**CHAPTER II**

**REVIEW OF LITERATURE**

**2.1. Prevalence of different diseases and disorders in Cattle**

Amin *et al*., 1988 reported diarrhea in calves, caused by enterotoxaemia and enteropathogenic strain of *Escherichia coli* of the 266 diarrheic samples examined bacteriologically, only 16 (6.02%) yielded *Escherichia coli* infection. Hossain, 1989 conducted pathological examination of 142 dead calves, of which 22 (15.49%) was diagnosed pneumonia as the cause of death.

Pharos, 1981 recorded the gastro-intestinal parasites in calves aged 12-18 months and concluded that gastro-intestinal parasitism in the investigated Pabna area had not been problem in this group of cattle.

Karim *et al*., 1996; Gautum *et al*., 1976 reported that early 3 months of age was the most susceptible for Ascarid infection in case of transmammary transmission of *Neoascaris* *vitulorum.* Hanif *et al*., 2003 reported that out 145 diarrheic calves of which 98 (67.58%) were frond to be affected with gastro intestinal parasitic infestation. Chen, 1986 reported that as in some ascariasis infestation, verminous pneumonia and hemorrhages results from the migration of the larvae through the lungs. These symptoms are more frequently encountered. Hanif *et al*., 2003 reported that out of 145 diarrheic calves of which 98 (67.58%) were found to be affected with gastrointestinal helminthes parasitic infestation.

Amanullah *et al*., 2009 showed that 15.91% economic losses were occurred due to morbidity and 84.09% due to mortality caused by black quarter in cattle and buffaloes.

Ali and Ahmed, 1986 reported the occurrence of Milk fever in ruminants for the first time from East Pakistan, now Bangladesh (Mymensingh district).

Rahman *et al.,* 1986 reported thatfascioliasis eased by *Fasiola hepatica and gigantica*. But in BangladeshFascioliasis occur only by *Fasciola gigantica.* It is under phylum: *Platyhelminthes,* class. *Trematoda* and *Fasciolidae*  family.

Nooruddin *et al.,* 1990 recorded an overall 62.0% of 13,421 cattle, and 28.8% of 5,771 goats affected with skin diseases. Das *et al.,* 1992 recorded 24.4% incidence rate of foot diseases in bovines in West Bengal. They found regular overgrown hoof (9.8%) as the most common foot disorder, followed by scissors claw (5.5%), interdigital lesion (0.7%) and eruption of sole (0.6%).

Repeat breeders are those female ruminants that fail to conceive after three or more regularly spaced services in the absence of detectable abnormalities of the internal genitalia (Samad, 2000) this disorder was recorded in 4 (1.15%) cows.

Mia and Hossain ,1967 reported that hump sore to the common skin diseases, followed by demodectic mange in cattle and papillomatosis in adult cattle (7-8%) of Bangladesh.

Rahman *et al.,* 1984 reported that the overall prevalence of surgical disease of cattle was higher (53.2%) in Bathan than in the stall-feeding (37.5%) system. In Bathan, the most prevalent surgical diseases were myiasis (13.4%) followed by navel ill (12.5%), trauma (10.8%), claw diseases (7.6%), arthritis (6.1%), horn diseases (3.4%) and teat obstruction (2.6%). In stall-feeding system, the highest prevalence (10.6%) was claw diseases and navel ill (6.6%). Navel ill, hernia, arthritis, horn diseases, urolithiasis and tail gangrene were more prevalent in male; and claw diseases, trauma, myiasis, upward patellar fixation and dislocation of hip joint were more prevalent in female cattle.

