TRAUMATIC INJURIES SUSTAINED BY CATTLE TRANSPORTED TO AKINYELE INTERNATIONAL CATTLE MARKET, IBADAN, NIGERIA.

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Abstract
Poor transportation systems and handling has resulted in several traumatic injuries of livestock in Nigeria. Cattle auction for sale at several markets have been identified with one injury or the other. However, there is paucity of information on the injuries sustained by cattle during transportation in Nigeria. Therefore, the study was designed to identify the different Traumatic injuries sustained when transported to Akinyele International Cattle Market Ibadan. The study was carried out for a period of five consecutive weeks (Monday-Sunday) between the period of 7.00am – 7.00pm. Direct observation with the aid of checklist was used to obtain information on Traumatic Injuries (Twisted Neck-TN, Injured Horn-IH, Injured Leg-IL and Bruised Skin-BS) sustained by cattle in Transit. The study revealed that a total number of 11,635 cattle were transported to the study area out of which 432 cattle had TN, 100 IH, 195 IL and 1579 BS. Of the 432 cattle with TN, most were females (67.4%) with the RedBororo (38.9%) mostly affected. Male and female cattle had same percentage of IH (50) with the highest among the Sokoto Gudali male (21%) and the least White Fulani female (10%). About 60% of the cattle with IL were males with the Redbororo mostly injures and the least White Fulani (11.3%). Most of the cattle with BS were females (68.5%). Sokoto Gudali (37.9%) were mostly affected while the Red Bororo were the least affected (30.7 %.) The study revealed that cattle with Bruised skin the common injury sustained and the least is the injured Horn.
Keyword: Traumatic injuries, bruised skin, injured horn, twisted neck, injured leg.

Introduction

Several injuries have been associated with the poor transportation systems of animals in Nigeria. Transportation of livestock by road has been tagged a stressful event in an animal's life (Adenkola *et al*., 2009). Inappropriate vehicle used for transporting cattle in long distance travel and on bad roads usually results in the vibration and movements of animals within the vehicles. Also, loading of different breeds and species of animals in the same vehicles could lead to injuries of cattle. Adenkola (2008) reported that cattle are mostly transported in vehicle meant for goods and alongside passengers in them. Different handling patterns of cattle during loading and offloading also results in injuries. Akinyemi *et al*. (2013) reported that cattle are often loaded and offloaded in and out of vehicles without ramp, therefore bundling the animals into vehicles. Traumatic injuries might also be caused by stockholders who beat and pull animal forcefully with clubs and rope in an attempt to force the animals to move (Babayemi *et al*., 2010). Injuries in transported animals have been used to predict unfair handling of animals (Hoffman *et al*. 2002; Maria *et al*., 2004; Minka and Ayo, 2007). The welfare of cattle is compromised when they sustain injuries and such injured cattle could command less market value, thus, causing economic loss to the owner.

There is paucity of information on the different injuries sustained by cattle during transportation operations in the study area. Therefore, the study was designed to identify the different injuries sustained by cattle at the offloading section of Akinyele international cattle market.

Materials and methods

The research was carried out at Akinyele International Cattle, Sheep and Goat Market, Akinyele, Akinyele Local Government Area, Ibadan, Oyo State, Nigeria. Akinyele is located along Ibadan-Oyo road at about 19 kilometers from Ibadan, it has annual rain fall of 1,250mm on 7.5309^{o} N latitude and 3.9110^{o} E longitude (Wikipedia). The location of the study was purposively selected due to its centrality to the South Western states and its significant high population of cattle. A period of five consecutively weeks (Monday to Sunday) from 7am-7pm was used to carry out the study. All the

cattle brought to the study area during the study period were assessed during the offloading activity. Direct observation with the aid of check list was used to obtain relevant data on the traumatic injuries sustained by cattle during transportation. Data obtained were analysed using descriptive statistics SPSS 2020.

Results and discussion

Traumatic injuries sustained in transit by cattle transported to Akinyele International Cattle Market is presented in Table 1. At total of 11,635 cattle were transported to the study area. The result showed that a total of 432 cattle had injuries on their neck (twisted neck) in which Red Bororo cattle had the highest percentage (38.9%) while White Fulani recorded the least (29.4%). Most of the cattle with twisted neck injury were females (67.4%). Of the total population of twisted necked cattle, RedBororo female (26.2%) had the highest percentage of twisted neck while White Fulani male had the least (9.5%). The high population of female Twisted Neck cattle could be because of the weak nature of female cattle and that they cannot withstand long transportation stress of tying with rope.

One hundred of the total cattle observed had injured horn with the highest among the Sokoto Gudali (41%) and White Fulani (23%) the least (Table 1). Both the male and female cattle transported had equal number of injuries on the horn. Sokoto Gudali female (21%) were mostly injured on their horn while White Fulani female had the least injury (10%). The least number obtained among White Fulani could be because of their characteristic large horn and aggressive nature which could be uses as defense during fight unlike the Sokoto Gudali that are polled. There are tendencies for the occurrence of injured horns since mixing of unfamiliar breeds (horned and polled), sex (male and female) and size together in a vehicle could result into injuries during fight and self-defense.

Male animals could be more aggressive than female and tend to fight or struggle for hierarchy or space thus losing their horn and getting injured. It is inappropriate to put different breeds and species of animals in the same vehicle.

