmers decide on the course of action, giving them ownership of the challenges and the solutions for their farms.

There's a wealth of literature out there that supports the use of a peer-to-peer learning approach, and shows how it can use in different contexts and applied in slightly different ways. And probably most widespread institutionalised format is in the farmer field schools which the FAO started in the late eighties. We've reached millions of farmers across Africa, Asia, and South America. Well, closer to home, and inspired by the farmer field schools, were stable schools. And this was started in Denmark with groups of organic dairy farmers getting together to help each other, reduce their antibiotic use, reduce the need for antibiotics. And it was a great success, and has been rolled down lots of different European countries, and is part of Danish legislation now. So a form of stable schools is an option for dairy farmers as an option to reduce their use or they can have their vet out visit their farm more often. And it was this approach that I adopted for my PhD and adapted to fit the UK dairy sector.

So my PhD I completed in 2019 at the university of Bristol, kindly funded by HDB Dairy and the Langford Trust. And I was really exploring how this approach and why this approach really helped initiate and support changes in practise around antimicrobial stewardship, in the context of the UK dairy sector. 30 dairy farms took part over the course of the whole project, and they were split into five different farmer action groups. And I followed them around for two years, basically, from 2016 to 2018, with a Dictaphone capturing all of their conversations and ideas and thoughts at 58 meetings in total. And I collated 30 medicine reviews for each farm participant, each one covering a two years consecutive two year period. And they, together in their peer groups, co-created these action plans or things that they were going to change to reduce the need for anti-microbials. So I had heaps of data that I triangulated to form my PhD. So what did it entail?

So these groups of farmers would have regular on-farm meetings, or workshops, to discuss how they were going to reduce the need for anti-microbials. So it was immediate focus on reducing the need, It's very holistic. They all got to host their group twice, in a kind of two phase cyclical process. And each workshop consisted of a bit of discussion around each the host farms' medicine usage at the start, followed by a farmer led farm walk. And it was quite important that the farmers led that, they showcased what they wanted to, and got help from their peer group as they saw fit. And then we'd come back together for some facilitated discussion to identify positive areas of that host farm and opportunities for change, as we called them. And this facilitated discussion was key. We didn't just sit and have a cup of tea and a pasty. We were very structured about coming up with an action plan as a peer group, and we had different tools to help them do so. So here on your screen, you've got a farmer drawing a map of the farm that they'd just been around, with help with the dog. And we'd ask them to highlight opportunities to change on that map. Here's some classic sticky notes with recommendations from the peer group about what that host farmer could do to change. We also did score charts, ranking activities. Really helped the host farmer see what their peer group had highlighted as positive areas and opportunities for change. And then we distilled that into the action plan. And the average number of recommendations on each action plan was about 10, so they're quite substantial. And ultimately, it resulted in change on the ground. 83.3% of the farm's action plans were implemented by more than a third within a year. And they covered a whole host of different topics.

So here on the left of your screen are the different topics that came up in those action plans. And the bigger the bar, the more recommendations occurred under that topic. So as you can see, the top three most frequently mentioned recommendations were under cubicle shed design, lameness management, and clearly, antimicrobial type and usage. Interestingly, discussion with the vet wasn't that common. But, as you can see from the graph, the more orange the bars, the more they were implemented. And every time discussion with the vet came up with an action plan, it was actioned. As I mentioned, I did collate with our medicine usage to sort of use as a discussion tool and track any progress. We looked at HPCIA use. So highest priority, critically important antibiotic use. And surprisingly, there was a massive move away from these medicines over the course of the project. We measured it in different ways, but the majority of farms eliminated or reduced HPCIA's within a year. And this was prior to Red Tractor farm assurance coming in, in 2018. So you just got the same drugs measured with mgs per kg versus animal daily doses on your screen, there. And the light grey bar is year one, dark grey bar's year two.

So besides the sort of shift away from HPCIA's, and the fact they all changed at least one thing, with many more from their action plans. What was really interesting was what the qualitative data showed, and that the mobilisation of knowledge within these peer group structures was key in helping them sort of prioritise what tasks needed doing, and how that was going to look on their

own farms. And the facilitator really helped the farmers with this activity and identified any knowledge gaps that they needed support with, which was the HPCIAs. The continual visiting each other's farms, going through this critical appraisal together, really helped build that confidence and instilled a sort of sense of solidarity amongst them all. And key to that was facilitation. This project would not have got off the ground without the input of some really good facilitators, and it helped keep the process going throughout the whole course of the project.

So finally, what can you guys do? So using smarter goals, trying to be as specific as possible. I would encourage you to learn much more about this approach and I've got loads of further reading for you. And basically just start holding action groups in your practise. Get in touch with some farmers that you think might really enjoy it, or would benefit from it, and start setting some dates and getting their medicine use put together and benchmarked in the peer group, and get going! So maybe start with a keen group of farmers, focus on a few hard hitting conditions, and then expand maybe total use. Stick some time bound goals to this, so if you've got one group off the ground within the last couple of months, within a year, you could easily have six meetings. And decide who's going to lead this in your practise. Who's going to get trained up in the approach and in facilitation.

So that's me pretty much done. Some further reading on your screen here. I've got the published paper out from the farm action group project. And there's the website for Innovation for Agriculture there on your screen, please do get in touch. We'd love to be able to help you in any way. And hope you enjoy implementing farmer action groups in your practise.

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