

STUDIES TO ACCESS THE AWARENESS AMONG SHEEP BREEDERS REGARDING PARASITISM AND ITS MANAGEMENT IN SRINAGAR AND GANDERBAL DISTRICTS

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Domestic animals are susceptible to various bacterial, viral, rickettsial and parasitic diseases. Parasitic diseases being primary afflictions in sheep and goats, result in losses in the form of decreased production, impaired gastrointestinal functions, morbidity, mortality, reduced feed conversion ratio, dull hair coat, high treatment cost and predisposition of animals to fatal diseases because of lowered body resistance. In spite of significant production losses, the problem is neglected due to its chronic and insidious nature (Sanyal, 1998). Helminth diseases alone are responsible for 5% mortality in India (Chakraborty & Lodhi, 1994). The constant movement of sheep and goat flocks over a large area greatly facilitates the spread of infection among livestock. For decades, anthelmintics have been used as the primary control measure for worm infections in sheep. However, over the years there has been a continuous and significant development of anthelmintic resistance by the parasitic worms infecting livestock. AR can be defined as the ability of parasites to survive doses of drugs that would normally kill parasites of the same species and stage. General risk factors for the development of AR in livestock include over and under dosing of anthelmintics, frequent movement and transfer of animals from one area to another and poor pasture management.

Work plan:

Keeping in view the above discussed problems, a survey was conducted in and around dosing schedule, drug resistance, drug overdose Srinagar and Ganderbal districts to access the awareness among sheep breeders regarding side effects and alike. About 50 breeders from 29 areas with flock strength >30 were interviewed on spot through a predesigned questionnaire as below:

1. Do they know why and how many times dosing is done?
2. Do they follow dosing schedule properly?
3. Do they follow practice of faecal examination before dosing?
4. At what age lamb/kid has to be dosed?
5. Do they follow practice of dosing at highland pastures?
6. Is dosing done by themselves or by paravets at highland pastures?
7. Do they have any idea about pregnancy safe anthelmintics?
8. Do they have any idea about anthelmintic resistance?
9. Are they aware about overdosing side effects?
10. Can they differentiate between dosing and vaccination?

Results:

1. Dosing frequency	
a. 2 times/annum	20
b. 3 times/annum	12
c. 4 times/annum	50
d. 5 times/annum	12
e. As needed	6
2. Follow dosing schedule properly	
a. Yes	74
b. No	26
3. Faecal examination before dosing	
a. Yes	28
b. No	72
4. Age of lamb/kid at the time of dosing	
a. 1.5-3 months	18
b. 3 months	68
c. >3 months	12
d. No dosing required	2
5. Practice of dosing at highland pastures	
a. Yes	88
b. No	12
6. Dosing done by themselves or by paravets	
a. Paravets	57
b. Themselves	43
7. Pregnancy safe anthelmintics	
a. Yes	74
b. No	26
8. Anthelmintic resistance	
a. Aware	30
b. Not aware	70
9. Overdosing side effects	
a. Yes	36
b. No	64
10. Difference between dosing and vaccination	
a. Yes	74
b. No	26

Discussion and conclusion:

The owners/sheep breeders interviewed had sizeable sheep populations reflecting more conscious farmers who adopt sheep farming for not only supplementing livelihood but for more ambitious economic motive. Awareness regarding need of periodical dosing appears to be quite high, however with regard to precise knowledge of dosing calendar, there is still much to be at the awareness level. Since most of the breeders are still far from being educated, they couldn't be expected to have knowledge about the importance of faecal examination before dosing. They deworm their flocks without knowing the type of parasitic infection with one or the other anthelmintic, the acceptance of which depends on the experience which they gain while dosing the sheep and goat in the long run. This practice of using a particular type of anthelmintic for a prolonged period, it's under or

overdosing without consulting a vet ultimately results in the anthelmintic resistance to which the majority of breeders are unaware of. Sometimes an efficient anthelmintic is rejected by them if it didn't show them the prompt results or developed any signs of illness.

The lack of knowledge about the use of pregnancy safe drugs results in teratogenic effects and crop losses, ultimately affecting the economy of the farmers. Majority of the breeders under study followed safe dosing protocols. The movement of the livestock to high land pastures and their concentration in grazing area warrants greater attention on parasitic diseases. It calls for one dosing at HLPs after sometime of migrations worm load accumulates. The practice of dosing at HLPs with the help of a vet or paravet is followed by a good number of breeders.

From this study it can be concluded that the meagre knowledge of the sheep breeders regarding need of faecal examination before dosing, anthelmintic resistance, overdosing side effects etc. can prove to be great harm for the flock and the economy thereof. Hence the prime need is to develop an integrated holistic system that will be a combined effort between animal health professionals, extension officers, farmer unions and drug companies where education in terms of awareness camps, workshops, seminars and alike is one of the important components for helminthiasis control, prevention of AR development and overdosing side effects.

References

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