

ACQUIRED LEARNING THROUGH AN ONLINE INTERACTIVE MINI-COURSE USING PAIN DIAGNOSTIC IN ANIMAL WELFARE TEACHING

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Introduction: The veterinary profession has the privilege of occupying an important position in animal welfare and pain issues; nevertheless, it has traditionally demonstrated a limited range, since its curriculum presents restricted discussion of these issues. Due to the great number of Veterinary schools in Brazil and the lack of teachers with animal welfare experience, a non-traditional approach based on online courses may provide aid for a better instruction in these fields. In addition, this teaching format allows students to review the material in accordance with their own timetable and rhythm, and also overcome challenges associated with distant geographical locations. Thus, this work aimed to study the learning acquired by students who attended an online interactive mini-course on the topic: "Relevance of Pain to Animal Welfare".

Methodology: Four questionnaires approved by Ethics Committee on Human Research of Federal University of Paraná were used in order to assess knowledge acquired through the three online course modules. The participants answered the questionnaire before and after the modules provision. The questionnaires aimed to test previous and post-course knowledge of the participants. For this, only participants who answered all the four questionnaires and attending all the three mini-course modules were considered. A googledocs form was used to make the questionnaires available, which permits creating and editing the questions from a registered email in the google website, generating afterwards a link with online access. Contact with students was made by Brazilian Veterinary Faculties which invited the students by an institutional email; participation was voluntary. All interested students accessed first the questionnaire link, answered it gained access to the mini-course and the next questionnaires. All the questionnaires presented quantitative and qualitative questions. The initial questionnaire was related to student and institution identification, and also tested the initial knowledge regarding welfare and animal pain. All the subsequent questionnaires emphasize the knowledge generated after the participation on each mini-course module. Module 1 involved welfare concepts and pain diagnosis aspects, emphasizing the physiological and behavior indicators, pointing out the importance of pain evaluation for animal welfare. Module 2 involved the topic of animal pain, mainly pain induced by human common practices, such as aversive handling, castration, dehorning, teeth and tail cutting. Finally, module 3 dealt with the recognition of animal sentience, demonstrating that at least vertebrates have the capacity to feel pain. **Results and discussions:** In total, 84 people from different Brazilian institutions attended the mini-course and answered the four questionnaires. The southeast region had the highest frequency of participation (76.2%), following by South region (12.4%). There was no participation from institutions located in Brazilian north and northeast. The predominant age range

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of participants was between 17 and 20 years old (50.0%), in their majority female (78.6%). The courses of Introduction to Veterinary Medicine (22.6%) and Deontology and Bioethics (15.5%) were most mentioned by the participants as involving animal welfare issues. An Animal Welfare course was mentioned only by 7.1% of respondents. This result may be related to the fact that Animal Welfare courses in Brazil were offered by 25% of studied institutions (Quadros and Molento, 2008). Regarding the animal pain topic, participants listed the courses of Surgery, Anesthesiology, Deontology and Bioethics, Clinics and Pharmacology as being important courses for animal pain teaching. However, 34.5% of the participants stated that the relevance of pain to animal welfare was not clear in those mentioned courses. Concerning the learning acquired after the mini-course, 23.8% of the participants stated that the contents were not offered in their institutions; listing animal behavior, pain diagnostic, animal welfare and sentience, as themes with little attention on their veterinary schools. After the mini-course, we observed an increase of up to 32.1% in pain recognition and welfare definition by the participants, accrediting sentience and emotion features to animals; which before the mini-course were not cited. Additionally, we noted that participants did not know how to define pain (31.3%) and animal welfare (79.8%) before the contact with the modules, being this percentage reduce to zero after mini-course. When participants were asked to evaluate the mini-course, their comments and suggestions, the answers presented were positive. The most common recommendation was to give the mini-course higher publicity (39.4%), and the principal suggestion was maintaining the mini-course available online (26.3%), and all the 84 participants said they would recommend the mini-course. **Final considerations:** Due the higher percentage of correct answers to specific pain and animal welfare questions, the online mini-course on “The relevance of pain to animal welfare” may be considered an efficient teaching tool, bridging an important gap in veterinary curriculum. Also, by the wide participant acceptance, the mini-course seems to have hold the public attention.

Key-words: veterinary medicine, questionnaire, students, sentience.

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