Table 1. Traumatic Injuries sustained on the neck (Twisted neck) and injured horn by cattle offloaded in Akinyele International Cattle Market, Ibadan

Breed	Twisted neck (Frequency)			Iinjured horn (Percentage)	
	Male Freq (%)	Female Freq (%)	Total	Male Freq (%)	Female Freq (%)
Sokoto Gudali	45 (10.4)	92 (21.3)	137 (31.7)	21 (21.0)	20 (20.0)
White Fulani	41 (9.5)	86 (19.9)	127 (29.4)	13 (13.0)	10 (10.0)
Red Bororo	55 (12.7)	113 (26.2)	168 (38.9)	16 (16.0)	20 (20.0)
Total	141 (32.6)	291 (67.4)	432 (100)	50 (50.0)	50 (50.0)

Source: Field survey 2018 * Freq- Frequency * %- Percentages

Figure 1 shows the bar chat of the different breeds and sex of cattle that were observed to be injured on the legs during offloading at Akinyele Iinternational Cattle Market. It is shown that 195 cattle sustained leg injuries in which 59.5% were males. Of the three breeds of cattle transported, Red bororo had the highest leg injuries (40%) while the least was observed among the White Fulani (28.2%). With close observation on the breed-sex of cattle injured, the Red bororo (23.9%) male had more leg injuries while the White Fulani female (11.3%) had the least. Injuries sustained on the legs could be as a result of poor handling during loading (bundling instead of ramp usage) of cattle into vehicles or the manner in which they are tied with ropes round their horn for a long period of time during transportation (Minka and Ayo 2007). Most of the male cattle observed to sustain leg injury could be because male animals are more aggressive in nature and might be struggling for freedom. It is however important that cattle should not have injuries on their legs since animals that cannot stand on hoof command less selling price and are less attractive to customers.

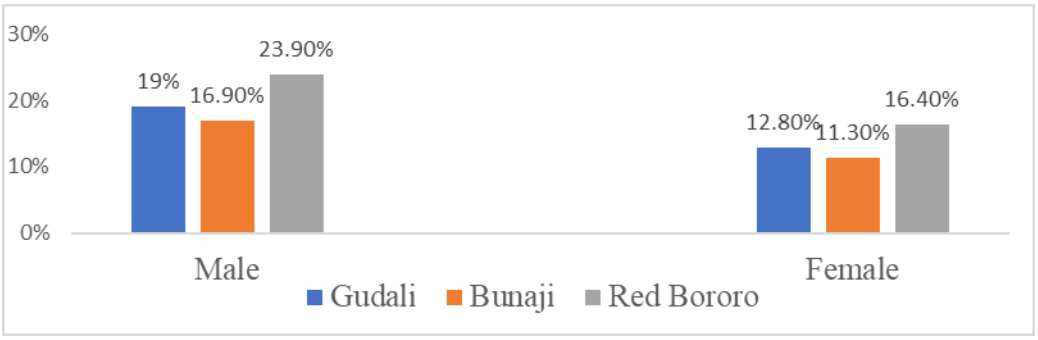


Figure 1. Traumatic Injuries sustained on the leg of cattle offloaded at Akinyele International Cattle Market, Ibadan.

Presented in Table 2 is the Traumatic injuries sustained by cattle in transit on the skin (Bruised skin). It was observed that 1579 of the total population of cattle transported to the study area had bruised skin. Most cattle affected were the females (68.5%). Among the breeds transported, Sokoto Gudali (37.9%) were mostly affected while the Red Bororo (30.7 %.) were the least having bruises. The Sokoto Gudali female (26%) were mostly affected while the Red Bororo (9.7%). The value obtained for both the White Fulani and Red bororo is very close. Bruising and injury seem more frequent in short-distance transportation (Gebresenbet, 2002). Smith *et al*, (2007) reported that bruises can be greatly reduced if the producers, truckers and packers will take care of the offloading facility. FAO 2001 reported that bruise sustained on the skin by cattle usually increase due to the presence of sharp objects and the high stocking density during loading.

Table2: Traumatic Injuries sustained on the skin of cattle offloaded at Akinyele International Cattle Market, Ibadan

Breed	Frequency			Percentage	
	Male	Female	Total	Male	Female
Sokoto Gudali	188	410	598 (37.9)	11.9	26.0
White Fulani	156	340	496 (31.4)	9.9	21.5
Red Bororo	153	332	485 (30.7)	9.7	21.0
Total	497	1082	1579 (100)	39.5	68.5

Source: Field survey 2018

The researcher observed that when cattle get injured, no first aid treatment is available to stop blood clot or to prevent infection and minimize pains and suffering. Vehicles should be properly equipped during transit so as to help when animals are injured.

Some injuries were severe in the sense that the horns were observed to be totally cut off from the head of the cattle while others still had their horns dangling. The study revealed that rags were tied around the horns to stop bleeding. Rags could transmit organisms that could further lead to infection of the affected area. Flies were seen perching on cattle with such injuries and thus, traumatizing the animal. It was also observed that the injured cattle were not properly cared for.

Conclusion

In conclusion, female cattle were mostly affected with twisted neck and bruised skin while males with injured legs. Both male and female cattle were affected with injured horn. Traumatic injuries sustained by cattle in this study affected the healthiness of the animals and also reduced customer preference during auction for sale. could affect consumer preference

Recommendation

Cattle of different breeds sex and sizes should not be transported together in the same vehicle to prevent injuries. Appropriate vehicles for transporting cattle should be used in transportation.

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