



Exploring Motivations of Poultry Farmers for Antimicrobial Use in Bangladesh: A Qualitative Investigation



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Background:

- Poultry farming in Bangladesh is characterized by diverse antimicrobial usage practices, prompting the need to understand farmers' motivations and decision-making processes.
- This study investigates the intricate decision-making processes of poultry farmers concerning antimicrobial usage, exploring the interplay of personal experience, advice sources, and external influences.

Methodology:

- **Study:** Qualitative investigation through semi-structured interviews
- **Study design:** Parallel farm-based longitudinal study design
- **Duration:** February – July 2023
- **Study region:** Mirsarai and Chandanish Upazila, Chattogram
- **Participants:** Broiler and Sonali farmers (n = 12, all male), Credit-based and contract farmers
- **Data collection:** Using semi-structured interview guide based on the AMU data from longitudinal study

Motivations for Antimicrobial Use



Prophylactic use in brooding (Self-experience)



Therapeutic use (Guided by vet)

Powerful drug in winter



“Basically, a less powerful antibiotic should be used in the summer, and a stronger antibiotic in the winter, so that the chicks can stand properly during the first week. (Broiler farmer)

Stockpiling



“I purchase many medicines beforehand. Such as, I buy 5 kg of Renamox antibiotic at a time, so that I get a discount. (Broiler farmer)

Reuse of leftover medicine



“ Sometimes, if there is too much medicine left over after applying one batch, I carefully save it for next time use. (Broiler farmer)

Changing drugs by seller



“ Feed dealer supplies me with the medicines. If a medicine recommended by the doctor is not available in his store, he always provides me with another medicine instead. (Broiler farmer)

Alter dose & course



“ If I don't see any improvement in the chicken's health even after using the dose recommended by the doctor, I increase the dose slightly. (Sonali farmer)

Frequent switching vets



“ If the condition of the chicken doesn't improve even after 2-3 days of using the antibiotics, then I feel worried and consult with another new doctor. (Sonali farmer)

Influences on Antimicrobial Decision-

Making

Farmers sharing experiences and knowledge



Feed dealers supplying antimicrobials and providing advice



Reusing formerly vet-prescribed antimicrobials without consultation



Antimicrobial Access Dynamics



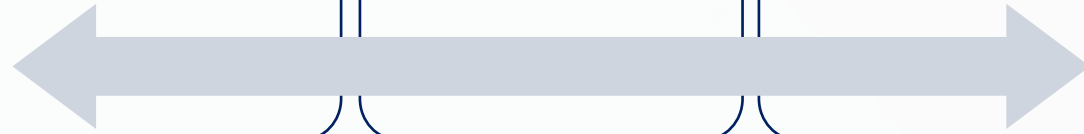
Mostly credit transaction between a farmer and a dealer



Farmers purchase antimicrobials in advance for DOCs



Sonali batches: Multiple prophylactic antimicrobials are purchased and used at different stage



Recommendations

- ❖ Targeted interventions in educating and training poultry farmers on responsible antimicrobial use
- ❖ Improved availability and accessibility of service and medicine in remote regions
- ❖ Strengthen regulatory measures to monitor the sale, distribution and use of antimicrobials in the poultry farming sector

Challenges

- Vet absence in emergencies, reliance on mobile communication
 - Distant procurement of medicines
 - Difficulties in prescribed antimicrobials locally, depending on alternative brands/categories
 - Degraded quality of antimicrobial drugs
- “ *The major problem is that the medicine recommended by the doctor is not always available locally. Then it may be necessary to change brands or collect them from a distant location.* ”

