



Quantitative and Qualitative Research in Bangladesh: Behavior Change and Communication Activities on Avian Influenza (H5N1)

Abul Barkat
Golam Mahiyuddin, Avijit Poddar, Matiur Rahman, Asmar Osman,
Md. Shahnewaz Khan, Md. Badiuzzaman, Abdullah –Al-Hussain, Murtaza Majid

HDRC Human Development Research Centre

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Executive Summary

Background

Avian influenza, or "bird flu", is an infection caused by avian influenza viruses that occur naturally among birds. The causative agent, the highly pathogenic H5N1 virus, has proved to be especially stubborn. If given enough opportunities H5N1 virus will change into a form that is highly infectious for humans or combine with the highly contagious seasonal influenza virus and spreads easily from person to person. This is particularly true in a country like Bangladesh where people live in close proximity of backyard poultry. The risk of pandemic influenza is serious due its geographic context. The accompanying study is part of the global Task Order of the Academy for Educational Development (AED) to conduct study on behavior change and communications activities on avian influenza prevention and containment and response to pandemic influenza.

Objectives

The objectives of the study are: (i) To determine motivations and incentives necessary to adapt best practices to prevent the spread of Avian Influenza into communities. (ii) To identify the barriers (real or imagined) that prevent the target audiences- consumers, transporters, vendors, farmers, stakeholders in the poultry production and processing industry- from adapting best practices to prevent HPAI.

Methodology

The study has been conducted in vulnerable and high risks border communities in Bangladesh and covered respondents associated with poultry production and processing (industrial, small, and backyard farmers), domestic and cross-border trade and transport of poultry, general commerce and trade (vendors, transporters, consumers), oversight of border-crossings and customs, and citizens living in communities along with international borders and entry points in Bangladesh.

Of the bordering districts, five were selected randomly which are distributed among 3 divisions, namely Rajshahi, Khulna and Sylhet. Thereafter, one upazila adjacent to the border from each district has been selected for the sample survey.

Both qualitative and quantitative techniques were used in data/information collection. Quantitative survey interview has been conducted on 365 households, equally distributed throughout 5 study districts. Survey respondents comprised 232 female and 132 male. A total of 90 in-depth qualitative interviews, distributed equally over the 5 sample districts have been conducted with targeted respondents including semi-commercial poultry farmers, commercial poultry farmers and workers, vendors, processing industry workers, transporters, large industry consumers (hotel, restaurant etc.), livestock officers and custom officials

Major Findings:

- Among backyard farm respondents, 65% are female and 36% are male. Of them 41% are household head with 78% male and 22% female. A large portion (38%) of the household heads are illiterate and among the rest education are largely below secondary level. The

mean age of the respondents is 43 years. Majority (80%) live in rural areas and 20% in urban areas. Besides backyard farmers, all other respondents are male.

- One-third of the household heads are engaged in agriculture. Other key occupations reported are 15% non-agricultural labour, 10% small trader, 9% agricultural labour, 7% household chores and service holder each.

- Average monthly income of backyard farmers is between Tk. 4000 and Tk. 5000. However, 17% earns less than Tk. 3,000 per month and 10% above Tk. 10,000 per month. The workers of large farms reported to get Tk. 3,390 per month. At the other end, average monthly income of Semi-commercial and Commercial farm owner is Tk. 10,800 and Tk. 42,000 respectively.

- In general, people residing adjacent to the borders can afford their daily expenditure for food. Some can save money after their daily expenditure as mentioned by the respondents in Bhomra borders. However, the people in the sample area of Tamabil border hardly could meet their three meals a day for more than six months a year.

- As regard to advantage of living in border areas, the most frequently cited benefits include “wider opportunity to do business” and “relatively better scope of employment”. In contrast, disadvantages are- sense of insecurity due to intermittent trade of fire across the border, restricted movements, crops are looted from fields by the robbers from other side of the border, presence of smugglers and drug addicts in higher proportion.

- Across the categories, the most commonly cited aspiration are related with economic prosperity, child education and improved living followed by education for their children, and improved housing followed by higher income, sound health and employment opportunity. The least expressed aspirations are better social environment, social security, and owning a car.

- The most commonly shared concerns are lack of access to health service, lack of access to medicine and insufficient service from the service providers. Closely followed by lack of sanitation and cost of health care. Less cited health concern is lack of awareness among the people regarding health.

- Commercial farmers (500+) use to buy chicks from nearby hatcheries and/or their wholesaling agents. Semi-commercial farmers generally procure chicks from the local level wholesale agents of the hatcheries. The backyard poultry farmers use to buy poultry from the local markets and neighbors.

