



## Preventive Veterinary Medicine

journal homepage: [www.elsevier.com/locate/prevetmed](http://www.elsevier.com/locate/prevetmed)

## Perceptions of French private veterinary practitioners' on their role in organic dairy farms and opportunities to improve their advisory services for organic dairy farmers

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## ARTICLE INFO

## Article history:

Received 21 April 2016

Received in revised form 7 September 2016

Accepted 11 September 2016

## Keywords:

Dairy cattle

Organic production

Animal health promotion

Veterinarian

Communication

## ABSTRACT

Veterinarians could be the expected sparring partners of organic dairy farmers in promoting animal health which is one of the main organic principles. However, in the past organic dairy farmers did not always consider veterinarians to be pertinent advisors for them. The objectives of this study are – from private veterinary practitioners' point of views- i) to describe the roles of veterinarians today in organic dairy farmers' animal health promotion strategies, ii) to identify factors related to organic farming which determine their role on organic dairy farms, and, iii) to identify opportunities for improvement of veterinarians' advisory services for organic dairy herds. Fourteen veterinarians, providing herd health advisory services to dairy farmers, were interviewed using qualitative semi-structured research interviews. A modified approach to Grounded Theory was used for data collection and analysis. Most often veterinarians had only contact with the organic dairy farmers in cases of individual ill animals or acute herd health problems. Even though certain veterinarians experienced situations and approaches of animal health and welfare on organic dairy farms not meeting their standards, they were not always able to establish themselves an advisory role supporting farmers in improving this. Indeed, organic production principles, regulations and farmers' health approaches challenged veterinarians' values on animal health and welfare and their perceptions of 'good veterinary practices'. Also, some veterinarians considered that there was no direct economic interest for them in the organic dairy sector and that could diminish their willingness to invest in this sector. Possible opportunities for improvement were identified; for example proposing more proactively advice via existing organisations, by making adaptations to advisory services for the organic sector and/or by dissociating veterinarians' curative role from their advisory role in disease prevention.

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## 1. Introduction

Health plays an important role in organic agriculture. As stated in the principle of health of the International Federation of Organic Agriculture Movements' (IFOAM); organic agriculture 'should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible'. Furthermore, health is defined as 'more than the absence of disease and includes the preservation of physical, mental, social and ecological well-being' (IFOAM, 2005). Health

promotion strategies in organic farming aim to support organisms to be in a state of homeostasis (Vaarst and Alrøe, 2012) or in other words be resilient to disturbances (Döring et al., 2015). These strategies go further than targeting specific disease conditions (Vaarst and Alrøe, 2012). The principles of organic agriculture as stated by the IFOAM are ethical guidelines to action. IFOAM's standard setting inspired the formulation of the European Regulation on organic agriculture (Luttikholt, 2007). Organic farmers have to operate within the framework of rules set by the European Regulation on organic agriculture (Council Regulation (EC) No 834/2007) to produce quality products and fulfil their responsibility of providing appropriate care to their animals. Organic farmers have to comply with rules on the origin of animals, husbandry practices and housing conditions, breed, feed, disinfection, disease prevention and veterinary medicine. Despite the specific objective to promote disease prevention and the rules on the use of veterinary treatments described in the European Regulation, the role of the veterinarian

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is not formally laid down in the regulation (*Council regulation (EC) No 834/2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91, 2007*).

In France, the organic dairy sector has been growing steadily since 2006 and more conversions of conventional dairy cattle farms to organic production are expected in the years to come (CNIEL, 2015). Thus, we can assume that more and more professionals, such as private veterinary practitioners will be faced with organic farming. Private veterinary practitioners could be potential sparring partners of organic dairy farmers in reaching the organic principles such as the promotion of animal health and welfare. Even though the production conditions on organic farms aim to promote animal health, the results have not always been shown to be better in comparison to conventional farms (Sundrum, 2001). Furthermore, the role of veterinarians has changed over the last twenty five years, from responding to emergencies and treating individual animals towards disease prevention and even further to an advisory role on health management to maintain health (LeBlanc et al., 2006). This shift of veterinarians' role emphasises the relevance of considering veterinarians as potential partners in developing the organic dairy herds towards a high level of animal health and welfare.

However, private veterinary practitioners in different places across Europe have not always been found to be adequately trained to work on organic farms by stakeholders (Vaarst et al., 2011, 2006b). Organic dairy farmers expressed a variety of experiences and opinions on their collaboration with their private veterinary practitioners when they were interviewed on their animal health management strategies. In general veterinarians are involved in treatment decisions but it is rare that they are involved in the process of reflexion of farmers' animal health management strategies (Vaarst et al., 2006a, 2003). Reasons for this are, as explained by organic dairy farmers, the limited interest of private veterinary practitioners in farmers' goals, in the organic production system or in advisory services (Vaarst et al., 2006a). Furthermore, according to organic dairy farmers, veterinarians' strong focus on animal disease is not always in accordance with their wish for a whole farm approach (Vaarst et al., 2007). The risk is that these factors lead to situations in which private veterinary practitioners are not considered by organic dairy farmers as pertinent advisors and are excluded from farmers' reflexion on herd health improvements (Vaarst et al., 2007). In light of these concerns expressed by farmers, it is interesting and relevant to study the situation seen from the veterinarians' point of view. To our knowledge, the veterinarians' point of view has received little attention in scientific studies, so far. We hypothesized that, in addition to general obstacles encountered in their work, private veterinary practitioners also experience difficulties specifically related to organic farming, and that these difficulties might influence the role they play in the animal health management strategies of organic dairy farmers.

The objectives of this paper are – from private veterinary practitioners points of view- i) to describe the roles of private veterinary practitioners today in organic dairy farmers' animal health promotion strategies, ii) to identify factors related to organic farming which determine their role on organic dairy farms, and, iii) identify opportunities for improvement of private veterinary practitioners' advisory services for organic dairy herds.

## 2. Material and methods

### 2.1. The context: French organic dairy production and veterinary practitioners' legal role in animal health care and surveillance

In 2013, 3.4% of the French dairy cattle farms were certified as organic. More than half of the French organic dairy cattle population is localised in three regions in the West of France, namely in the

regions Pays de la Loire, Bretagne and Basse-Normandie (Agence BIO, 2015).

The EU regulation on organic animal production does not formally give guidance on the role of private veterinary practitioners on organic farms. The French national regulation does not either. However, the national regulation describes the tasks of private veterinary practitioner in animal health care and surveillance in holdings with animals producing products destined to human consumption in general. To ensure animal health surveillance, regardless of whether the herd is organic or not, regular monitoring visits performed by the farm's veterinarian are prescribed. In practice, the veterinarian has to perform at least once a year an on-farm herd health assessment. It is based on the morbidity and mortality figures of the herd, treatment records of the farmer, additional diagnostic tests if necessary and the animal husbandry situation. Based on the results of the assessment, the veterinarian will recommend an animal care protocol for the farm. It can include the identification of recurrent health problems for which the veterinarian can prescribe drugs without clinical examination of the animals and the control actions the farmer has to take to be allowed to treat these conditions (Anonymous, 2007).

