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Animal Welfare: Mismanagement That Affect Animals' Well-Being, and Performance

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Abstract:

The objective of this work was to draw attention to the mismanagement of domesticated and stray animals that affect their well - being, health and welfare. Some animals were brought to The Teaching Veterinary Hospital (TVH), College of Veterinary Medicine, University of Bahri, with different mismanagemental conditions that interfered with their normal lives. These conditions included, delayed delivery to veterinary services centers by their owners due to their presence out in the field, mishandling during loading and unloading, subjection to stressful work or harmful conditions while getting benefits from them, unsuitable housing and management, lack of food and uncomfortable resting situations after work. Also some cases of abandoned homeless animals suffered from starvation and loss of shelter were included, all these conditions were recorded and their photos were taken. All tough situations, resulted in animals suffering from injuries, long standing affections that cause chronic pain, restlessness, weakness, stresses, starvation and loss of function which interfered with their normal activities, health, production, reproduction and welfare. It is concluded that some animals suffered from inhumane situations due to their owners' carelessness and ignorance which exposed them to many physiological and psychological stresses. Delayed veterinary care, when animals' health is on the line, rough handling, inconvenient housing and management and abandonment diminish animals' rights and deprive them of their welfare. The activation of Animal Welfare Act by the authorities is necessary. **Keywords:**

Animal mismanagement, Starvation, Shelter, Stress, Welfare.

Introduction:

Animals' production and well- being are integral part of the way-of-life for the people of the world. Good animal management practices include control of diseases and control of nutritional, physiological and morphological defects (physical defects) as any one of these can temporarily or permanently reduce the efficiency of an animal (Baker and Greer, 2002).

Animal welfare (AW) is a human responsibility; it means how the animal is coping with its surrounding. Animal well-being includes proper housing, management, nutrition, disease prevention and treatment, responsible care, humane handling, and, when necessary, humane euthanasia. Every person in contact with animals has an effect on animal welfare, moreover, veterinary professionals are concerned about animal welfare (Yeates, 2013).

The World Organization for Animal Health (OIE) is a body formed in 1924 with the objective of improving transparency and international collaboration in the control of serious epizootic animal diseases. In 2001 the OIE developed global standards and guidelines on animal welfare practices, animal health was the key component of animal welfare (Khan, 2007). The Sudan joined the OIE in 1956 (OIE, 2005) and The Animal Welfare Act was issued by the National Council in 2015 (Mohammed 2015).

Although animal health and A W are guarded and applied by strong rules most people are not aware of their importance and their impacts on their animals' productive and reproductive performance. Some owners abandon or euthanase their companion or working animals due to financial limitations (Hennessy *et al.*, 1997, Tuber *et al.*, 1999) or age factors where they became unable to work .

Parturition is a stressful process for cows and their calves and an abnormal parturition further exacerbates the stress (Sathya *et al.*, 2007). Calving difficulty causes trauma for both cows and their offspring, and can lead to increased rates of uterine infections, periparturient disorders ,longer calving intervals (Yasar and Gazioglu,2006), lower milk and reduced production, of newborn calves (Bellows and Lammoglia,2000).

When animals are exposed to adverse environmental conditions which cause many unfavorable consequences, ranging from discomfort to death , they are subjected to hormonal and behavioral reactions to these stressful situations. However, the psychological aspects of environmental stimuli are powerful activators of endocrine responses (Dantzer and Mormède, 1983).

The objectives of this study were to draw attention to some aspects of animal mismanagement and violation of their rights by abandonment. Accordingly cases of animals brought o the TVH and had experienced some tough conditions with their owners were reported in addition to some cases of stray or working animals in the streets devoted from their right.

Materials and Methods:

Area: The Teaching Veterinary Hospital (TVH) is one of the departments of the College of Veterinary Medicine, University of Bahri. It is located in North Khartoum, city of Bahri and it provides veterinary services to whole Khartoum state. Since June 2013 up to date.

Animals: Cases admitted to the TVH for veterinary care were observed and those of mismanagement were reported and their pictures were taken using Sony Xperia 3 cell phone camera .Moreover, pictures of some domesticated or stray working animals suffering from bad management were also taken.

Surgical Interference: Different anesthetic protocols (Hall *et al*,2001) and surgical operations were applied according to each situation. Suitable suturing methods were performed for different wounds (Fowler, 2010, Ramdan, 2011, Perret-Gentli, 2015), rumenotomy was performed according to (Dehghani and Ghadrdani,1995). Wound dressing was done (O'Dwyer, 2013) as well as cesarean section (Schultz *et al.*,2008). Moreover, tooth rasping was done when necessary (Joshi *et al.*, 2018).