- The commercial poultry farmers sell their products mainly to the wholesale suppliers, and occasionally, to the large consumers like big restaurants. Semi-commercial farmers sell poultry to commercial consumers, restaurants, hospitals, dormitories, etc. Some sell to vendors in bigger markets. Backyard farmers sell to vendors from local markets, hawkers/petty suppliers and to neighbors.

- Poultry products (chicks, chicken, eggs) in larger quantity is mainly transported by motorized van. Non-motorized vans are used for smaller amount and shorter distance.

While transporting, metallic cages are used for poultry birds and specially made cartoon boxes for chicks. Eggs are carried in trays packed in cartoons.

- Regarding processing of poultry, slaughtering, dressing and cutting are the common practice. Almost all the process is made manually in bordering areas. Most of the poultry buyer prefer to process the birds at home.

- Some 59% small rural backyard farmers have heard about Avian Influenza. However 32% do not know anything about its mode of spread among the poultry birds. Irrespective of male or female, they do not have proper knowledge about detection of Avian Influenza among the poultry birds. Hardly, 21% know that human can get Avian Influenza from the infected domesticated birds. In areas where there was outbreak of Avian Influenza and numbers of poultry birds were culled-up, awareness on this issue is reasonably higher. School going adolescents know more about Avian Influenza than their parents.

- A little less than half of the backyard farmers who have some knowledge about Avian Influenza have argued that poultry/poultry products across the border are at greater risk of being exposed to Avian Influenza than poultry/poultry products originated from Bangladesh and 42% have said that the risk is equal.

- Semi-commercial and commercial poultry farmers are more aware about Avian Influenza compare to others. All semi-commercial and commercial poultry farmers know Avian Influenza can affect human being. They are also familiar with sign and symptoms of Avian Influenza, mode of spread of Avian Influenza and how it can spread among human as well as how to protect from being affected. However, overall knowledge and practice level for prevention of Avian Influenza is quite high in the commercial farms as compared to the semi commercial.

- Most of the vendors, transporters, large consumers and processors of poultry and poultry products have heard about Avian Influenza and have some knowledge about its spread among the poultry birds but have little knowledge about the sign and symptom of the disease. Transporters and consumers are somewhat confused about the risk of Avian Influenza among the humans, however, most of the vendors and processors know that human can be affected by Avian Influenza but none of them have required knowledge regarding their protection from Avian Influenza.

- Poultries in backyard farms are kept in sheds made of clay or brick with hey or wood roof adjacent to dwelling house. Except in few cases, chickens and ducks are found to keep together. Largely, female members of the households (generally female household heads) take care of the poultry everywhere followed by adolescent girls. There is no restriction for the children and other domestic to come in contact with poultry. Poultries are kept free in daytime and allowed to collect food from outside. Hand washing practice after contact with poultry is rare and such practices before in contact with poultry is absent.

- Broadly, three types of poultry farm habits are found to exist in surveyed areas. Most common practice is to raise day one chicks from different farms in Bangladesh and sell out after 40-45 days. Other ones are to raise adult broilers and lying chicken for consumption and selling eggs. Except in little variation, reported poultry raising/care practices of the surveyed semi-commercial and commercial farm are almost similar.

However, protective measures for prevention of poultry disease in general and Avian Influenza in particular is fairly higher in commercial farms compare to semi commercial farms.

- Official poultry trade between Bangladesh and India has been stopped since August 2004 with the outbreak of Avian Influenza in India. But, instances of small-scale unofficial poultry trading (smuggling) between India and Bangladesh have been mentioned by some. Source of poultry buying and selling for backyard and commercial farms has been reported as Bangladesh. Almost all the respondents including the custom officials are unaware of laws related to cross border poultry trade. Moreover, boarder officials are not familiar with the existence of any checklist being used for giving transit clearance of poultry and poultry products at the check post.

- Besides ban of poultry trade, mandatory spraying of disinfectant on the wheels of each vehicle before its entry to Bangladesh from India, campaigns/workshops to raise the awareness of farm owners in bordering districts on Avian Influenza/Bird Flu have been made by the Government of Bangladesh as measures of cross border prevention of Avian Influenza.

- The predominant perception of the border residents is that they are more vulnerable to avian influenza because of outbreak of Avian Influenza in bordering districts of India. In contrast, according to a group of people, Avian Influenza is not a serious disease rather it is a conspiracy by foreign country to damage the emerging poultry sector of Bangladesh.