Animal health and welfare: equivalent or complementary?

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Summary

The concepts of ‘health’ and ‘welfare’, whether applied to humans or animals, are increasingly becoming linked. But are they really indissociable, or even synonymous? Although human health is generally defined as a complete state of physical, mental and social well-being, animal health is still considered as simply the absence of disease. However, recent advances in scientific knowledge are forcing us to revise our ideas about the mental complexity of animals and to recognise their ability to feel emotions and to have needs and a degree of consciousness. The precise objective of animal welfare science is to study their mental states and their ability to adapt to domestication. Pending a global application of this concept of health, including mental health, to animals as well as to humans, the idea of welfare remains an important element in addition to traditional health concerns. More generally, this linkage fuels the ethical debate about the ways in which people use animals, prompting society to change its stance on some aspects of the issue.

Keywords


Introduction

The concepts of health and welfare are the focus of worldwide concern, whether they are applied to humans or animals. They are closely linked to the recent ‘One Health’ concept, which also covers the environment in the broader sense (1), particularly in the context of global issues such as food security (2, 3). Key organisations in the health sphere (World Organisation for Animal Health [OIE], World Health Organization [WHO], Food and Agriculture Organization of the United Nations [FAO], United Nations Children’s Fund [UNICEF]) have stressed the importance of welfare (4, 5, 6, 7). Such thinking is applied mainly to domestic animals and has been supported from the outset by animal protection organisations (8), but has progressively become scientifically substantiated to the point of giving birth to the new discipline of ‘animal welfare science’ (9). Little by little the welfare of animals has become an issue that has garnered substantial public support (10) and currently figures prominently among European issues advocated by the Treaty of Lisbon (11). But does this apparent mutuality between health and welfare mask a degree of redundancy? What does welfare have to contribute to health? Isn’t health sufficient in itself? Does improving welfare always benefit health and vice versa?

Animal health?

Since 1946, the WHO has defined health as ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (12). More recently, the concept of ‘mental health’ has quite sensibly been defined as ‘more than the absence of mental disorders or disabilities, (...) a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community’ (13). Even though the vocabulary used may seem difficult to apply to animals as it stands, surely animal health is
also more than the absence of diseases or pathologies? It should be noted that this concept is only gradually gaining ground in veterinary circles. Since its creation in 1924, the key activities of the OIE have been to monitor and control animal diseases (14). It was not until the OIE’s Third Strategic Plan for 2001–2005 that the organisation included the improvement of animal health, veterinary public health and animal welfare worldwide in its mandate (15). This mandate was reaffirmed in subsequent Strategic Plans, the latest of which extends into 2015. Nonetheless, an examination of the OIE’s specific missions reflects the importance of diseases (13), and the broadening of the definition of ‘animal health’ seems to have more to do with adding ‘animal welfare’ than with changing the definition of animal health as such, which would bring it more into line with the WHO definition.

That said, scientific advances in the fields of ethology and neurosciences are forcing us to revise our perception of the mental complexity of animals, as illustrated by the recent example of the Cambridge Declaration on Consciousness (16). Animals as ‘sentient beings’, as they are described in the Treaty of Lisbon (2009), must be considered as capable of feeling emotions, having needs and a degree of consciousness (17, 18, 19). The concept of mental health should therefore apply equally to animals. An animal can, for example, suffer from ‘anxiety’ (20), ‘depression’ (21) or even ‘compulsive disorders’ (22), which are some of the new challenges facing ‘veterinary behavioural medicine’ (23). In addition to the absence of these pathologies, an animal in good mental health would be one with ‘a life worth living’ (24), as demonstrated by recent advances in certain aspects of animal ethics (25).

Animal welfare?