Results and Discussion:

Cases presented to the clinic of the TVH were observed, recorded, treated and followed up. A camel was brought with a wounded neck by a sharp object due to the owner's mishandling during the process of its loading in a truck for exportation purpose (Figure 1a). This camel suffered from pain and bleeding, it was restrained, sedated (Figure 1b) and the wound was sutured with some medication and advices to the owner for after care.



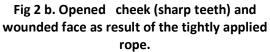
Figure1 a: Wounded camel neck by a sharp object Figure1 b: Restrain and sedation for operation Generally, human-animal relationship makes owners to use them and gain any benefits that driven from them. Dependency represents one of human-animal relationship; human depends on animals to get benefits from their work. Animals' welfare and rights are safely guards form the inhumane approaches of owners (Yeates, 2013). In case of human in proper approach and unknown animal husbandry, animals are harmed by mishandling and management and this will end in animals suffering from pain, wounds, fractures or finally death. On the other hand if mismanaged and hurt animals survived, their owners will be burdened by their treatment cost, stopped work and after care and finally may be their loss. However, in case of untrained or vicious animals human will be injured or killed. In all cases, awareness of owners about how to handle animals and approach them is necessary (Blackwel, 2001).

To restrain their camels owners tied their muzzles by fine and sharp ropes around the face tightly (harness, Figure 2a) which ends in a wounded face.

The movement of the camel's jaw with an unnoticed sharp tooth resulted in a perforated cheek (Figure 2b). The tooth was rasped and cheek wound was sutured in the TVH.



Figure 2 a: A muzzle tightly applied by ropes around the face.



Some owners tend to make their own devices for controlling their animals like rams contraceptive devices (Mohammed, 1997) or harnesses from cheap materials instead of buying special ones. These devices can induce injuries to their animals if they were hard or sharp and not standardized as some owners have less concern for their animals (Hills, 1993)

A female sheep was brought from the pasture with a neglected sharp tooth which resulted in a perforated cheek the tooth was rasped and the wound was sutured (Figure 3).



Figure 3: A neglected sharp tooth- perforated cheek (ewe)

During the movement of nomads seeking for rich pastures, different health problems of animals occur usually. When sharp teeth are neglected and not treated they cause wounds, abscesses, cheek perforation and finally food loss. These conditions are related

to unavailability of veterinary services or knowledgeable owners around where simple cases are aggravated.

Figure (4) shows a crocodile brought to the TVH from the Zoo with a hook inside its oral cavity .It accidently swallowed the hook and suffered from pain due to the previous unprofessional trials for the removal of the sharp object in the zoo and was extremely stressed.



Figure 4: A hook inside the crocodile's oral cavity.

In the veterinary hospital surgical interference was performed to remove the hook but, unfortunately it passed away.

A cow was brought with its owner complaining from sounds being heard from its rumen during movement. On rectal palpation stones were felt and about 15 kg of small stones were removed by rumenotomy (Figure 5a &b).



Figure 5a: Cow rumenotomy-Foreign body

Figure 5b: Sands and Stones

(Stones)

Finding foreign bodies inside animals is directly associated with owners' care and management of their animals residence and feeding places and their welfare. When sharp objects or other harmful things found beside them or put on their way carelessly they will swallow them blindly. Some animals have to take their food from the ground mixed with other foreign bodies which are discovered after causing digestive problems.

A pregnant cow was brought with hematoma being harmed by other cows (Figure 6) hematoma was opened and a drain was applied. Crises among animals usual happen during feeding, birth giving or even after birth .They are attributed to crowding and not properly managed farms. Horned cows tend to harm their pens- mates which causes traumas, hematomas, wounds and hernias that will be aggravated in case of pregnant ones.



Figure 6: A cow with hematoma in the belly (hurt by cow's horns)

Some farms lack the proper system of housing by putting animals of different ages, situations or species together .A camel living among cows was hurt by their horns in its abdomen, it was brought to the TVH with its intestine outside (Figure7a) as well as a newly borne calf was presented with its intestines exposed outside (Figure 7b), its mother

trampled on its abdomen after its birth. Moreover, a one-day old calf was brought with umbilical hernia (Figure 7c); in all these cases the intestine was reduced successfully.



Figure 7a,b &c: Extra abdominal intestine due to housing mismanagement

A cow suffering from dystocia was brought to the TVH, after being wrongly interfered with by its owner and neighbors, with an extremely swollen vulva and the dead fetal limbs tied with a dirty rope (Figure 8). This case was treated surgically by cesarean section and intrauterine pessaries.



