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## **Assessment of the welfare of racehorses in Central Java, Indonesia**

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### **Abstract**

As many other developing countries, animal welfare issue is not a big concern in Indonesia. This is more neglected in livestock which produces foods such as beef cattle, goat, sheep and pig. It is easier to understand the level of welfare in animals which have more direct contact with human such as companion and working animals such as horses. This study then was aimed to assess the level of animal welfare of horses used for racing in Central Java, Indonesia. In these two decades, equestrian sports such as racing and riding have been getting more popular in Indonesia and resulted the use of horse as racing object also increased. By respecting the five freedoms of animal, we assessed the welfare of 200 heads of racehorses, belong to 14 owners in Central Java Indonesia. From various sources of literatures and management practices on regular basis five indicators were selected to describe the five freedoms of animal attributes. Racehorses were individually assessed using those indicators. The assessment was complemented with information on farm level such as feeding, housing and health care management, exercise, training methods, and human-animal interactions. The data were analyzed descriptively. The results showed that 63.66%, 24.28% and 12.07% of racehorses had relatively good, moderate and poor welfare respectively. In conclusion, most of horse used for sport activity especially racing are well handled. Welfare assessment based on objective parameters can be used as first step to improve horse welfare in Indonesia, but need continuous improvement to make better quality of those horse's life and the racing and equestrian riding itself.

*Keywords: welfare assessment; racehorse; five freedoms of animal, Indonesia*

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## ***Introduction***

Horses are one of important livestock in Indonesia, and there is no significant attention by the government for the development. The existence of the horses have a strategic value for utilization as working animals, one of them as transport horses. On the other hand, horses development was encouraging as its utilization as a means of sport facilities such as horse racing and equestrian that has positive effects for the development as an industrial commodity which is able to increase the economic value of the horses. Traditional welfare standards have focused on the absence of negative affective (mental) experiences e.g. pain, fear, distress. The ability to identify situations that elicit negative emotional responses would allow animal caretakers to prevent or minimise them, to reduce poor welfare, and improve human and animal safety (Stratton et al, 2014). **Fleming et al, (2013 Athletic competition can be stressful for horses (Cayado et al., 2006), and subsequently there is a need to evaluate the effect of various types of events and common equestrian practices on horses.** It is argued that if an animal is experiencing pleasure or happiness, or is in a happy emotional state, then its needs are being met, and its welfare is good (Boissy et al. 2007). This approach may render the assessment of other factors such as the Five Freedoms, domains or needs welfare frameworks unnecessary. This study is expected to obtain information for the development of scientific study of the horses, and to understand the general conditions of Indonesian equine farming systems. This study aimed to looking for the welfare level of the race horses in Central Java Indonesia. Welfare encompasses both physical and mental health (Broom, 1991; Dawkins, 2004, 2006), and while the physical health of horses may be monitored during events, there are few measures that assess the mental state of horses during competition. An animal's mental state can be expressed through their behaviour (Broom, 1991). There are a number of methods of evaluating behavior and welfare of horses at rest or in stables, including the use of ethograms (e.g. Hausberger et al., 2009; Lloyd et al., 2007) and the assessment of stereotyped behaviours as a psychological welfare indicator (Henderson, 2007; Mason and Latham, 2004) There is a rapidly growing motivation to better understand how animals experience their world, and how they are affected by human presence, activity and control

## ***Methodology***

The research was conducted from May to October 2016 in racehorses training center in Salatiga, Central Java, Indonesia. As many as 200 racehorses belong to 14 owners were assessed. Data retrieved by conducting direct interviews by a questionnaire with the owners or stable managers and also observing the real condition in the stables. Data taken include the identity of the breeders or owners and farm managers, stable management. The study also took environmental data to analyse the influence of the environment to the horse performances. we assessed the welfare of 200 heads of racehorses, belong to 14 owners in Central Java Indonesia. From various sources of literatures and management practices on regular basis 25 five indicators were selected to describe the five freedoms of animal attributes. Racehorses were individually assessed using those indicators. The assessment was complemented with information on farm level such as feeding, housing and health care management, exercise, training methods, and human-animal interactions. The data were analyzed descriptively. The principal of five freedom was the protocol Objective and preferably non-invasive indicators of positive emotion are needed to assess animal welfare status, verify assumptions regarding environmental enrichment, and

promote positive welfare. There is no one right way to keep horses. An ideal management system is dependent upon a combination of factors such as available space, climate, discipline the horse is used for, cost effectiveness, number of horses on the property, a horse's natural needs, mental and physical well-being, etc. It is easy to place human needs and preferences before the needs of a horse. Therefore, a simple way to test whether or not your housing system provides your horse with good welfare is by consulting the Five Freedoms (Salumets, 2012).

## Results and Discussion

Table 1. Welfare Level of Racehorses in Central Java, Indonesia

Daily Management	Welfare level (%)		
	Good	Moderate	Poor
Eating and Drinking Aspect	58.93	38.39	2.68
Health aspect	51.02	30.61	18.37
Comfortable aspect	100.00	0.00	0.00
Fear aspect	60.71	35.71	3.57
Normal Activity aspect	47.62	16.67	35.71
<b>Average</b>	<b>63.66</b>	<b>24.28</b>	<b>12.07</b>

From the result we can see that in general, racehorses in Central Java, Indonesia were in good welfare (63.66%), including eating and drinking aspect (58.93%); health aspect (51.02%); comfortable aspect (100% respectively); fear aspect (60.71%); and normal activity aspect (47.62%), moreover, there are 24.48% in moderate welfare, including eating and drinking aspect (38.39%); health aspect (30.61%); comfortable aspect (0%); fear aspect (35.71%); and normal activity aspect (16.67%), on the other hand, there are 12.07% in poor welfare condition including eating and drinking aspect (2.68%); health aspect (18.37%); comfortable aspect (0%); fear aspect (3.57%); and normal activity aspect (35.71%). Feral horses spend about 60% of their time eating, 10% of their time lying down, 20% of their time standing and 10% of their time doing other activities. Compared to stabled competition horses kept in individual stalls and fed rationed feed – 15% of their time is spent eating, 65% standing and 15% lying down. Although these horses usually receive good nutrition, their eating is done over 4-5 hours; a third of the time spend by feral horses who are free to graze at will (16-18 hours per day). Feeding at will is most likely preferred to frequent meals as horses have been shown to display less problem behaviours when free fed. Problem wood chewing behaviour occurs predominantly overnight in stabled horses that do not have any access to food during this time. Racehorses that feeding high energy diets found that 82% of horses had some degree of ulceration. Ulcers can result in weight loss and poor body condition. There is some evidence that the pain of gastric ulceration is one of the factors in the development of oral based stereotypies (Salumets, 2012).



Fig.1. horse racing activities in Central Java, Indonesia



Fig.2. Daily routine for race horses

## Conclusion

In conclusion, most of horse used for sport activity especially racing are well handled. Welfare assessment based on objective parameters can be used as first step to improve horse welfare in Indonesia, but need continuous improvement to make better quality of those horse's life and the racing and equestrian riding itself.

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