When the WHO defined human health (12), it is interesting to note the prominence given to the word ‘welfare’ (see above)! In 1976, almost mirroring the WHO approach, Hughes had already defined animal welfare as ‘a state of complete mental and physical health, where the animal is in harmony with its environment’ (26). Both the WHO definition of health and the Hughes definition of welfare have sometimes been criticised as being theoretical and unrealistic. How many humans can claim to have enjoyed such a state even once in their life? It is therefore even more difficult to apply it as it stands to animals. The approach to animal welfare has subsequently become more practical, but has nevertheless retained the ideals of these definitions as the goal for which we should strive. One of the more practical aspects to consider is the animals’ ability to adapt to the environment. This is a reflection of the biological functioning of the animal and can be assessed from a zootechnical, semiotic, physiological and ethological standpoint (27, 28). The relative importance given to the different facets of animal welfare depends on the scientists concerned. Biologists (ethologists, ecologists, etc.) tend to give more weight to the behavioural aspects, zootechnicians regard it more in terms of productivity, physiologists concentrate on stress, while veterinarians often focus on the absence of disease (29). However, various analyses have noted the importance of a multidimensional approach to the issue, recommending an integrated assessment of animal welfare (see: 25, 29, 30, 31, 32, 33). This approach is illustrated by studies conducted under the European Welfare Quality programme (34).

In parallel with these practical considerations, and based on recent advances in neurophysiology (35) and cognitive ethology (36), there has been a move towards a more ‘hedonistic’ approach to welfare. Not only have the phylectic limits of the potential to experience pain been extended to include, for example, fish (37), cephalopods (38), crustaceans and molluscs (39), positive emotions such as joy and pleasure have also been studied, so as to develop a more direct approach to the welfare of animals (40). This brings welfare and health closer together in the broader sense, with a view to a more prophylactic than curative approach (e.g. 41).

Animal welfare: a plus for both animal and human health?

Generally speaking, and in the light of the above, it would seem reasonable to consider animal welfare as a dynamic state of equilibrium (homeostasis) between the animal and its environment (internal and external): functional attempts to maintain or recover this balance may exceed the ability to adapt and cause physical and mental suffering, which could be detrimental, notably to health (42). Although it has been recognised for some time that disease has a major negative effect on farm animal welfare (29, 31, 33, 43), the mental health aspects need further scientific research (44). Recent advances in human psychoneuroimmunology (45) should open the door to animal applications and attract intense interest from modern veterinary medicine, given the advances in our knowledge of the mental capacities of animals. Mental suffering in animals (phobia, anxiety, compulsion, depression, etc.) could very well also undermine the immune system and hence their physical health. It has already been clearly demonstrated that the psychological stress experienced by farm animals affects their physical health (46, 47). We can already discern the link with human health, because these stresses, combined with those caused by transportation and the slaughterhouse, significantly affect the sensory (taste, smell, sight) and health qualities of meat, with possible repercussions on human health (48)!
concern for animal welfare, and perhaps soon for animals’ mental health, can therefore not only improve the health of animals in the broader sense, but also the quality of animal products. Nevertheless, certain measures that are perceived to be beneficial to animal welfare (access to the outdoors, bedding, the chance to congregate with other animals, etc.), could prove problematic in health terms. Such measures need to be undertaken rationally and prudently. It has been concluded, after several years of study, that although there are thought to be certain health benefits to conventional battery cages for laying hens, which undermine animal welfare and are now banned in Europe, their drawbacks outweigh these possible health benefits (49). On the other hand, it has to be acknowledged that certain animal health policy measures (quarantine, depopulation, etc.), at first sight beneficial in terms of overall health, may nevertheless raise welfare and ethical questions. Once again, a debate encompassing the broader concept of health is required to determine which path should be taken and to map out the way forward (50, 51).

Conclusions

Although human health in the broader sense is presented as synonymous with welfare, the same does not (yet) apply to animals. Animal health is still often considered as simply the absence of physical infirmity, despite significant scientific progress in our understanding of the cognitive and emotional complexity, and hence mental health, of animals. We cannot, therefore, continue with such a restrictive definition of health and must (on the basis of the science) recognise welfare as an indispensable component of health. This will enable us to respect these sentient beings in their entirety, drive forward the ethical debate on the ways in which humans use animals and, consequently, adapt our practices accordingly.

References


