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Abstract

Newcastle Disease is a viral disease of both layer and broiler chickens caused by Paramyxo virus belonging to family Paramyxo-viridae. This disease causes considerable economic loss to the farm owners because of the reduction in egg production and mortality both in backyard flocks and commercial farms. Therefore, this cross sectional study was conducted to estimate the proportionate prevalence, pathological conditions and clinical features of ND in the small scale commercial broiler farms in Ramu upazila of Cox's Bazar during the period of first March to sixteenth April 2017, Sixty farms were selected randomly and out of them 40 (66.66%) were found positive to ND. Age ,vaccination, bio-security program and provision of wild birds, native chickens, ducks and crows in the farm premises exhibits the significant relation ($p<0.05$) with the occurrence of ND in the susceptible flocks. Proportionate prevalence of ND was estimated as 81.25% at 20 – 35 days, 47.62% at 10 -19 days and 57.14% at 1 -9 days. Moreover, proportionate prevalence of ND was lower in vaccinated farms (53.48%) whereas all the in non-vaccinated farms were infected and the differences was statistically significant. Similarly, prevalence was higher (97.44%) in the farms with provision of wild birds and native chickens compared to 9.52% prevalence in farms without entry of wild birds and native chickens. There is 20% prevalence in moderate and 100% prevalence in poor bio secured farms. Unions like Joarianala,Mithachari is identified as the most enzootic area via the study.

Key words: ND, Prevalence, Broiler farms, Ramu upazila.