

INFLUENCE OF TRANSPORT CONDITIONS ON ANIMAL WELFARE

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Introduction

Animal transports are numerous. In the year of 1992, 4,2 millions of cattle and 263.000 horses for slaughtering were transported in Europe. Relative weaker commercial business on slaughtering horse transports in EU can be seen from Netherlands and Germany to Belgium. The import of horses from third states to EU is much more intensive (1). Export states for EU, among other, are also Argentina, Uruguay and Paraguay. Most of long distance animal transports are performing by road, railway and ship (2). Transports should be done properly and in the manner to demand animal welfare principles. In Slovenia animal transports on the road are in the increasing (3). In the time of the transport animals are suffering on different ways mostly because of unconsideration official rules and human unknnowledge. The important factors which can influence on poor animal welfare are animal preparing for transport, technically and bad-unsufficient equipped vehicles, resting points, poor animal care in the time of the transport and ignorance to accepting animal reactions and their capability to react on sudden environmental changes. In all the Europe, specially in EU, numerous studies were done on researching problems of long distance transports, animal care, animal damages and influences to the meat quality. Due to the fact that we observed more than 400.000 horses and cattle in 8.016 vehicles and 8.906 waggon, and we made 686 pathoanatomic sections, we have got significant sample for evaluating some transport influences of animal welfare on long distance transports. In our research work we observed 8 transports of 662 ostrich from the age of 1 to 5 years and body weight of 70 to 162 kg and 12 transports of 810 young ostrich of the age of 1 to 5 month and body weight of 1 to 33 kg as well. In our observation 16 transports of 57.660 adult rabbits and 4 transports of 39.016 hen-layers were included. Those data wasn't statistically evaluate.

Material and methods

Research works were performed on the road and railway border stations in Sežana and Port of Koper, Slovenia. In our investigation 262.929 cattle and 161.685 horses were

observed in 8016 road animal transport vehicles and 8.906 rail ships. 20 transports of 1427 ostrich (982 adult and 480 young animals), 4 transports of 33.016 hen-layers and 20 transports of 78.700 rabbits for slaughtering were observed as well. All together 1090 cattle and horse animals were registered like dead or slaughter in emergency. We were not registrate and implement dead cases and pathoanatomic dissections of ostrich, hen-layers and rabbits. All together 686 animal dissections were done random on Veterinary faculty of Ljubljana and National veterinary Institute of Slovenia Nova Gorica.

Causes of death were registrated to their typical forms and distributed to 7 categories:

1. hearth weakness and travmatic lesions
2. traumatic lesions
3. hearth weakness
4. pneumonia
5. brain lesions (traumatic lesions)
6. hypertermia
7. other (dehidration, stress, asphyxiation, hepatitis, intestinal inflammation, rumen dilatation with acid indigestion, opstipation and torsion of stomach, colon torsion, rectum proliferation and parasite invasions)

The causes of death were registrated to the:

1. transport distance – transport duration time
2. animal body weight
3. month in the year
4. three month part of the year
5. sort of transport (truck, railway)

We use statistical package SPSSX (statistical package for social sciences) for the statistical evaluation.

Long distance and other different types of transports, care of poultry, ostrich and rabbits were observed and performed to slovene national law about animal transport adjust to EU legislation.

Results

Animals often suffer on transports due to the consequent pains, distresses, fears and other problems before they die or they are slaughtered. Direct damages are relatively **pogoste** and high and represent 2,5 – 7,5% on transports where damages were existing, and 3% on all