### 2.2. Selection of interviewees

Due to the relative importance of the organic dairy production in the regions Pays de la Loire, Bretagne and Basse-Normandie, it was considered pertinent to interview private veterinary practitioners in those regions on their working relationship with organic dairy cattle farmers.

From these three regions 14 veterinarians, all working in different veterinary practices, were interviewed (referred to as IV1–IV14). Veterinarians were selected using two criteria:

- Firstly, veterinarians had to work in a private veterinary practice that offers advisory services to dairy cattle farmers, besides their curative actions to control animal health problems. Different degrees of importance of advisory services in the daily work of veterinarians were allowed, as this is the reality in the field. All veterinarians were practicing in private veterinary practices. In addition, IV10 is contracted by an organic farmers' organization to provide advisory services on organic dairy farms and was interviewed on that service.
- Secondly, the veterinary practices, in which the veterinarians worked, had to have organic dairy cattle farmers in their clientele. The study aimed at including veterinarians with a range of experiences working with certified organic farmers, reflected in the number or percentage of organic dairy farmers among their clients, rather than a representative sample.

First, a short-list of potential veterinarians was made from a list of veterinary practices available to students of the veterinary school of Nantes to perform their internships. This list contains information on the activities that the veterinary practices offer related to herd health management. Thirty-five practices were identified that met the criteria of providing advisory activities on dairy herd health. Second, the interviewees were approached by telephone until enough interviewees were found. Fourteen interviews were considered enough, but 12 were performed, as after the 12th interview no new themes emerged. In total 26 veterinarians were contacted. Five veterinarians never returned our messages. Reasons for veterinarians to refuse to participate were: no organic farmers in the clientele (3), no interest to participate in the study (1), lack of time (2) and a veterinarian refused because interviewees were not paid for participating in the study (1).

### 2.3. Data collection and analysis

Qualitative semi-structured research interviews were used to interview the veterinarians. They took place between August and October 2015 (duration of 30–81 min) and were performed by one person (the first author; JD). The interviews took place in the offices of the veterinarians at a time most convenient to them. The interviews were conducted in French. All interviews were recorded and fully transcribed anonymously, except for one case when the veterinarian asked not to be recorded (IV9), because he felt uncomfortable being recorded. In this case, only written notes were taken during the interview by the interviewer and subsequently used for the analysis.

A qualitative research interview is a method to try to understand the world as seen from the interviewees' point of view and to unravel the meaning of central themes in their world. Showing variation rather than quantification is the goal of qualitative interviews. Interviewees are encouraged to describe their experiences in their own words and express their reasons for acting. They can be seen as subjects and actors, and they are not approached as objects mechanically controlled by causal rules. Besides, they are also subject to their environment, for example to the weight of power relationships and discourses. And although the interviewees might not have participated in creating these power relationships and discourses, they can still affect and maybe compose what the interviewees talk about (Brinkmann and Kvale, 2015). Thus, as formulated by Brinkmann and Kvale (2015); 'We can think of people as authored-authors'.

The interviewer's role was to focus the interview on themes of interest, as described in the interview guide (Table 1), using open questions. The interviewee determined which elements he or she found important to address within the theme. Thus, the interviewee directed the course of the interview and depending on the interviewee's experiences not all the themes were discussed with the same depth across the different interviews. It was the interviewer's task to clarify, as far as possible, ambiguous or contradictory answers to earlier statements made. Even though interviewees were stimulated to underpin their opinions by given examples of their experiences, we cannot exclude that interviewees might have referred to experiences of colleagues.

A modified approach of Grounded Theory was used for data collection and comparative and theoretical analysis (Charmaz, 2014). The iterative process used in Grounded Theory allowed for continuous improvement of the interview guide during the data collection in order to reformulate questions, follow-up on emerging themes and formulate new hypotheses to be used in the next interviews. To analyse the transcribed interviews, relevant short statements were coded with headings. Across interviews, the codes were combined to form themes describing equivalent topics and these themes were further organised in sets of themes to form categories. Codes that were considered central, displaying a certain logic and direction were considered in the emerging analysis. Using Grounded Theory allowed to rise and try to answer 'why' question by formulating a model of understanding (Fig. 2) arising from the results of the analysis and not solely answer 'what' and 'how' questions (Charmaz, 2014).

## 3. Results

### 3.1. Private veterinary practitioners' roles in organic dairy farmers' animal health promotion strategies

Most of the interviewed veterinarians intervened on organic dairy farms on cases of individual ill animals or isolated situations of severe herd health problems. Examples for such veterinary inter-

vention were respectively, difficult calving or a rise in bulk milk tank somatic cell count that would lead to a reduced milk price. However, three veterinarians visited organic farms on a regular basis for the monitoring of reproduction performance. For one veterinarian, this was the main reason for visiting organic farms. An alternative to these collaborations is provided by a local organic farmer group' initiative to contract two veterinarians (IV10) to provide their members advice on herd health management.

Even if providing advisory services can represent a very important part of the daily professional activity of certain veterinarians, it does not guarantee a transposition of that activity to their organic dairy clients. 'We don't work with them! We never see them!' was a reaction from one of the interviewed veterinarians, illustrating his experience collaborating with organic dairy farmers. This veterinarian (IV5) explained further: 'The question of what influences the way we work together doesn't even arise. We have nothing under control on their farms. Much less than on conventional farms where I go every 15 days, those who are in an overall monitoring system, we go there every 15 days. I know exactly what is going on there, as well as with those where we monitor the reproduction [performances Ed.] and whom I see once a month.'

Most veterinarians had a relatively low percentage of organic dairy cattle farmers in their clientele (Table 2). The median number of organic dairy cattle farmers in the veterinary practices of the interviewed veterinarians was 6, with a minimum of 2 and a maximum of 20. Moreover, the interviewed veterinarians worked in practices in which multiple veterinarians shared the rural activity. Therefore, they were not always the designated person to visit the organic farms when a veterinarian was needed. Consequently, in some cases the veterinarians' opinion on the working relationship with organic dairy farmers and organic farming in general was based on relatively small number of experiences.

The veterinarians expressed a diversity of opinions on the organic production system and principles. It ranged from an opinion that the organic production system is not the future for agriculture since – according to one of the interviewed veterinarians – it is not possible to feed the whole world when producing organic. Another interviewee expressed that some of the production principles are proof of great wisdom but that unfortunately, in practice, not all the principles are applied. Yet another person was of the opinion that veterinarians should support organic dairy farmers because they have 'a beautiful profession'. In between these extremes, a range of different opinions were present among the interviewed veterinarians.

### 3.2. Factors specific to organic farming influencing veterinarians' role on organic dairy farms

The following paragraphs describe different themes that were identified from the interviews explaining veterinarians' perception about their working relationship with organic dairy farmers.

#### 3.2.1. Veterinarians have specific expectations of organic dairy farmers' approach to animal health and welfare

Veterinarians were asked if there were aspects of their work with organic dairy farmers that they did not appreciate as much and what these were. Several veterinarians have started illustrating this with situations in which they were disappointed by the manner that organic dairy farmers handle animal health and welfare. The veterinarians expressed that they would expect of organic dairy farmers to work on disease prevention rather than looking for (alternative) treatment solutions and ask veterinarians as advisors in this instead of seeing veterinarians as 'fire fighters' to treat ill animals.

