Analysis of perception of risk factors for public health in the use of hormones in assisted reproduction programs in cattle

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In recent years, there has been a marked increase in hormonal protocols application for assisted reproduction programs in cattle. Because of this frequent use of exogenous hormones, it is essential for practitioners to have technical knowledge for the proper use of these substances, respecting grace periods for consumption of meat and milk, as well as take care to handle these drugs. The purpose of this study was to analyze the knowledge and the risk perception of cattle farmers and veterinarians on the use of hormones used in assisted reproduction programs in cattle and to determine the possible occupational hazards. The method used in this study was participatory research through personal interviews to collect data. A total of 65 farmers and 40 veterinarians were interviewed in 50 municipalities from 10 Brazilian states (SC, PR, SP, MG, MS, MT, GO, RO, AC and RR). For grouping and analyzing data related to risk perception in the use of hormones in the reproductive assisted programs, it was considered the following socioeconomic factors: schooling, number of animals and reproductive biotechnologies used in the farm, time of use of the biotechnologies and time in the activity. The variables of perception of risk factors were: veterinary care, the knowledge of the grace period of at least two hormones used on the property, training on the handling of hormones, use of personal protective equipment (PPE) for manipulation of hormones and knowledge of the group of people who should not manipulate hormones. The correspondence between socioeconomic factors and risk perception was assessed by analysis of multiple correspondence and frequency, using Statistica 7 software. All of the interviewed farmers said that the stores do not require veterinary prescription for the sale of hormones. The grace period is unknown for 69.2% of farmers and 65% of veterinarians. The use of PPE (usually only gloves) is adopted by 56.9% of farmers and 92.5% of veterinarians. The group of people who should not manipulate hormones was known for 21.5% of farmers and 62.5% of veterinarians. Regarding the cattle farmers, there was a positive association between the socioeconomic factors "has higher formation" and "less than 5 years of time in the activity" with the risk factor variable "is aware of the group of people who should not manipulate hormones" (P < 0.01). Among veterinarians, there was a positive association between the socioeconomic factor "over 11 years of time in the activity" with the risk factor variable "know the grace period" (P = 0.04). Other associations found between the risk factors were "do not know health risks" with "doe not guide the assistants on the occupational hazards" (P < 0.01) and "doe not guide the assistants on the use of PPE" (P < 0.001). It is concluded that there is a lack of information between breeders and veterinarians about the grace period of hormones, on the importance of using PPE when handling the drugs and the group of people who should not manipulate hormones, indicating greater vulnerability in matters of professional health.

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