

# Foal weaning in Italy: management and factors associated with the development of abnormal behaviours



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## INTRODUCTION AND AIM

In free ranging horses, weaning is gradually initiated by the dam at around 9 months, whereas domestic horses are weaned often abruptly at around 5-6 months.

This, together with other management practices, possibly causes stress to the foal and is considered a risk factor in the development of abnormal behaviors, such as weaving, box walking, wind suckling and wood chewing. These stereotypic behaviors are quite a common feature in sport horses.

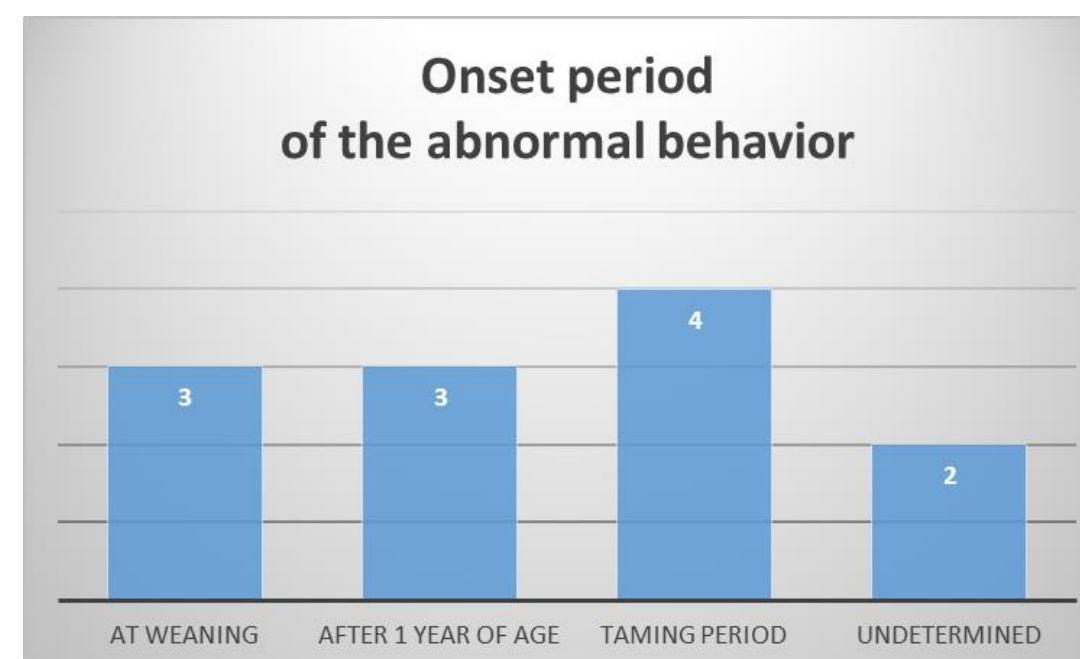
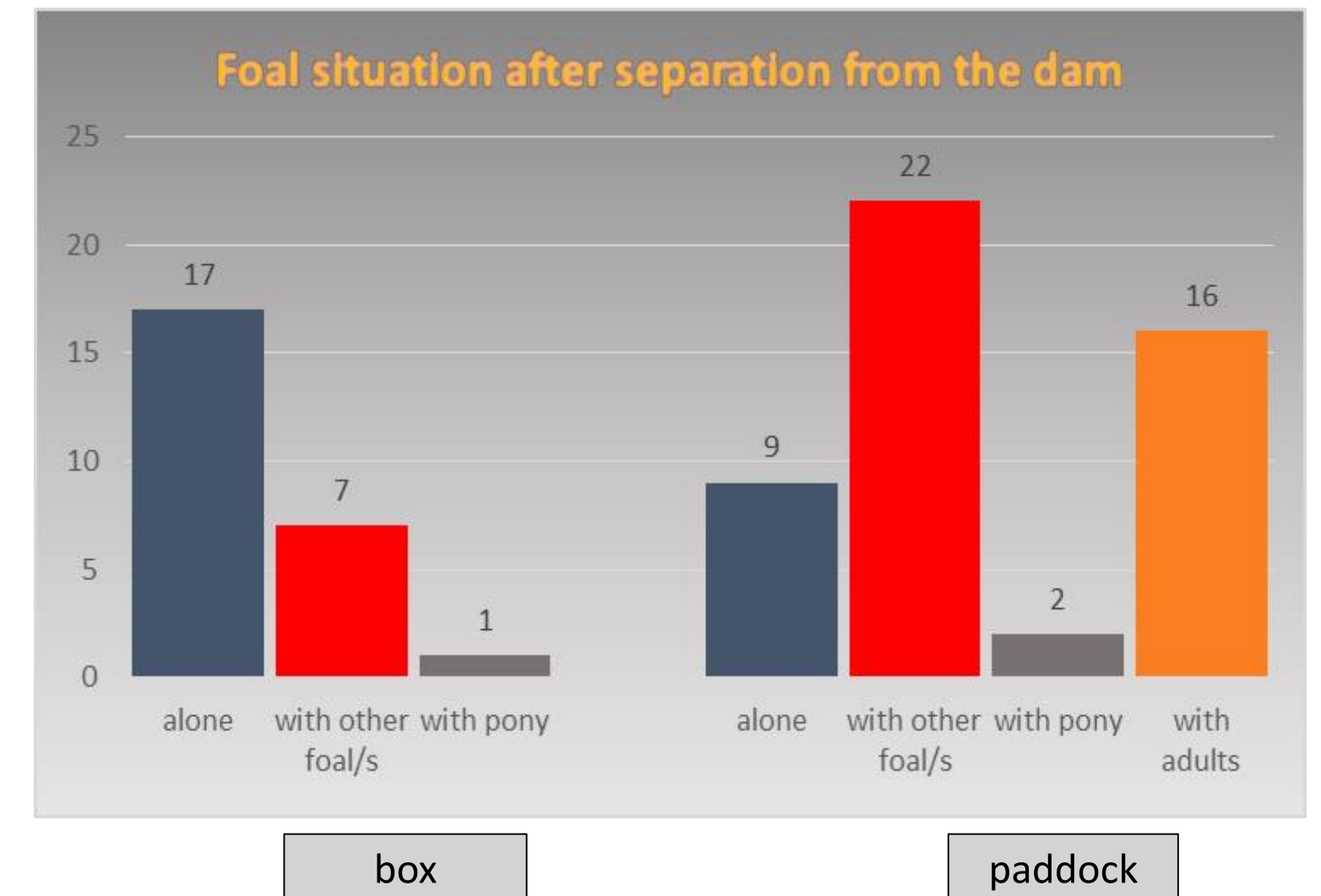
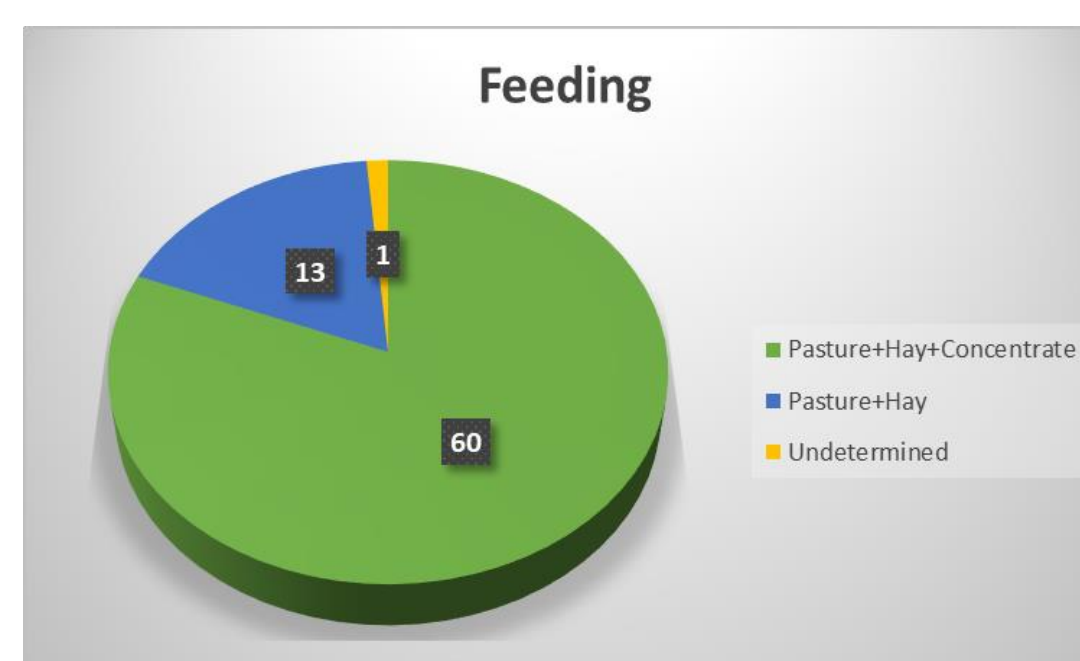
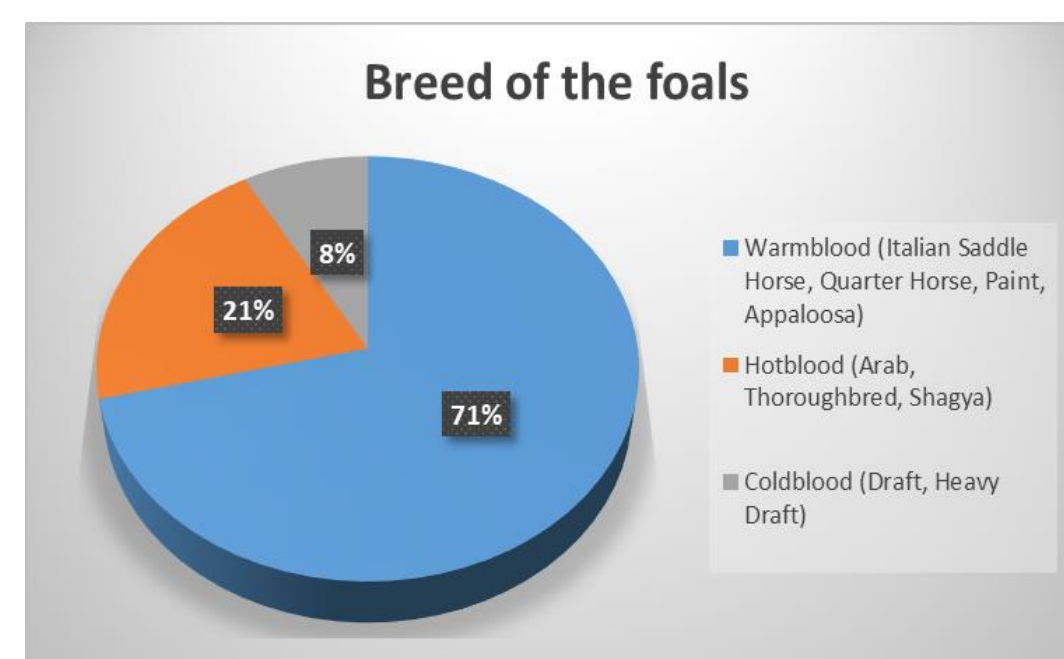
**A survey was carried out to assess pre-weaning and weaning management practices, with the aim to investigate possible risk factors associated with the development of abnormal behavioral patterns.**

