

Due to lack of awareness, disease prevention practices weren't common in backyard poultry. However, A worrying trend of using prophylactic medicine (29.3%), mostly oxytetracycline (due to low price) was observed. Some farmers isolate their sick birds to prevent disease transmission. Farmers also restricted scavenging (25.33%) of their birds and use medicine (24.7%) if they observed disease outbreak in neighbouring households. 92% of the respondents used medicine to treat patients, suggested by the local medicine shops. OTC (35.3%). Ciprofloxacin (6.7%), Camphor (19.3%), Paracetamol (16.0%) and herbal medicines (5.3%) were common treatment agents.

- Chickens/eggs are sold to neighbour (n=41), local live bird market (n=53) or to the mobile traders (n=25). Often they brought back chicken (n=20) which were mostly mixed back to the flock (n=10).
- Disease and predators are the most important challenges in backyard farming

RECOMMENDATIONS

- Training on farm practices, biosecurity measures and diseases
- Raising awareness on antimicrobial resistance
- Stop using of prophylactic medicine is threatening
- Proper disposal of waste and dead poultry according to national act
- No scavenging during disease outbreaks
- Increasing vaccine coverage.



Backyard Poultry Biosecurity: Existing Knowledge, Attitude & Practices (KAP)

Organized By



INTRODUCTION

Backyard poultry production is an important source of household food and subsistence income in rural Bangladesh. The extent of the backyard poultry operation raises the significance of biosecurity to manage the disease risk to public health as well as to commercial poultry production. Despite this large-scale contribution to poultry production, knowledge regarding diseases and biosecurity practices among backyard poultry keepers are very poor. No biosecurity measures were in place to reduce the risk of infectious diseases, such as Newcastle Disease and food-borne zoonoses.

As a first step in the development of policies designed to reduce the potential risks posed by backyard poultry production, it is necessary to understand the existing knowledge and practices of owners and handlers of these flocks. Therefore, the current project, with the financial support of UKRI GCRF One Health Poultry Hub and Research England's Quality-related Research Strategic Priorities, explored the knowledge, awareness and practices (KAP) of backyard poultry keepers with regard to biosecurity, infectious diseases and vaccinations.

SOCIO-ECONOMIC STATUS OF THE INTERVIEWEES

A total of 150 backyard poultry farmers were interviewed from 7 upazillas of Chattogram district. Among the respondents, 92% were female. Fig. 1 and 2 shows education and the age (years) percentage of the respondents. Only 10% (n=15) farmers received training from government or NGOs

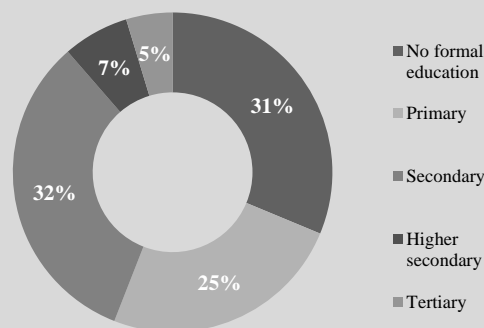


Fig. 1: Education percentage of the respondents.

KNOWLEDGE, ATTITUDE AND PRACTICES

Most of the farmers had knowledge about different disease symptoms (83.7%), whereas only 9.5% (n=14) could name at least one poultry diseases. All 14 of the respondents knew about Newcastle disease. Majority respondents didn't have a clear perception on disease sources, and often driven by superstition as evil eye. Respondents believed that diseases spread from one individual to another via direct contact (74.0%), aerosol (18.0%), droppings (8.7%), respectively.

Joint rearing and feeding of backyard poultry and other avian species are common in Bangladesh. 48% reared other avian species than backyard chicken such as ducks, pigeons and quails etc. Zoonosis and infectious disease risk might be occurred from combined feeding (22%) and watering (16.7%) practice followed by some farmers. Rice, broken rice, rice polish and ready broiler feeds were commonly used. Backyard chickens used to drink water from available sources in household such drains, tube-well sides, pond sides etc. and hence farmers often didn't use separated waterer (84%).



Backyard farmers didn't have a routine cleaning schedule like commercial farmers. They used plastic sheets, ash and straw as bedding materials and cleaned later infrequently with shovels and brooms.



27.3% of the respondents used to separate newly introduced chicken from the existing flock. Most of the farmers kept their chicken at a separate coop in household premises at night. However, 25.3% of the farmers kept their chicken in a coop or baskets in the dwelling house, which could be a potential zoonosis risk.

Children like to play with household and pet animals. 46.7% of our respondents allowed their children to handle backyard chicken, which might pose a possible public health threat.

Though the use of vaccination wasn't very common (10.7%, n=16), respondents had varied idea about it. Majority of the respondents knew that vaccine helped to prevent diseases (37.3%). Others considered vaccines as medicine (7.3%), growth promoter (2.3%), immunity enhancer (0.67%) etc.

Another possible public health issue might raise from the disposal of litter, wastage and dead poultries. Lack of awareness lead to the farmers practice of throwing litter/wastage (52.0%) and dead poultry (78.7%) to bush/pond/roadside/jungle. Burial of dead birds (14%) were comparatively common than litter/wastage (2%). A few of the respondents burn poultry wastages and dead birds (0.7% and 2.7%).

Farmer's age

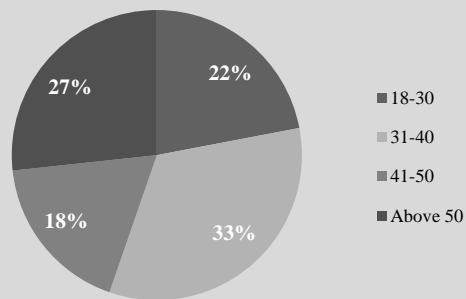


Fig. 2: Age (years) percentage of the respondents.