Other veterinarians had different experiences, such as one who expressed that a positive aspect of working with organic dairy farm-

**Table 1**

List of themes discussed during the interview with the private veterinary practitioners.

1	Organization of work between veterinarian and organic dairy farmers: discussion of the veterinarians' experience of the reasons that are typically given by organic dairy farmers for inviting the veterinarian to the farm, the topics discussed with these farmers and the type of role veterinarian has (treatment/advisory role) on organic dairy farms. This included discussing possible differences compared to the organization of work with conventional dairy farmers.
2	Veterinarian' experiences on the collaboration with organic dairy farmers: discussion of positive and negative aspects of working with organic dairy farmers. And differences found with the work on conventional dairy farms, if any.
3	Veterinarian' opinion on the principles of organic agriculture.
4	Veterinarian' opinion on alternative medicines. Veterinarians' use of alternative medicine in their work and its possible influence on their relationship with organic dairy farmers.
5	Veterinarian' thoughts on organic dairy farmers' expectations towards their veterinarian: discussion on how they are made aware of this. And discussion on the possible differences compared to conventional farmers.
6	Veterinarian' needs from organic dairy farmers to be able to ensure a good collaboration.
7	Situations in which the veterinarian could not meet the demands of organic dairy farmers: the topics identified and possible reasons why.
8	Involvement of the veterinarian in the conversion of dairy farms to organic: topics discussed and (expected) added value of veterinarians accompanying organic dairy farmers in the conversion.
9	Effect on conversion of dairy farms to organic on the working relationship between veterinarian and farmer: comparing the types of services asked by organic dairy farmers of the veterinarian before and after conversion of the farms to organic, if any.
10	Understanding of what the veterinarian considers as the most satisfying working relationship he/she can have when working with farmers in general (advisory role versus a treating role) and if that corresponds to the veterinarian' daily work situation.
11	Understanding of what the organic farmers' disease prevention strategies are according to the veterinarian.
12	(Desired) role of veterinarian in organic farmers' disease prevention strategies.

ers was the very good animal health situation. Another positive aspect of working on organic farms was, for example, that a veterinarian still felt to have the opportunity to treat individual cows. In intensive production systems, this was not always an option anymore, because cows were culled immediately and veterinarians were only involved in herd health management decisions. One veterinarian described as a positive facet of working in organic farms, being involved from the start in the diagnosis of diseases and the initiation of treatments. This was compared to the non-organic farms where animals often had been treated by the farmers before he arrived.

### 3.2.2. Disappointing animal health situations harm veterinarians' positive view of organic farming

**IV6:** 'So yes, on the organic farms, what is in general pretty pleasant is the fact that the farmers are rather, in general they are rather relaxed, they have a rather global overview on the society, they are not selfish right. Ehm... they... they place themselves as farmers in the middle of a web, a rural web. Often they participate in... they are people that participate quite a lot in associations and things like that. Yes. So there is a... there is a human relationship that is a bit different. And then, that... that makes us also think of our own place, our way to do our job, etcetera... well this very productivist agriculture, very mechanised, etcetera, in which we also participate. Even though, it is not necessarily our choice.'

The example above illustrates how, at a community level, this veterinarian experienced that organic farmers live up to the organic principle of care. Although veterinarians could acknowledge such positive aspects of the organic principles, their opinion of organic farming was often strongly determined by the animal health and welfare situations at farm level, as illustrated by the example below.

**IV5:** 'Well, me, it goes into the right direction [organic production principles. Ed.]; it is a good approach! The problem is that we should not confuse organic agriculture and product quality! Organic agriculture only guarantees a working method, but it does not guarantee the quality of the product. I think that people mix up the two! At least for livestock rearing! I do not know for the part, for the crop part, it is just a bit different, because there are a lot less pesticides and everything, since they have become harmful, I think it is a bit different for the crop part. But for the animal part, I may eat more willingly conventional products than organic, (...)

*think that the animals are better [in conventional systems], in my opinion, they are less ill-treated! Due to undernutrition, due to the non-use of anthelmintic treatments! Well, there is still, only in organic [farms], where we see heifers on pasture that are dying of parasitism like in the 50's, well! It no longer exists! So I think that, although actually, it's on the rise, this technical side, I have serious problems with that.'*

In the example above, the veterinarian states that the organic production principles are a positive development. However, the minimum standards set did not guarantee satisfying animal care and health situations. Organic dairy farmers did not ensure sufficient and appropriate care of the animals seen from this veterinarian's point of view, e.g. related to feed for the animals and treatments when needed. Furthermore, farmers seemed to accept what the veterinarian regarded as 'unnecessary mortality'. Thus, despite the positive overall approach of organic farming the veterinarian approves more of conventional than organic farming.

The quote below illustrates a related issue. Because of the fact that non-organic farmers reach organic standards, the veterinarian' opinion on the organic dairy farming system is downgraded. This is further amplified by experiences of poor animal health situations on organic dairy farms. Other benefits of the organic production principles, e.g. the reduced use of pesticides on the land were acknowledged but seem not to be of the same importance to the veterinarian when forming his opinion on organic dairy cattle production.

**IV1:** 'Ehm, well... well the... the agriculture, the labour of the land in organic, I think it is good. The organic rearing of animals, I think it is rubbish, I think that is ehm... already, the norms that are fixed now make no more sense because... three treatments, three diseases per cow per year, ehm... all our farmers are organic, regarding the animal health part.'

*In my opinion, organic doesn't bring... does not give an added value to animal health. For... what is agri... the labour of the soil, I am not an agronomist, I don't know anything about it, so it is true that... on paper, it seems more interesting, because... the consumption of pesticides compared to other countries, we see that there is something to be changed. But on animal health, I don't think that there is something pertinent and... I, personally, we see farmers that are organic, ehm... that have the tendency to vaccinate*

**Table 2**  
Description of the working environment and their daily work as described by the interviewed private veterinary practitioners.