transports. Those facts obviously show mistakes in animal care during animal transports. This is also the reason for rising severe undirect damages, which were not evaluated in our investigation. Reasons for most death causes are mostly hart weeknesss and traumatic lesions, only traumatic lesions and only hart weakness. Death cases were caused also due to pneumonia of different categories, mechanical brain lesions, hypertermia and other causes of death. We didn't analysed them separatelly because they appear sporadically. If we compare the influence of transport distance to animal death causes we can establish that the influence of transport distance is normally distributed on the curve line to 1200 km with the peak on 800 km, while the second peak is expressed on 1000 to 1500 km. Death cause 1 due to the transport distance was not express on cattle, but mostly on horses on distancies from 600 to 800 km. Death causes 2 and 3 were express on cattle on longer distancies but on horses only on shorter ones. This should be explained on to the fact that distancies were longer for cattle and shorter for horses. Numerous death cases because of death cause 2 on horses on transport distancies between 500 to 800 km can be explained through the fact that horses were not prepare for transports. In many cases rules (4) according to the directive 91/628 EEC were not consider. Because of duration of transports most of death cases happen in first two days of transports and rich the peak after fifth day. Death cause 1 due to the transport duration is expressed just on horses. Death cases due to the transport duration are more numerous in first two days and less frequent in the third day of the transport. Death cause 2 due to the transport distance is expressed on cattle among all days of transports with the peak on fifth day, and on horses within the first three days. Death cause 3 is more frequent in first three days. Other death causes were appear rearely. The body weight did not influence on the number of death cases owing to death cause 1 in cattle. More numerous were death cases because of death causes 2, 3 and 7 when animal body weights rich 250 to 600 kg. Due to the month of the year, when transports were performed, the death cause 2 were expressed most on cattle with the peaks in june and july, the peak of death cases owing to death cause 3 appear in august. Death causes 1, 2, 3 were expressed most on horses, due to the influence of month transportation. On the third three month period of the year most death causes 2, 3 and 5 were expressed on cattle, and 1, 2 and 3 on horses among all four three month periods. Death causes 2, 3 and 6 were expressed most on cattle and 1 and 2 on horses due to the sort of transport – trucks. Death cause 3 appear on horses constantly on the transports by road and railway. Adult ostrich were transported on the 150 to 1000 km long distance transports, 16 to 70 hours before the first observation. Just in 4 transports of 12 animals were fed and watered. In three transports (in two ships 50 animals and in one 60 animals) adult ostrich in two etages (altitude

160 cm) were transported. The average animal altitude was cca 200 to 220 cm. Animals can not stand in their natural extend position. Because of this reason 10% of animals were lie down due to the force and exhaustion. Animals which were in standing position beat the heads into the roof. Anyway we didn't ascertain no death causes. Numerous animals were injured by skin lesions and viable bleeding on heads and bodies. Only one transport of 20 animals of 12 ships (662 animals) was transported by the consideration administrative rules (4, 5, 6, 7). Young ostrich were transported 11,30 hours to 48 hours from the loading to observing point, from where they have still 100 to 600 km to rich unloading point (one of young ostrich ships nearly 1000 km). Average animal body weights differ from 25 to 33 kg. Animals in body weight from 5 to 7 kg were packed in cartoon boxes and in metal cages (2 to 3 kg) and loaded one up to another. From 8 ships of 810 young animals just two ships – 113 youngs were transported by consideration the adminitrative rules (4, 5, 6,7). In one transport of 190 young ostrich in body weight of 2 kg, animals were in boxes one one up to another. Young ostrich in lowere etages of the truck were not protected to animal droppings of animals from the upper etage. Animals were on the transport aproximately 24 hours with no feed or water and in the time of observation 600 km from unloading point. We didn't establish no injuries on young animals, just some old lesions, probably from the breeding stall. Hen-layers were shipped 24 to 36 hours before we observe. Animals were caged in cages one up to another. Animals in lower etage of the truck were not protected to animal droppings of animals from the upper etage. Animals were on transport aproximately 200 km from unloading point and oversettled. They were injured, some of them have broken legs, probably to the loading procedure. We establish some death cases. Any of mentioned ships wasn't transported by the consideration adminitrative rules (4, 5, 6, 7). Rabbits were on the transport aproximately 16 to 24 hours before observation with no feed or water and 500 km from unloading point. Animals were caged in cages one up to another. Most of 16 transports – 78.700 transported rabbits were not protected to animal droppings of animals from the upper etage. Caged animals were overloaded, under stress and they suffer. Dispnea was occured, vitality was affected, some animals were in agony before exitus. Any of 16 ships were transported by the adminitrative rules (4, 5, 6, 7).

Conclusion

Animals suffering due to transports. We establish 2,5 to 7,5% of direct damages in all transports of horses and 0,3% direct damages on cattle. The main sources for animal detahs were death causes like traumatic injuries (2) and hearth weakness (3) by poor transport

devices arrangement (loading ramps, animal separating, safety barriers, etc.), animal preparing for transport, such a delivery due to the socialisation, body mass and category, poor attention to animal breeding and animal welfare. Due to most important animal damages in different times of the year (winter, early spring and summer) our opinion is that animals should be more preserved against outer influences. Our conclusion is that results of our investigation show significant connection between suffering and bad wellbeing and transport of animals. Main reasons for direct damages and animal suffering request for more human transports with no animal suffering, what means complete consideration of administrative rules on the subject of animal transport (4, 5, 6, 7).

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