**CHAPTER-IV**

**Discussion**

Presence of fly larvae in animal body could reflect a present exposure to the disease myiasis (Serra-Freire and Mello, 2006; Hall & Smith, 1998). In this study, 37 myiasis cases were observed on which 56.76% were goat, 43.24% were cattle whereas Sergio I (2007) recorded the most infested host for myiasis were cattle and goat (46.4%). The overall prevalence of the study was 5.52% among 670 cases which is comparable to the result of Giangaspero *et al*. (2011), Alahmed (2004) who reported 3% out of 3129 in Italy, 2% out of 3712 cases in Riyadh Region respectively. However, Radfar and Hajmohammadi (2012), Shoorijeh *et al.,* (2011), [Gebremedhin EZ](http://www.ncbi.nlm.nih.gov/pubmed?term=Gebremedhin%20EZ%5BAuthor%5D&cauthor=true&cauthor_uid=20725855) (2011), [Arslan](http://pubget.com/search?q=author:%22M%20O%20MO%20Arslan%22&from=18523857) *et al.,* (2008), Kara *et al.,* (2005), Abo-Shehada *et al.,* (2003) and Dorchies *et al*. (2000) found higher prevalence rate than the present study that are 14.71% among 1964 cases in South-eastern part of Iran, 13.1% out of 1998 in South Iran, 59.9% out of 554 in Ethiopia, 40.3% out of 387 in north-eastern part of Turkey, 31.9% out of 1276 cases in Turkey, 24% out of 520 in northern Jordan and 35.68% among 1303 cases in France, northern mediterranean region respectively.

It was pragmatic that cross breed cattle were frequently infested with myiasis (56.3%) than the Red Chittagong (25%) and local breed (18.8%). In addition, Kara *et al.,* (2005) illustrated as infestation rates of fly larvae were lower in native cattle.

It was found that, younger cattle were more susceptible to myiasis (62.5%). [Arslan](http://pubget.com/search?q=author:%22M%20O%20MO%20Arslan%22&from=18523857) *et al.,* (2008) stating that infestation rate up to 1-years-old was 30.0%, 1 to 3 years-old 40.0% and older than 3 years old was 52.4% and Kara *et al.,* (2005) said intensity of the infestation decreased with the age of cattle.

In goat, the younger(≤ 1 year) showed higher infestation rate (71.4%). Paredes-Esquivel *et al*. (2012) found prevalence in lambs younger than 4 months was significantly affected and Alem *et al.,* (2010) found prevalence of *Oestrus ovis* in small ruminants of less than 1 year of age was significantly higher than those with greater than 1 year of age.

In this study, female goat were significantly affected (52.4%) with myiasis than the male (47.6%) which have a similar finding with Radfar and Hajmohammadi (2012) on where 151 female and 138 male goats were infected respectively. However, Orfanou *et al*. (2011), Sahar S. Abd El-Rahman (2010), Kara *et al.,* (2005), [Farkas](http://www.sciencedirect.com/science/article/pii/S0304401796011107) *et al.,* (1997) found more cases in male than the female. Shoorijeh *et al.,* (2011) and Abo-Shehada *et al.,* (2003) reported same type of infection rate in both sexes. [Gebremedhin](http://www.ncbi.nlm.nih.gov/pubmed?term=Gebremedhin%20EZ%5BAuthor%5D&cauthor=true&cauthor_uid=20725855) (2011) and Scholtz *et al.,* (2011) was not found any significance influenced by sex.

The study exposed that, frequency of maggot infestation was higher in vagina(Goat 19.1%, cattle 31.3%);other more common sites of myiasis recorded were inter-digital space of hoof(Goat 9.5%, cattle 12.5%) ; naval region(Goat 14.3%, cattle 12.5%); scrotal region(Goat 14.3%, cattle 6.3%);inguinal region(Goat 9.5%, cattle 6.3%), tail, mouth, ear etc. Kumar and Ruprah (1984) explained myiasis occurred in the navel area of newborn calves (27%), vulvar region of recently calved cows (20%), in shoulder region (20%) and in wounds in between the claws. Duro *et al.,* (2007) also reported that umbilical myiasis is well-recognized in animals. Rahman *et al.,* (2009) found myiatic wounds in umbilicus, vagina, scrotum and shoulder area in cattle at the Veterinary Clinic, Bangladesh Agricultural University, Mymensingh; Gaglio *et al.,* (2011) reported three cases of genital myiasis occurred where wound in vulva of a goat, scrotum of a ram in Italy.

It was observed that, in all cases of ruminants oil of turpentine was used as an initial treatment of maggot infestation. Several antimicrobial drugs were also used to prevent secondary infection. Overall the drugs of Oxytetracycline (43.24%) group were used frequently than Amoxicillin (29.73%), Penicillin (16.22%) and Ciprofloxacin (10.81%).Among several trade drugs of Oxytetracycline Renamycin was used most of the time due to its availability.