ID veterinarian	Number of veterinarians working in the practice	Proportion of the practice' activity related to farm animals	Domains in which the veterinary practice offers advisory services for dairy farms	Description daily work of the interviewed veterinarian	Percentage of dairy farmers organic	Reasons stated by the veterinarians for intervening on organic dairy farms
IV1	6	67% (nearly 100% dairy)	Reproduction, evaluation functioning milk machine and milking technique and nutrition	Mainly individual medicine (about 10% of their clients have advisory services)	3%	Health problem on an individual animal
IV2	4	75% (nearly 100% dairy)	Reproduction, udder health, evaluation functioning milk machine and milking technique, podal disorders including hoof trimming, work with nutritionist on nutrition problem	Mainly individual medicine (about 12.5% of their clients have advisory services)	1%	Health problem on an individual animal
IV3	13	33% (95% dairy)	Reproduction, lameness, milk quality and nutrition	Both individual medicine and advisory services	10%	Mainly for a health problem on an individual animal, some advisory services when occurrence of isolated herd health problems (e.g. high somatic cell count problems, advice on nutrition) and one farmer has regular advisory service regarding reproduction
IV4	2	90% (67% dairy)	Reproduction, lameness, milk quality and parasitology	Mainly individual medicine (about 20% of their clients have advisory services)	10%	Most common reason is for regular advisory services reproduction. Other reasons are health problem on an individual animal, on two farms for dehorning calves under anaesthesia
IV5	4	50% (100% dairy)	Reproduction, nutrition, udder health, lameness, parasitology, animal husbandry	Works fulltime as advisor (about 40% of their clients have advisory services)	2–3%	Health problem on an individual animal
IV6	9	85% (75% dairy)	Reproduction, including overall farm inspections, nutrition and heifer management. Udder health. Lameness; overall farm inspection, housing, hygiene, nutrition, hoof trimming, Parasitism. Calf rearing and growth.	Well-developed advisory services but also individual medicine	3%	Mainly for advisory services on reproduction and some intervention for health problems on individual an animal
IV7	7	50%, (40% dairy)	Reproduction, udder health	Individual medicine (about 5% of their clients have advisory services)	2–3%	Health problem on an individual animal
IV8	8	62% (50% dairy)	Reproduction (incl. fertility, milk production and quality milk quality), milk quality, hoof trimming, calf health	Mainly advisory services (80% of the labour time is spent on advisory services)	10–12%	Health problem on an individual animal
IV9	6	75% (50% dairy)	Reproduction, nutrition and milk quality.	Mainly individual medicine	7%	Health problem on an individual animal
IV10	2	100%	Specialized advisory services for organic dairy farmers by the organic farmers' organization; farmers pay for these services	100% advisory services for organic dairy farmers	100%	Advisory service on herd health
IV11	7	55% (95% dairy)	Reproduction, udder health, nutrition (with external expert)	Mainly individual medicine	2%	Health problem on an individual animal, and two farms follow-up on their programs in the management infectious disease (Bovine Viral Diarrhoea and Paratuberculosis)
IV12	4	80% (70% dairy)	They work with subscriptions to packages; either only for reproduction or for all their visits. Farmers pay a fix fee and then they do not pay for each time the vets come to the farm.	Both individual medicine and advisory services (about 15% of their clients have advisory services)	5%	Health problem on an individual animal
IV13	7	80% (85% dairy)	Claw trimming, milk quality, fertility, calf growth, nutrition, disease prevention (vaccination and anthelmintic respiratory diseases)	More advisory services than individual medicine	2%	Health problem on an individual animal
IV14	20	30% (75–85% dairy)	Reproduction, claw trimming, production performances with an agricultural engineer, nutrition and housing, laboratory services milk quality	50% individual medicine, 50% advisory services	2%	Health problem on an individual animal

less, deworm less and thus have animals that have more chronic diseases, moreover. . .they have poorer body condition, so the animals, from my point of view, I, that are in lesser health condition than those in the traditional, well conventional [farms].'

Some veterinarians did express appreciation of the overall organic production principles. Even though some veterinarians sympathized with the overall organic production principles, disappointing animal health and welfare situations were reason to discard completely organic production as a positive approach.

### 3.2.3. Organic production system, principles and regulation interfere with veterinarians' view of 'good animal health management practice'

The veterinarians used different examples to show how in some cases certain characteristics of the organic farming system, the organic regulation and/or organic principles interfere with what they consider the most appropriate animal health management practices (Fig. 1). Some veterinarians brought up the more comfortable financial position of organic dairy farmers compared to conventional farmers as one of the reasons that organic dairy farmers accept more health problems on their farm rather than re-evaluating their practices.

**IV5:** 'Well, I think that they [organic dairy farmers Ed.] have as much problems as the others [conventional farmers Ed.]. (. . .) I think, unfortunately, the milk price is too high for them. So, they don't question their work methods! If the milk were paid less, maybe they would be a bit careful.'

However, some veterinarians had other opinions based on the argument that they had experienced that farmers in a better financial situation ask the veterinarian to come more easily on the farm.

Examples were also given by veterinarians of how in their opinion some of the organic principles can have a negative effect on dairy cattle health, for example veterinarians could also question the principle of avoiding drug use on animal health. In the example below, the effects of the promotion of naturalness are discussed by the veterinarian.

**IV6:** 'And there is also the idea that animals have to combat [a disease] by themselves. That natural selection does things well. Except that an organic farm, even what we call today an organic farm has nothing that is natural. (. . .) Yes, a good example, yes: the horns. So the organic farmers say "Ah, but no! We should not cut the horns off! We should not cut the horns off it hurts the animals and. . .and well, the horns link them to the cosmos", well. . .I don't enter this

sort of discussion, yes! But that is, well, well very good, so we leave the horns. But in fact, three years later all organic farmers, they call you to cut the horns off, right! Because horns in nature, of course it doesn't cause any problems. Cows, if they are in a 10-hectare field, it is not a problem, they can escape. Moreover, they do not approach each other. But cows in a place big like this [referring to his office], three cows with horns. Even if they have been staying together for the last 10 years in a 10-hectare field, it is. . .it is fatal. It is fatal! So ehm. . .well, either we have an open air farm and we pick up with falls and that is it. Or, if we want to have indoor production it is necessarily without horns.'

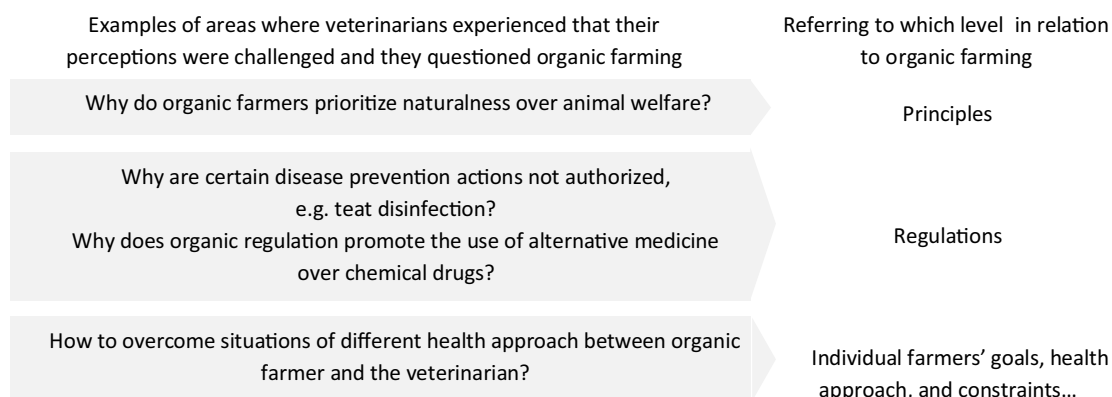
Certain veterinarians indicated that in their experience the organic regulation can have a negative impact on the animal health and welfare situation on organic dairy farms. This can be related to the constraints of the organic production systems, such as not always being able to buy feed when the health status of the herd would indicate the necessity. Another example that was given is the promotion of the use of alternative therapies over chemical products. According to some veterinarians, treatment with alternative therapies can lead to health situations that are worse than when they would have been treated with allopathic therapies applied in a good way (choice of the right product, for the right animal and applied at the right time). Veterinarians identified also the problem with farmers' decision-making in choices of antibiotics. Farmers might ask to choose the antibiotic with the shortest withdrawal time, due to the doubled withdrawal period under the organic regulation, but this might not be the most appropriate one to use in that specific situation.

