

## Training and Health of Captive Elephant Keepers in Sri Lanka

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The ancient Kings of Sri Lanka had elephants in their army to show their strength and to maintain status. It was customary for a prince to parade on a tusker in the city immediately before his marriage ceremony. At that time, elephants were used for logging, to pull carts, plough fields, execute criminals, in war, and in religious and state ceremonies (Jayawardena 2013). Usually elephants around 10 years of age were captured from the wild in kraals or by noosing and tamed. This knowledge has been documented in Ola leaf manuscripts (Jayawardena 2013). Thus Sri Lanka has had substantial experience in elephant husbandry practice, and the expertise to manage problems of managing wild-born elephants in captivity (Dangolla *et al.* 2002a).

In earlier times, the fathers and grandfathers of elephant keepers were also keepers and traditional knowledge of both elephant management and treatment was passed down from generation to generation. Most children of keepers did not attend school but sons would learn elephant keeping and agriculture while the daughters became housewives (Jayawardena *et al.* 2011a). This inheritance pattern was broken with the current generation because most children of former keepers did not take up elephant keeping (Weerasiri *et al.* 2004). With the socio-economic changes of modern times, elephant keepers started educating their children, and did not want them to become keepers (Jayawardena *et al.* 2011a).

The need for proper training with new techniques for both elephants and keepers has been highlighted previously (Jayawardene 2013). It has been accepted that there is a gradual decline in knowledge of both traditional elephant management and native elephant medicine. However, new elephant keepers often do not

accept advice from the seniors who are masters of the trade. Perhaps, because they sometimes taught their apprentices using loud and abusive language (Jayawardena 2013). The new keepers appear to consider elephant keeping as just another profession (Jayawardena 2013). Several senior keepers have indicated that they left the profession after their elephant died due to this factor. Yet such retired keepers show their interest in elephants by meeting new keepers at festivals, by appearing when an elephant runs riot, by showing up when a keeper is injured by his own elephant, or when an elephant is seriously ill. This shows that the older generation of keepers loved their elephants and their profession and they still do.

In the recent past, new individuals have entered the elephant keeping profession either through interest or because there was no other occupation available for them (Jayawardena *et al.* 2011a). They have none or little traditional knowledge of elephant management or medicine and are relatively young. The majority of them believe that most elephant management issues can be settled using physical strength.

Until recently there had been no formal training for elephant keepers, both in private or state sectors, in Sri Lanka. This situation was identified in the year 2000, and the 'Captive Elephant Owners Association' was established. The association made attempts to educate keepers with the help of Indian veterinarians. However, this training was not well formulated and priorities were not identified. In addition, there was no recognition of the trainees subsequent to the training, which led to the failure of the training. In 2012, the state sector started training elephant keepers at Pinnawela Elephant Orphanage. This training was organized through the Postgraduate Institute of

Science of the University of Peradeniya. The training was conducted separately for junior and senior keepers. In 2014, the National Zoological Gardens at Pinnawela Orphanage successfully concluded another training program for novice prospective keepers. A group of 80 unemployed potential elephant keepers followed this program, which included five ladies. Up to this point, I have witnessed only one female keeper. She looked after a privately owned elephant but she too gave up the profession when she got married. Currently there is one female assistant keeper who helps her husband to look after the elephant.

Some of the medicines used by senior keepers in traditional elephant treatment have proven to be successful, for example remedies for wounds and sinuses (Perera *et al.* 2004). Though not scientifically tested, some medicines administered during mild colic also work.

The first clinical case of tuberculosis in a captive elephant in Sri Lanka was detected in the year 2001 (Dangolla *et al.* 2002b), and was suspected to have been contracted from the father of the keeper who was undergoing treatment for tuberculosis. Since then the awareness of TB in elephants and in elephant keepers in Sri Lanka has increased. Some calves in the Elephant Transit Home in Udawalawe have been suspected to be infected (Perera *et al.* 2011) and a few from Pinnawela Elephant Orphanage have been detected to be sero-reactive and are being treated.

The trunk wash test to obtain bacteria for culture is the recommended confirmatory test for elephant TB. Captive elephants in Sri Lanka do not allow anybody to manipulate their trunk, and they are difficult to train to suck saline into the trunk, raise the trunk, and expel the saline as is required to obtain a sample. Consequently, attempts to collect trunk wash samples from 60 captive elephants by me failed. An investigation on captive elephant keepers in Sri Lanka revealed a high possibility of keepers being sero-positive and warrants more attention (Dassanayaka *et al.* 2011). In general, keepers of privately owned elephants appear to neglect their health for unknown reasons (Dangolla *et al.* 2012).

In 2009, when privately owned elephants were brought to Kandy for the Esala Perehera, a mobile health clinic for keepers emphasizing respiratory health, was held. Approximately 10% of the keepers were Mantoux reactors and some had signs of latent TB (Jayawardena *et al.* 2012; Dassanayaka *et al.* 2011). Later, when such suspected keepers were advised to report to a chest clinic for further investigations they did not comply. This non-compliance by keepers can often be observed if they do not see the direct relevance and impact on their lives, especially monetarily. The situation among the same keepers with regard to liver and kidney functions were not very different (Jayawardena *et al.* 2011b). A number of them had liver and kidney problems according to serum enzyme tests and urinary analyses (Jayawardena *et al.* 2011b). One heavily diabetic keeper and a keeper with hematuria were diagnosed, but both were unaware of their condition (Jayawardena *et al.* 2011b). One elephant keeper with oral cancer died before the confirmatory histopathological report arrived (Jayawardena *et al.* 2014). Most keepers had missing teeth and one keeper did not have any teeth. The reasons for ill health among keepers include excessive liquor consumption, smoking and chewing beetle. The risk to life in their line of work may be a possible reason for these excesses.

The situation of the keepers at the Pinnawela Elephant Orphanage is slightly different, possibly because there is discipline among them due to the orphanage being a government institute. Relatively few of them smoke and consume alcohol frequently, and therefore the frequency of Chronic Obstructive Pulmonary Disease (COPD) is much less. However, it is noteworthy that the frequency of COPD and also Mantoux reactivity among them was much more compared to the general Sri Lankan population (Dassanayake *et al.* 2014). At a later time, when a batch of new people including five ladies was taken in for training to become elephant keepers, clinical results of their chest examinations were very similar to the general population.

Typically, when an elephant contracts an unknown or rare condition, their keepers try local remedies

before contacting an ayurvedic (traditional) doctor and when both these fail, a veterinarian is contacted. These days newly educated owners first contact veterinarians or both veterinarians and ayurvedic doctors simultaneously. Lack of priority referral of veterinarians is a disadvantage since modern western medicine and its approach can detect rare and new conditions effectively and early. This situation was obvious in Raja, the male elephant of Kegalle temple, who had an irritable bowel condition for more than 10 years, possibly as a result of the stress caused by a road traffic accident (Dangolla 2012).

Captive elephants will retain an important place in Sri Lanka into the future and elephant keepers will play a significant role. The observed decline in the elephant keeping profession warrants attention. Education programs by veterinarians and other experts must be introduced as part of elephant-keeper training, as at the Pinnawela Elephant Orphanage. Private individuals and institutions must hire only such trained keepers. For their continued professional development, new recruits must be kept under studentship of senior keepers until they find their own jobs. Social acceptance of elephant keepers must be improved if this profession is to be developed further and if captive elephants are to be given better care.

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