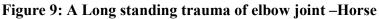
Figure 8: Enlarged vulva, a dead fetus tied by a dirty rope

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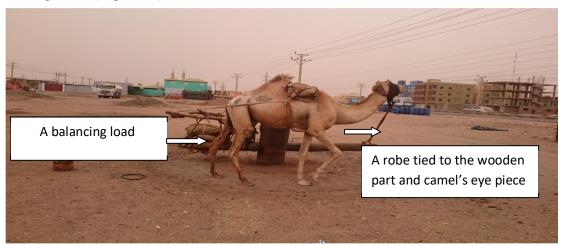
In case of dystocia if not handled by professional veterinarians the loss of dam or fetus or both will be of an economical impact to the owner or company. Calving stress affected several blood parameters of the dam and calves including cortisol, cholesterol and vitamin A and E (Civelek *et al.*, 2008). In model and ideal farms these conditions are controlled, however, in small farms owners are influenced by their peers such as other farmers and their choices (Fishbein and Ajzen, 1975)

A working horse with the history of an old neglected simple elbow lesion was introduced to the TVH with an abscess for dressing (Figure 9). Acute cases are easy to be handled and continuous pain and stress can be avoided, but owners do not want their work to stop. This cruelty finally stops their work and animals may be handicapped and abandoned.





Usually people are accustomed to the scene of a camel running a modest machine for sesame seed grinding with closed eyes to obtain sesame oil .This machine is composed of many parts that exert extra loads on the camel's body in addition to the continuous moving stress (Figure 10).



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Figure 10: Stressed camel, sesame seeds grinding

The one -humped camels (*Camelus dromedarius*) have their own characteristics which make them capable for working for long times under harsh conditions (Al-Baka, 2016) and their eyes are modified to suit these harsh environment (Abuagla *et al.*, 2016). The idea of working camel with closed eyes so as not to be distracted under stressful condition looks inhumane. Also if necessary it can work alternatively with another camel in a fixed time to avoid stress. Heleski *et al.*, (2005) reported that, economic concerns are the most common barrier to animals welfare improvement.

In the street some stray donkeys are seen under the sun (Figure 11 a) and starved ones try to find something to eat from the street (11 b) during which they may be exposed to traffic road accident. (Fig.11c). Moreover, some owners after work tie their donkeys to anything in the street to rest either under shade or under the sun and leave them eat from the ground (Figure 11d).



Figure 11 a,b,c &d: Abandoned and stressed donkeys

The scene of many stray donkeys wandering now days in the city became one of the bad views. This happens due to owner's abandonment due to the cost of feeding or animal's in ability to work as before which reflect an inhumane reaction .They are exposed to thermal and cold stress factors that affect their physiological responses (Grandin,1997). Starved animals are forced to change their feeding habit from herbivorous to carnivorous feeders just for survival. Khartoum locality authorities used to gather such animals in one known place, if their owners wanted them back they have to pay back first.

Donkeys and horses used to work from early in the morning, during the resting time of their owners, animals also need shelter for protection from heat and food and water supply. Al these poor conditions are attributed to owners' financial limitation (Yeates, 2013).

A horse suffering from superficial whip wounds was brought and treated in TVH (Figure 12).



Figure 12: Inhumane management: whipping of a horse

A stray monkey, which was abandoned by its owners, was brought to the TVH suffering from pain and nervous symptoms after being hit on its head vigorously (Figure 17) was finally euthanized. In both cases, the cruelty and mismanagement of humans towards animals are very clear. Usually to speed up working horses, owners beat them up inhumanely using whips which result in wounds that may be infected latter and interfere with their health and activity. Moreover, hitting of weak animals by kids just for fun shows that animals' rights and welfare are denied.

Conclusions:

Animals' mismanagement whether it occurs accidentally or in purpose affects animals' health, performance and welfare. Veterinary professionals and governmental authorities are responsible for educational work and extension activities to over-come these bad conditions and application of animal welfare practice. Owners should know that, animal welfare leads to financial benefits which results in economic savings. Moreover, they should be encouraged to get insurance for their animals and free treatment. To control such conditions owners and animal labors should be trained to notice any changes in animal's behavior and to know how to deal with them in different abnormal situations. First aid boxes should be available in pastures or farms to handle acute cases immediately and present them latter for professional treatment before their health and wellbeing are affected. Farms of large or small scales should be properly managed and separate pregnant cows from others. Newly borne calves should have their separate places to avoid any maternal or other animals harm.

References:

1. Abuagla, A.I., Ali, H.A and Zaroug, H.I. (2016). An Anatomical Study of The Eye of the One-humped Camel (*Camelus dromedarius*). *Inter. J. Vet. Sci.*, **5**(3): 137-41.

2. Al-Baka, A.H. (2016). Camels and Adaptation to Water Lack.,MRVSA5(Special issue) 1st Iraqi Colloquium on Camel Diseases and Management ,College of Veterinary Medicine / AlMuthana University 16-17 March ,54-69.

3. Baker, J.K. and Greer, W. (2002). *Animal Health - A Layperson's Guide to Disease Control*. Prentice-Hall, Incorporated: Upper Saddle River, NJ.