## MATERIALS AND METHODS

An **online survey** was carried out according to Parker et al. (2008):

- 22 questions concerning pre- and weaning management and behavior of both foals and mares.
- Studied factors: breed, feeding practices, weaning management, paddock size and housing type

Data from 74 breeders of Central-Northern Italy, describing **148 horses**



## RESULTS and DISCUSSION

**Abnormal behavior type and frequency in general** (mares and foals together): oral-ingestive stereotypies (65%) - wood chewing most frequent (35%).

**12 foals out of 74 showed abnormal behavior (16.2%)**

- Expression of foal's normal behavior is negatively affected if the dam is aggressive toward humans ( $P < 0.05$ ,  $\chi^2$  test).

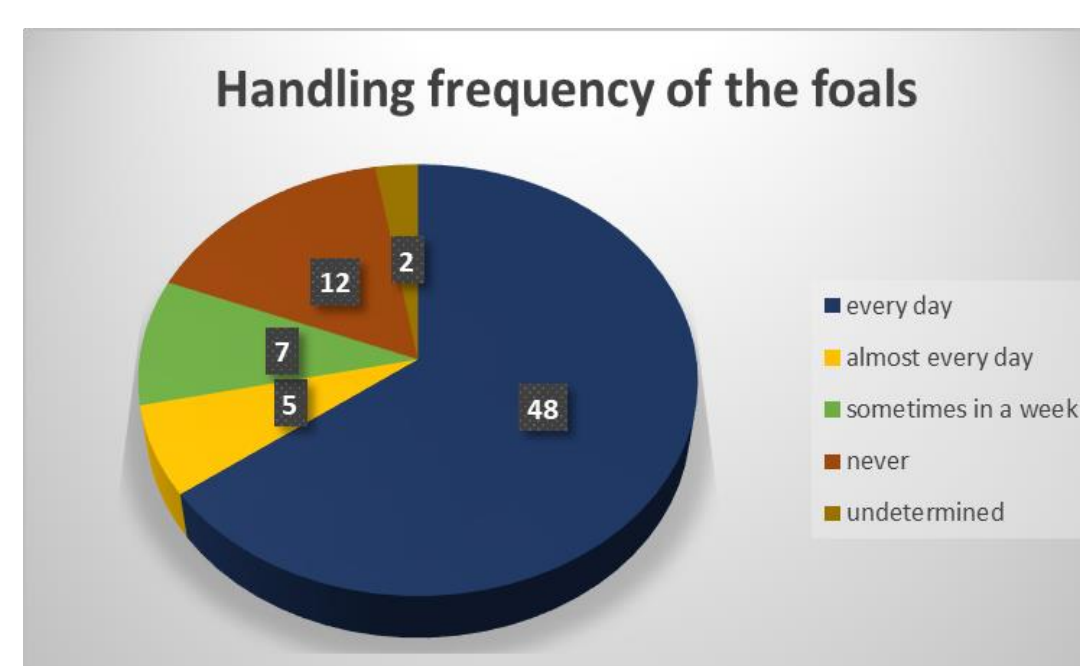
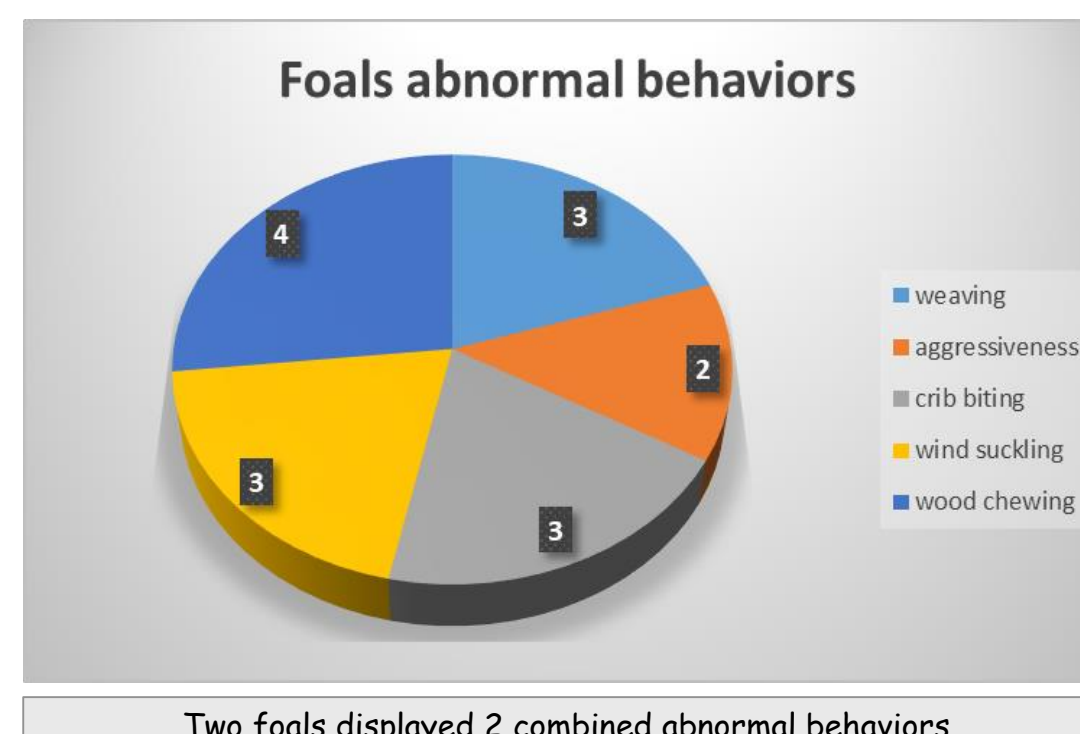
Following factors showed a trend for significance ( $P < 0.1$ ):

- abnormal behavior in mares  $\rightarrow$  development of abnormal behavior in foals: 3 out of 8 stereotypic mares had foals with the same behavior.
- mare's dominant attitude in the herd  $\rightarrow$  dominant foal behavior
- foal's early handling by humans negatively associated with dominant behavior

(Dominant, middle- or low-ranking horse: in accordance to the number of threats given and received in the herd)

**Comparing results to similar surveys:**

- Italian breeders wean their foals mostly abruptly at an average age of 7 months vs 5-6 in other Countries
- Higher average percentage of horses with abnormal behaviors: 13.5% (foals 16.2%; mares 10.9%) of the sample vs a mean of 5.2% from other studies



## CONCLUSIONS

- The high percentage of mares and foals presenting abnormal behaviors is symptom of problems in the management of the observed horses. Anyway, probably due to the **small size of the sample**,
- the study of management risk factors evidenced only trends for associations between the studied factors and the onset of undesired behaviors.
- Mares aggressive towards humans are associated with foals not expressing the complete range of normal behaviors typical of their age.
- Similar surveys are carried out since years in other Countries and a reduction in the incidence of behavioral problems was observed afterwards, probably due to the consequent increased awareness of the breeders.