**IV8:** 'Negative aspects? Ehm. . .their difficulty in using allopathy, so ehm. . .they are sensitive to the withdrawal period, etcetera, so we have to make particular choices in molecules, which are not always well indicated for what we have.'

A different example was a veterinarian with doubts on whether organic dairy farmers sometimes 'hide' behind the interpretation of the organic regulation when they do not adopt disease prevention practices. For example, concerning the use of vaccination or when stating that they cannot find teat dipping products that are allowed under the EU organic production regulation.

### 3.2.4. Divergent approaches to animal health management between organic farmers and veterinarians

Veterinarians discussed that the way certain farmers handle animal health is not always the same as for the veterinarian (Fig. 1).



**Fig. 1.** Areas in which the organic dairy farming system is, as perceived by private veterinary practitioners, not in agreement with their approach of animal health management. At different levels difficulties are perceived to be due to the framework of working in the organic dairy system; at the level of the organic principles, the organic production regulation and at the level of the organic dairy farmer.

This can start with the fact that the two have different philosophical approaches of health. Veterinarians described for example their philosophy as 'scientific' or 'logic' versus a 'mystical or occult' approach of health of organic dairy farmers, in the most extreme case. In the end, these different approaches can lead to different practices to handle health, which can be inconceivable for the one or the other person. Farmers' practices can become an obstacle for veterinarians. Disease control methods, such as the use of antibiotics or vaccination, proposed by veterinarians might not be in line with those of farmers and thus not accepted.

Several veterinarians also expressed the difficulty of working with certain organic farmers that have a negative attitude towards them or their animal health management practices. This can be related to what a veterinarian called the 'antiness' of certain organic dairy farmers towards 'the system' in general. That is not necessarily only against veterinarians but it could also be the rejection of formalized advisory services from other organisations. Some organic farmers reject the diagnostic approach of the veterinarian, such as performing additional diagnostic tests. But most often examples were given of 'antiness' that was directed towards the use of allopathic treatments and vaccines.

**IV3:** *'I am thinking of a farmer that I know very, very well, and who is almost a friend and he has had for a long time problems with a high somatic cell count level of the herd. Thus eh, the milk quality has been catastrophically since I know him, which is for 10 years. And he has never wanted to make a control plan with us. He is against antibiotics, he is against eh... disinfection, "anti" all these things. So, he treats all his cows with essential oils and everything. But obviously it doesn't work since his herd is still at a somatic cell count level of 800 000 and he culls every year a third of his animals.'*

Alternative medicine was the only topic identified on which veterinarians considered that they could not always meet the demands or answer questions of organic dairy farmers. Organic farmers have asked veterinarians for alternatives to the conventional medicine. Veterinarians' attitudes towards and experience in alternative medicines varied. For example, among the interviewed veterinarians there was a trained homeopath, veterinarians who did not believe much in the effects but sold alternative medicine and firm non-believers in the effects of alternative medicine that therefore did not offer any products or advice on the matter. The lack of knowledge on alternative medicine was not always considered as a problem by the interviewed veterinarians since, in their view, there should be no need for the use of alternative medicine but farmers should aim for disease prevention. And it is thus on disease prevention that farmers should ask veterinarians advice according to them.

**JD:** *'You are not trained in homeopathy or in other alternative medicines?'*

**IV6:** *'Well eh, in the end not that much. It is something that we have discussed in the past but in the end we don't feel that much the need for it. Because in fact, if we have good disease prevention and apply well husbandry measures, in particular on organic dairy farms that are not intensive, where we don't push the animal, well, normally we don't need therapies, very little. So in that case we don't need to go and find an alternative therapy. The objective is the less therapies possible, whatever the kind.'*

The severity and frequency of herd health problems can change after conversion of farms to organic, according to the interviewed veterinarians. However, veterinarians articulated that it can be difficult for them to evaluate herd health in organic farms when

farmers change their health management practices, e.g. when farmers start using alternative treatments that are not bought from the veterinary practitioners.

**JD:** *'Of those that you have followed during the conversion, in fact, regarding the health status of the herds, did you see an effect of the conversion to organic?'*

**IV8:** *'... I would not say that there are fewer diseases. They don't come anymore to get the medicines, that, it is certain, they do other things, but do they have less mastitis, less things, I am not sure. I am not sure. They consume less, that is clear, but I am not sure that they have fewer diseases, for those that I know well.'*

The evaluation of herd health without treatment data to reflect the health status of the herd can be an additional obstacle for veterinarians. Or as was said by IV10: 'the number of treatments is not a reliable reflection of the animal health situation on organic farms. Therefore, we need to find other points of entry to propose advisory services.'

### 3.2.5. The low number of organic dairy farms prevents investments in the organic sector

Veterinarians questioned themselves whether or not they should aim for closer working relationships with organic dairy farmers. They gave different examples of why they did not invest in organic dairy farming systems. One recurrent explanation was the low percentage of organic dairy farmers in the veterinarians' clientele.

**IV14:** *'It is certain that if we would have 50 organic farms, I think that we would be... maybe we would be more attentive to or be more involved in, in the organic sector. But since they are so few, and we rarely see them, they are part of the farms that are set apart a little bit'*

As a consequence of the low percentage of organic farmers in their clientele, veterinarians expressed a lack of sense of feeling invested in the organic farming system (Fig. 2, box §3.2.5). As stated by veterinarian IV7 'we don't feel invested in a mission, since there are so few farmers'. This could influence their inclination to invest time in understanding the organic production system. Although other reasons influence that decision too, the low percentage of organic dairy farmers in the clienteles could also influence their willingness to train veterinarians in alternative medicine.

**IV1:** *'I think it asks for a lot of investment, time investment, to be trained because... if we use homeopathy, it is to do it the real way, it is not... at least that is my point of view'*

*'... it is really a different kind of medicine that... is really different from allopathy, so we would have to review the diagnostic approach... and then learn the pharmacopoeia in homeopathy, I think it takes also some time to master it, so ehm... I think takes a lot of time... to devote in order to train and then... for a market that is a relatively small market, so... apart from the prospect of possibly... recruiting new organic farmers in other sectors, but... it's not necessarily...'*

Furthermore, as expressed below some of the veterinary advisory services developed today can be, according to veterinarians, more adapted to farming systems other than organic. For example, advisory services that have been developed by veterinarians aiming at optimisation of the dairy production were expected not to be in line with organic farmers' objectives.

**IV14:** *'even though we can bring them, I think, things to optimize their farm a bit, it is true that everything that is, ehm, follow up'*

of herds like we do it today, is more interesting for big farms that look for... performances, optimisation of production, improving areas like that, and ehm... organic farmers give more the impression to function, not on a slow pace but search for quality rather really the big quantity.'