**2.2. Prevalence of different diseases and disorders in Goats**

In Bangladesh, Dr Taylor identified the first PPR outbreak during 1993. Sill *et* *al*. 1995 reported PPR spread throughout the country and had devastating effects in organized Goat Farms. Reader and Obi, 1999 reported that PPR was not clearly recognizable up to 1972, but the true extend of the disease has become apparent in recent years and is still being clarified. Debnath, 1995 reported that PPR thought that the disease might have come from India. Shah *et al.,* 1983 reported that PPR in goat has been recorded in 1993 from the border belt areas of Southwestern districts (Sathkhira, Jessore and Barguna) of Bangladesh. It has been reported that the Black Bengal goats (67.24%) are more susceptible to PPR that Jamunapari breed (32.76%). Debnath, 1995 reported that epidemic areas morbidity rate has been estimated to be 80% to 90% accompanied by a mortality rate of 50% to 80%. Islam *et al*., 2001 reported that in endemic condition, PPR may be less dramatic or may occur as a sub clinical or even in apparent form. Debnath, 1995 reported that paste des petits ruminants (PPR) are a contagious disease of sheep and goats caused by a morbilli virus of the Paramyxoviridae family. Debnath, 1995 recorded that transmission of disease is occurred by close contact, secretion and excretion of sick animals to the healthy. The discharges from the eyes, nose and mouth as well as the loose faeces contain large amounts of virus. Although sub clinical infections can be experimentally induced in goats, they do not transmit the disease to susceptible pigs or goats. Reader *et al*., 1977 reported that PPR virus was excreted from all routes at the onset of clinical symptoms, with titer increasing from organs most seriously affected during the course of the disease. The quantity of virus execrated was substantial and would account for the rapid spread of the disease in flocks of goats.

Rahman and Samad, 1984 studied the diseases of goat in some areas of Bangladesh and reported 12% mastitis, 10% colibacillosis, 5% salmonellosis and 7% otitis externa.

Rahman *et al.,* 1984 recorded in salmonellosis, animals showed profound depression, dullness, prostration, high fever (105-107ºF) with sever fluid diarrhea, sometimes dysentery and extreme weakness. The temperature commonly drops upon initiation of diarrhea.

Roy, 1954 reported that sub acute fascioliasis manifested by weight loss and pallor of the mucous membranes, submandibular edema. Rahman *et al*., 1972 reported that clinical findings of chromic fascioliasis indicate that lose weight, develop submandibular edema (Bottle-jaw), chronic diarrhea and emaciated. Garrels, 1975 reported that clinical pathology in case of acute fascioliasis, severe norm chronic anemia and hypoalbuminemia observe in goats. In the sub acute and chronic diseases, rapid weight loss with a severe hypo chromic, macrositic anemia will be seen. In Bangladesh, Bhuyan, 1970 investigated fascioliasis in which 12.92% of goats were infested with *Fasciola gigantica*.

Dewan and Das, 1988 suggested that Urolithiasis could be prevented either by adding 4% sodium chloride in concentrate ration or provided water and green pasture (grass) and leaves. Blood *et al*., 1989 reported that the chemical composition of urethral calculi varied and appeared to depend too largely on the dietary intake of individual elements. Calcium, ammonium and magnesium carbonate were the common constituent of calculi of cattle and sheep at pasture. Blood *et al.,* 1989 reported that clinical findings of Urolithiasis manifested by a syndrome of abdominal pain with kicking at the belly, treading with the hind feet and swishing of the tail repeated twitching of the penis, sufficient to shake the prepuce, unsuccessful efforts to urinate, accompanied by straining, grinding of teeth and passage few drop of bloodstained urine. Urinary bladder is distended and retention of urine. Mia, 1967 reported that the prevalence of Urolithiasis was found comparatively higher during autumn (11.37%) and winter (13.4%) seasons in the urban areas of Dhaka.

Ali *et al*., 1987 recorded 2.17% incidence of respiratory disorders in Black Bengal goats and Koul *et al.,* 1988 reported 24.24% mortality in Bengal goat due to pneumonia. Nooruddin *et al*., 1987 reported higher prevalence of skin disease (26.80%) in Black Bengal goats under rural condition of Bangladesh. The prevalence of sheep and goats of Dhaka and Mymensingh district of Bangladesh were studied.

Mondol *et al.,* 1974 revealed that prevalence of corneal opacity observed in urban area of Mymensing district.