Abstract

Stockpeoples’ ability to recognize pain in their livestock, and to respond appropriately, is of utmost importance for animal welfare. Assessment of pain is complex, and attitudes and empathy are thought to play a role in peoples’ responses to the sight of pain. In a separate paper we investigated the dimensionality of Norwegian dairy goat stockpeoples’ goat-oriented attitudes and empathy. This paper investigates how the stockpeople assess and manage pain and disease in goats. The interrelationships between pain perception and provision of veterinary attention were explored, as well as how these two measures are associated with demographics, attitudes and empathy. Pain assessment scores for individual conditions ranged across most of the picture-based pain assessment scale. Dystocia, gangrenous mastitis and the neurological form of caprine arthritis encephalitis were considered most painful. Linear regression showed that one attitude dimension was positively associated with mean pain assessment score (mPAS), while growing up on a goat farm, having farming as main income and having seen a large number of the conditions were negatively associated with mPAS. Cluster analysis on reported frequency of contacting veterinary surgeons for ten conditions revealed two distinct groups of stockpeople. Logistic regression showed that females, older stockpeople and stockpeople who grew up in a rural district were significantly more likely to be in the group that more frequently contacted veterinary surgeons. We conclude that training of stockpeople needs to focus on evaluation and management of pain to ensure a high standard of animal welfare.

Keywords: animal welfare, dairy goats, human-animal relationships, pain assessment, pain management, veterinary treatment

Introduction

Stockpeoples’ ability to recognize pain in their livestock, and to respond appropriately, is of utmost importance for animal welfare. Pain has been defined by the International Association for the Study of Pain (IASP) as “the unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” (Loeser & Treede 2008). The ‘Five Freedoms’ and the accompanying provisions (FAWC 1993) are widely accepted as a solid framework for evaluation of the welfare of farm animals, and the actions required to safeguard animal welfare. The third freedom states that animals should have “freedom from pain, injury and disease — by prevention or rapid diagnosis and treatment” (FAWC 1993). All animals will inevitably experience some pain at times, as it is an inherent part of living. However, high welfare standards require that steps are taken to prevent unnecessary pain and rapidly alleviate unavoidable pain. In the livestock industries pain may result from injuries, diseases, management practices and poor handling techniques. Examples from the dairy goat industry include the routine disbudding of goat kids (albeit with local anaesthesia and long-acting pain relief according to Norwegian legislation [Norwegian Ministry of Agriculture and Food 2005]), mastitis, chronic infectious diseases and lameness. Research applying objective methods to evaluate pain involved in any condition in goats is lacking, with the exception of pain related to disbudding (Alvarez et al 2009; Alvarez & Gutiérrez 2010). Physiological measures may be useful in prey species that are unlikely to display overt signs of pain unless there are advanced injuries or disease, but the technical requirements render these methods less feasible for on-farm assessment (Anil et al 2005; Weary et al 2006). This underlines the importance of the stockpeoples’ skills in identifying and quantifying pain based on qualitative observations of subtle behavioural changes, but also based on clinical symptoms, as the severity of lesions may be related to pain severity (Gregory 2010). Thus, early identification and accurate assessment of pain requires knowledge about health and natural behaviour of the species and a good knowledge of the individual animal (Molony & Kent 1997; Rutherford 2002).

Research on attitudes towards pain in animals has mostly addressed the perspectives of veterinary surgeons (Price...