### 3.3. Opportunities for veterinarians to improve advisory services for organic dairy farmers

The low frequency of visits of veterinarians on organic dairy farms and resulting low amount of communication between farmers and veterinarians can lead to an impasse (Fig. 2).

**JD:** 'And do they discuss with you why they contact you so little?

**IV7:** Well, no, because to be able to discuss it, we would need to see each other.'

Different opportunities that have been identified by the interviewed veterinarians to break this impasse will be discussed in the paragraphs below.

#### 3.3.1. Pro-actively seizing opportunities within existing work organisations to change their role on organic dairy farms

Most of the veterinarians have identified opportunities within their current organization of work with organic dairy farmers to further develop their working relationship, changing their role of solely a 'fire fighter' towards the role of an advisor in animal health management (Fig. 2, box §3.3.1).

A potential opportunity could be to have a more proactive approach when being asked to intervene on organic dairy farms. As IV14 stated: 'it is not a forbidden territory [talking about disease prevention practices], I think, but it is true that we are always there for a fast intervention, maybe we don't take the time to be interested in what they can do'. A more pro-active approach to animal health problems of veterinarians rather than a reactive stand is dependent on their general motivation to have a role in farmers' animal health promotion strategies. This motivation varied from veterinarian to veterinarian interviewed, even though all provided advisory services in animal health to farmers.

The annual mandatory sanitary visit has been given by veterinarians, as another example of an opportunity to change their current role towards that of an advisor in organic dairy farmers' animal health promotion strategies.

**IV10:** 'The annual mandatory visit is an excellent opportunity to show a broader interest in the farm and to ask questions that go beyond what we usually discuss. It is an opportunity to start a dialogue on other treatment practices they have and to show to be open-minded'.

However, the quote below expresses that not all veterinarians agree with the veterinarian above on the value of the annual mandatory visit as an opportunity for veterinarians to discuss more in depth the health situation of herds.

**IV11:** 'We do the annual mandatory visit because it is a legal obligation, but it has no value hmm... it has no professional value for the farmer.'

But examples were given of situations where the discussion on herd health during mandatory visits on organic dairy farms did lead to a change in the organization of work between farmer and veterinarian by the establishment of advisory services. Indeed, the quote below shows the example of a veterinarian explaining that he had one organic dairy farmer that used advisory services offered by the vet in order to improve the reproduction performances of the herd.

**IV8:** 'It is often during the annual mandatory visit that we propose our services. So, during the annual visit we discuss the results of the farm and often at that moment that triggers a follow-up service. Or farmers ask us to have a follow-up, but it is nevertheless often during the annual visit.'

Some veterinarians were aware of situations where organic dairy farmers in their clientele turn to other persons and organizations to find information on the management of animal health. The farmers' information sources and the organization of education (farmer experience exchange groups, one-day courses, etc.) were sometimes known by veterinarians.

**JD:** 'Have you been invited to organic farmers' meetings or meetings organised by the Chamber of Agriculture?'

**IV8:** 'No never. Never, never. I have been to an open day but that is all. An open day of an organic dairy farm, that is all.'

**JD:** 'Would you be interested?'

**IV8:** 'I have not had the invitation. I would have gone there, because it does interest me, but ehm... I think that we are not the main interlocutor of these farms, typically.'

In general, the private veterinary practitioners were not taking part in these moments of information exchange on animal health management, outside the context of their work on the farms. Veterinarians expressed their interest and willingness to participate in such meetings in several cases. Yet, they have not undertaken many steps to be able to. Only one of the interviewed veterinarians, and the veterinarian contracted by the farmer group, had participated in an organic farmer group by giving a presentation on the management of young stock.

#### 3.3.2. Opting for an alternative organization of work between organic dairy farmers and veterinarians

An alternative model for a working relationship between organic dairy farmers and veterinarians has been developed by a local organic farmer association. Based on a need identified amongst their members for advisory services on dairy health management, the association took the initiative to contract two veterinarians to design and provide this support. The two veterinarians are trained homeopaths, which could contribute to their understanding of particular health approaches of certain organic farmers. However, in their opinion, farmers should aim to attain animal health situations where there is no need for treatments whatsoever. And that the necessity of any form of treatment is the result of a failing disease prevention strategy.

**IV10:** 'The farmers themselves came to find us. For a long time, the demand has been there, farmers were frustrated regarding the lack of the alternative side in herd health advisory services. Of course there are the alternative treatments, but also regarding alternative approaches such as Obsalim [French method based on cow observation], taking into account the farm system as a whole, going further than what you would do during the annual mandatory visit. Or at least we didn't go far enough during the annual visit.'

**JD:** 'In what way didn't it go far enough?'

**IV10:** 'Well, we do [during the follow up proposed by the organic farmer group. Ed.] a complete tour of the farm, we go and see the animals on pasture, we look at all the different age groups. Inevitably, we are very interested in nutrition... The first visit may take about 6 hours.'

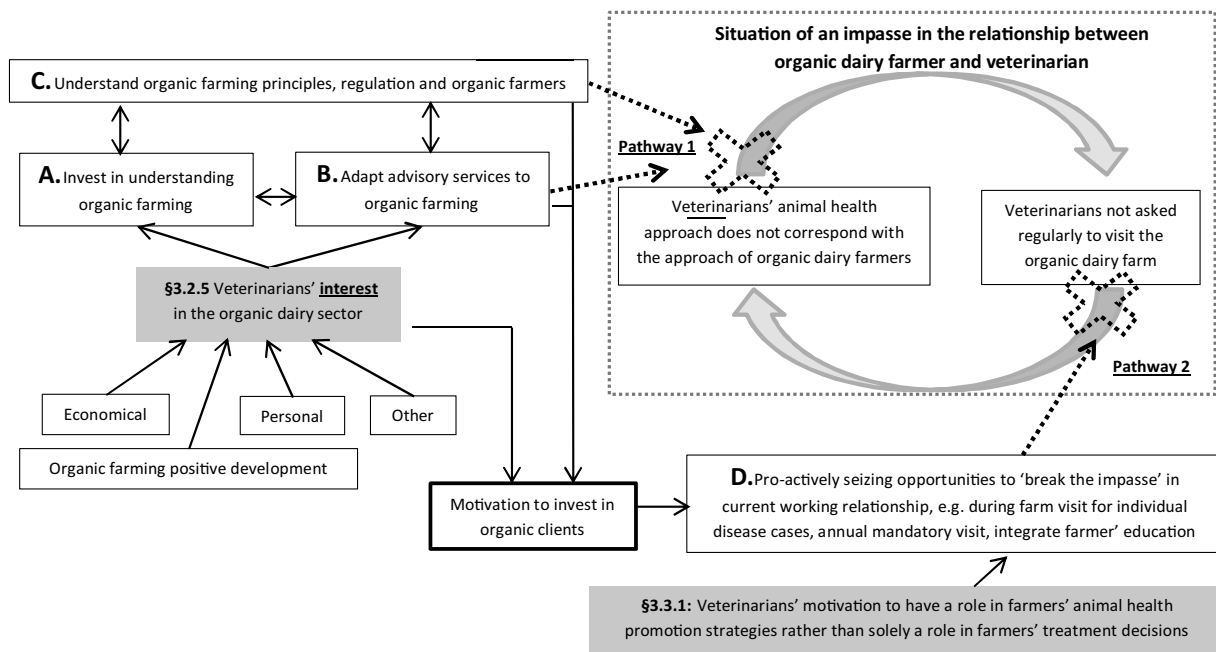


The farmers had different motivations to ask for the service, e.g. in case of herd health problem, with the aim of optimization of their production system or for the design of criteria to identify health problems at an early stage. The services provided are adapted to the needs identified by the individual farmer, such as the goals set, the topics discussed and the number of visits per year.