4. Bellows, R.A., Lammoglia M.A. (2000). Effects of dystocia on cold tolerance and serum concentrations of glucose and cortisol in neonatal beef calves. *Theriogenology*, **53**: 803-813.

5. Blackwell, M.J. (2001). The 2001 Inverson Bell Symposium Keynote Address: Beyonnd Philosophical Differences: The Future Training Of Veterinarian *Journal Of Veterinary Medical Education*, **28**: 148-152.

6. Civelek, T., Celik, H.A., Avic, G., Cenker and Cingi, C.C.(2008). Effects of Dystocia on Plasma Cortisol and Cholesterol levels In Holstein Heifers ad Their Newborn Calves. *Bull Vet Inst Pulawy*, **52**: 649-654.

7. Dantzer, R, Mormède, P. (1983). Stress in farm animals: a need for reevaluation. J Anim Sci. 57(1): 6-18.

8. Dehghani, S.N, Ghadrdani A.M. (1995). Bovine rumenotomy: comparison of four surgical techniques. *Can. Vet. J.*, 36: 693-697.

9. Fishbein, M and Ajzen, I. (1975). Belief, Attitudes, Intention and Behavior: An Introduction to Theory and Research, Addison-Wesley, Reading, M.A.

10. Fowler, E.M. (2010). *Medicine And Surgery of Camelids*. 3rded., Published by Wiley and Blacwell.

11. Grandin, T. (1997). Assessment of Stress During Handling and Transportation, J. Anim. Sci., **75**: 49-257.

12. Hall, L.W., Clarke, K.W. and Trim, C.M. (2001). *Veterinary Anaesthesia*, 10th ed., Harcourt Publisher, L.T.D.

13. Heleski, C.R., Mertig, A.G. and Zanella, A.J. (2005). Results of A National Survey of US Veterinary College Faculty Regarding Attitude Towards Farm Animal Welfare, *Journal of the American Veterinary Medical Association*, **226**(9):1538-1546.

14. Hennessay, M.B., David, H.N, Williams, M.T., Mellott, C. and Douglas, C.W. (1997). Plasma Cortisol Levels of Dogs at a county animal shelter. *Physiology and Behaviour*, 62: 485-490.

15. Hills, A.M. (1993). The Motivational Bases Of Attitudes Towards Animals. *Society and Animals*, **1**:111-128.

16. Joshi, M.M., Kipper, K.V. and Daji, P.P. (2018). The teeth rasping in a pet rabbit. Int. J. of Vet. Sci.&Anim.Husb.,3(1):pp:1-2.

17. Kahn, S. (2007). The role of the World Organisation for Animal Health (OIE) in the development of international standards for laboratory animal welfare Proc. 6th World Congress on Alternatives & Animal Use in the Life Sciences Tokyo, Japan, AATEX 14, Special Issue, 727-730.

18. Mohammed, S.S. (2015). Effect of Patrolling and Exposure to Solar Radiation Stresses on Some Blood Parameters of Police Horses (Sawari), Khartoum State, *Sudan.J. of Appl. And Ind. Sci. & Techno.*, **3**(2)-51.

19. O.I.E. (2005). The 16th Conference of the OIE Reional Coission of. Africa.WWW oie.int./doc./ed/d1183.pdf

20. O'Dwyer, L. (2013). The role of Antimicrobials in Wound Dressing .The Veterinary *Nursing*, 4(2): 3360-366.

21. Perret-Gentil, M.I. (2015). Principles of Veterinary Suturing. Research .Usta.edu./wp.content/upload: pp:1-25.

22. Ramadan, O.R. (2011). The Arabian Camel Surgical Encyclopedia.Colored Surgical Atlas.,King Faisal University ,publishing Center.

23. Sathya, A., Prabhakar, S., Sangha, S.P.S., Ghuman, S.P.S. (2007). Vitamin E and selenium supplementation reduces plasma cortisol and oxidative stress in dystocia-affected buffaloes. *Vet Res Commun*, 31: 809-818.

24. Schultz, L.G, Tyler, J.T., Moll, H.D. (2008). Surgical Approaches for Cesarean Section in Cattle. *Canad. Vet. J.*, 49: 565-568.

25. Tuber, D.S., Miller, D.D., Caris, R.H., Halter, R., Linden, F. and Hennessy, M.B. (1999). Dogs in animal shelters: Problems, Suggestions and needed expertise. *Psychological Science*, **10**: 379-386.

26. Yasar, A., Gazioglu A. (2006). Relationship between vitamin A and β -carotene levels during the postpartum period and fertility parameters in cows with and without retained placenta. *Bull Vet Inst Pulawy*, 50, 93-96.

27. Yeates, J. (2013). Animal Welfare in Veterinary Practice (1st ed.) Publisher, Universities Federation for Animal Health, Wiley –Blackwell, A John Wily and Sons Ltd., Publication.