In this example, the farmers paid the veterinarians a fixed day rate. If the farmer wished, the private veterinary practitioners of the farmers were informed of the services provided, welcome to participate and remained the referent veterinarian of the farm. In general the farmers did not wish to communicate to their referent veterinarian. The veterinarians contracted by the farmers' association did not sell drugs to the farmers and had only an advisory role. In this setting the dual role that veterinarians have in general was uncoupled; the curative role was separated from the advisory role.

### 3.3.3. Model of understanding explaining and showing opportunities to break a situation of the veterinarian in the role of a firefighter on organic dairy farms

Fig. 2 illustrates themes described above in a model of understanding. This model aims at explaining how these different elements can lead to situations of an impasse in which veterinarians can feel stuck in on organic dairy farms in the role of a 'firefighter' in case of individual ill animals or occasional herd health problems. And not being able to change this since they are often rarely called to visit the farms. Opportunities to break that vicious cycle and change the organization of work between private veterinary practitioners and organic dairy farmers, as discussed above, are integrated in the model.



**Fig. 2.** Model of understanding explaining and showing opportunities to break a situation of an impasse in which the veterinarian has solely a role of a 'firefighter' on organic dairy farms.

**Pathway 1:** Veterinarians' motivation to invest in organic dairy clients can be driven by an interest that they have in the organic dairy sector (box §3.2.5). This interest can drive them to develop their understanding of the organic dairy sector and/or specific advisory services for organic dairy farmers. In turn, functioning like a reinforcing mechanism, it will promote the understanding of the organic farming principles, regulation and organic farmers. This improved understanding might remove the blockage of an animal health approach that does not correspond to the approach of organic dairy farmers as was discussed in paragraph 3.2.3 and 3.2.4.

**Pathway 2:** Indirectly the investments made in the organic dairy sector could further motivate veterinarians to devote themselves to organic clients to make profit out of their investment seizing opportunities to break the 'impasse' via the second pathway (box D). This pathway can also be influenced directly by an interest in the organic dairy sector and by veterinarians' motivation to have a role in farmers' animal health promotion strategies (box §3.3.1). The model of understanding shows that veterinarians can break a situation of an impasse with or without investing in knowledge or skills specific to the organic dairy sector.

## 4. Discussion

### 4.1. Presenting veterinarians' point of view on their role on organic dairy farms

This study presents French private veterinary practitioners' perception on their role in organic dairy farmers' animal health promotion strategies. To our knowledge, the point of view of veterinarians has received little attention in the literature so far, in contrast to organic dairy farmers' point of view.

### 4.2. Veterinarians did not always manage to establish themselves in an advisory role even when experiencing disappointing animal health situations

Private veterinary practitioners played a number of different roles on organic dairy farms. However, most often, the interviewed veterinarians had only contact with the organic dairy farmers of their clientele in case of individual ill animals or occasional herd health problems. Even though some of the veterinarians experienced situations and approaches of animal health on organic dairy farms which did not meet their standards, veterinarians were seldom able to establish a role of advisor supporting farmers in their animal health promotion strategies to improve these situations. That is despite the fact that all interviewed veterinarians were included in the study based on the criteria that they were providing herd health advisory services to dairy farmers in general. These results are in line with a previous study in Denmark, where veterinarians of organic dairy farms were mainly involved in treatment decisions for individual animals, and rarely included perspectives on herd health (Vaarst et al., 2003).

#### 4.3. The risks of a situation of an impasse

An explanation for the small advisory role of veterinarians on organic dairy farms might be that veterinarians' approach to health in combination with the advisory service offered to dairy farmers in general does not meet the exact expectations of farmers. This situation can be accentuated if veterinarians, as a consequence of this, are asked less and less to work on farms. When veterinarians are not regularly present on farms and confronted with the conditions and challenges which are specific to particular farms, the risk is that it negatively affects their development of knowledge, expertise and awareness of clients' needs (Bellet et al., 2015). Moreover, frequent contact between farmers and their veterinarians can be valuable in itself, as it favours a common understanding of the current herd health situation (Klaas et al., 2011). It is likely that a common understanding of the health situation is a pre-requisite for veterinarians if they want to propose advisory services in line with the needs perceived by farmers. As hypothesized by Garforth (2011), farmers' attitude to risk management practices and their intention to implement these are influenced by the farmers' attitude towards animal disease risk.

#### 4.4. Organic dairy farming lies outside the sociotechnical regime of veterinarians who therefore possibly have different values and practices than organic dairy farmers

We can consider organic dairy farming as a niche in French agriculture, today. Most veterinarians are in a (mainly conventional) sociotechnical regime which is different from that of organic dairy farmers. Sociotechnical regimes are the result of organisational and cognitive routines that are shared by and embedded in, amongst other, the practices, governance structures and knowledge sources of the different social groups involved (Geels, 2002). The interviews pointed out that the organic principles, regulation and individual farmers' goals and practices were not always in line with veterinarians' perception of 'good animal health practices'. This may explain why they did not agree with farmers' priorities and resulting practices. Alrøe et al. (2001) and Lund (2006) already highlighted the importance of making veterinarians and other extension workers aware that the values of animal health and welfare are different than in non-organic farming.

The definition of health, as understood in the organic principles, goes further than the absence of disease and high performances, aiming for a state of homeostasis where animals can cope with changing situations in their environment and stress. Döring et al. (2015) suggest an understanding of health as 'resilience', and this is very much in accordance with the organic principles' focus on health as an overarching principle on all levels of the farm. Disease prevention actions often target the prevention of one specific disease condition, whereas homeostasis takes into account the animal as a whole, focusing on practices that improve immunity (Vaarst and Alrøe, 2012). EU regulations on organic farming are consistent with these principles. The EU Council directives on organic livestock production promote making profound changes of the agricultural system as a whole aiming at adapting the system to provide conditions to prevent animal health and welfare problems. This systemic approach includes reviewing e.g. breeding goals, housing systems and production strategy in the search of preventing and solving of problems (Alrøe et al., 2001; Verhoog et al., 2004). It remains however individual farmers' responsibility to find concrete actions to fulfil the organic production objectives. Some veterinarians stated that the organic principles and regulation had a negative effect on animal health on welfare. However, studies comparing cow health on conventional dairy farms to organic provide inconsistent results: herd health results were sometimes better,

worse or similar on organic farms (Hovi et al., 2003). It is possible that some interviewed veterinarians generalised the examples of poor health and welfare situations encountered in their small clientele in organic dairy farming. Consequently, some veterinarians did not see the added value of organic production on animal health and welfare, when the same standard was also reached in non-organic farms in their clienteles. However, most veterinarians did agree on the importance of finding solutions to health problems in disease prevention strategies and expect that of organic farmers.

Animal welfare, considered in the light of the organic production principles, is regarded as more than meeting animal's needs. It includes the notion of naturalness, assuring within the context of a farm system that animals can express as much as possible their natural behaviour and have feed and an environment that is considered adapted to the species and breed (Vaarst and Alrøe, 2012). In organic farming, naturalness can be regarded as a precondition for animal welfare and an aim in itself (Lund, 2006). Negative effects of naturalness on the individual may thus be accepted to a certain extent, but it is clearly stated that the humans have the obligation to intervene when necessary to avoid poor animal welfare, and this is considered a part of the so-called 'ethical contract' of care between the animals and the humans in organic agriculture (Vaarst and Alrøe, 2012; Verhoog et al., 2004). Indeed, certain veterinarians in this study raised this dilemma of a lost balance between ensuring both naturalness and animal health and welfare in the context of organic dairy farming. Many veterinarians' critical attitude towards organic farming for situations of poor welfare, when natural living conditions compromise the physical health of animals, may be explained by veterinarians prioritization of physical health over natural living conditions (Lund, 2006). This is not surprising considering the nature of veterinarians' background and daily work focusing on health.

#### 4.5. Different perspectives on alternative medicines

The veterinarians interviewed in our study did not question whether their relationship with organic dairy farmers might be impacted by a lack of knowledge or expertise from their side, with the exception that some of the veterinarians thought that the fact not meeting farmers' expectations regarding alternative medicine might have an influence. With regard to the use of alternative medicines, most veterinarians were either sceptical or felt they had insufficient knowledge. The use of alternative medicines for the prevention or cure of diseases in animals is not taught in the standard curriculum in French veterinary schools. This is because the evidence regarding the efficacy of most of these alternative medicines is either poor or non-existent or, as in the case of homeopathy, because the available evidence points towards an absence of effect beyond the placebo effect (Ernst, 2002). This complies with the Federation of Veterinarians of Europe (FVE) recommendations which state that veterinary education should be based on science (FVE, 2015). Some veterinarians are thus placed in a situation whereby they are asked to provide a treatment that they either deem inefficient or for which they have limited information on the efficacy and safety. In this study some of the organic farmers in the clientele of the interviewed veterinarians used alternative treatments such as homeopathy, but veterinarians did not seem to have been their partners in developing these practices. This is in line with results on the independent use of alternative treatments by French organic meat sheep farmers (Cabaret et al., 2011). The overall communication on animal health could potentially be harmed, if the topic of alternative therapy was completely avoided.

#### 4.6. Veterinarians' motivations to have an advisory role in farmers' animal health promotion strategies vary

So far, the lack of a direct economic interest in the organic dairy sector diminished some veterinarians' willingness to invest in better understanding of the organic dairy sector and/or to adapt existing or create advisory services specific to the organic dairy sector. And this lack of interest could also lower their motivation to have a more pro-active approach in trying to establish an advisory service on organic dairy farms. Without a change of the environment leading to incentives for veterinarians to do so, that adaptation will not likely occur. The (lack of) incentive for change can be financial, intellectual stimulation (Mee, 2007) or, as seen in this study, a personal motivation. It is the reality of the private veterinary sector that they have to maintain an economically sound business. At the same time, they have to act within a legal framework imposed to them, deal with the fact that their clients search for the best value for veterinary services and they have to face competition on certain services (Petitclerc, 2013). As presented, a different type of organization of the work between organic dairy farmers and veterinarians does exist and it could be interesting for the sectors to study this further.

Not all interviewed veterinarians showed the same motivation to establish themselves as advisors on farms, irrespective of the type of farm. Often there was a lack of a proactive approach in discussing herd health even though veterinarians did identify possible 'contact moments' during which they could have.

However, veterinarians have been mandated to safeguard animal health and welfare and food security all along the food chain. The role of veterinarians is therefore more than only performing medical procedures. At each level of the food chain the quality of the veterinary services must be guaranteed (Petitclerc, 2013). Veterinarians cannot allow themselves to wait until a farmer calls for a specialized service, their services need promotion (Mee, 2007). Farmers, as animal keepers, have to ensure good animal care to maintain good animal health and welfare levels. Vaarst et al. (2003) already discussed that when organic farmers asked veterinarians only for treatment decisions, there was little chance for dialogue between farmers and their advisors to develop common understanding on organic farming. A major argument in this debate was that if neither the farmers nor the veterinarians felt the need to work towards changes in animal health management that met the specific organic goals, then development would not be likely to occur (Vaarst et al., 2003). It is in organic dairy farmers and their private veterinary practitioners' common interest to promote animal health and welfare in organically reared animals, and it can be viewed as their common responsibility to keep the dialogue on animal health management open. In this study, the example was presented of the initiative taken by a local organic farmers group to contract veterinarians to provide them with veterinary services adapted to the needs expressed by several of their members. Also, the use of advisory tools in animal health management promoting dialogue can help advisors to identify farmers' objectives, priorities and management practices and to adapt for example herd health and production management programs to each farm (Duval et al., 2016). The design and use of such tools could be further developed and promoted.

#### 4.7. External validity of the results

The results of this study can also be considered interesting in contexts other than the French context. However, the transfer of qualitative research results to other settings should be done with care, as the results are obtained from persons with a specific background and experiences that need to be understood (Malterud, 2001). In addition, it should be noted that most of the interviewed

veterinarians points of view were based on a relatively little amount of experience regarding working with organic dairy farmers. This situation arose in spite of the aim to select veterinary practitioners with a range of experience working with organic dairy farmers rather than a representative sample, as we hypothesized that it could influence veterinarians' perception on their working relationship with these farmers. However, in practice this proved to be difficult due to the low amount of dairy farmers that are certified organic producers.

## 5. Conclusion

The interviewed private veterinary practitioners in France rarely played a role in organic dairy farmers' animal health promotion strategies, despite the fact that they all provided herd health advisory services to dairy farmers in general. As veterinarians have relatively little experience working on organic farms, poor animal health and welfare situations encountered strongly influence their opinion on organic dairy farming and the value of certain elements of the organic regulation. The veterinarians perceived difficulties specifically related to organic farming context that challenged their own values on animal health and welfare and their perceptions of 'good veterinary practices'. This can, at least partly, explain veterinarians' non-agreement with organic farmers' priorities and resulting animal health management practices. However, examples have been provided that there is a place for veterinarians in an advisory role on organic dairy farms. This requires that veterinarians identify an interest in organic farming and/or have the motivation to have a proactive approach to maintain and develop relationships with (organic) dairy farmers and possibly adapt advisory services to the needs of organic dairy farmers. Nevertheless, a common effort is needed of both organic dairy farmers and private veterinary practitioners to maintain the dialogue on animal health promotion ongoing.

## Acknowledgements

We gratefully acknowledge the participating private veterinary practitioners, for sharing openly their experiences and reflexions with us.

This work received funding from the Region Pays de la Loire under grant number 201309596.

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