Behavioral obstacles to vaccinations in livestock – examples from sub-Saharan Africa

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A livestock farmer in rural Mali waiting for his lamb to get vaccinated
Roles of livestock

- **FOOD**
- **GENDER**
- **ENVIRONMENT**
- **PROSPERITY**
- **HEALTH**
The livestock poverty ladder

Livestock poverty ladder

Usually preferred by women

Cattle, camels

Dairy cows (in small numbers)

Sheep, goats, pigs

Poultry

RESOURCES

Burden of animal diseases

- Estimates from BMGF

Annual mortality of African livestock

<table>
<thead>
<tr>
<th></th>
<th>Young</th>
<th>Adult</th>
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<tbody>
<tr>
<td>Cattle</td>
<td>22%</td>
<td>6%</td>
</tr>
<tr>
<td>Shoat</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>Poultry</td>
<td>70%</td>
<td>30%</td>
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Source: Otte & Chilonda; IAEA
Access to veterinary inputs (ex. drugs and vaccines)

- Most of the livestock keepers have small scale enterprises

- These people are poor and, in many situations, have poor access to veterinary services and veterinary technologies

- The inadequate distribution of animal health systems is a market failure which needs societal intervention
Determinants of vaccine adoption

- Effective; safe; good quality; produced at a large scale;
- Cost; time; place
- Awareness and willingness to use it because they value the potential benefits of using the vaccine.
- Acceptability: Perception; Belief; knowledge; trust; side effects (ex. CBPP)

Vaccine availability \[ \times \] Vaccine access \[ \times \] Vaccine demand = Vaccine adoption
Understanding the importance of people

The People
their decisions and trade offs
how do we align the decision

Livestock owners
Why is this important for disease management and build back better?
- Low input production system
- Limited political power
- Often a woman (for small livestock)
Behavioral challenges to vaccination

Awareness and knowledge

- Willingness to vaccinate study in Mali (304 cattle and small ruminant farmers interviewed)

✓ Positive factors
  - Information on the campaign calendar (faster if from places of worship)
  - Awareness of the benefits of vaccination.
  - A recognition of the vital importance of vaccines
  - Farmer able to recognize a vaccine of good quality
Behavioral challenges to vaccination

Awareness and knowledge (Cont.)

Willingness to vaccinate (Mali- n = 304 cattle and SR farmers), 89% of respondents vaccinated their herds during official vaccination campaigns.

✓ Negative factors

- Ignorance of roles of vaccination
- Concerns about vaccine side-effects.
Behavioral challenges to vaccination

Beliefs and perceptions

“Before livestock keeping provided social status, it was necessary to have as many heads as possible but was not profitable. The tendency was to buy more heads, without even worrying about the health of the animals, today it is no longer important to have so much, it is no longer the quantity that counts, but the quality.”

(Farmer in Farakala, Sikasso, Mali)
The gender dimension in livestock keeping

▪ Division of roles

 ✓ In mixed crop-livestock systems of Ethiopia, women are dominant in livestock management and husbandry practices compared to men and other household members

 ✓ Men tend to have a larger role in activities related to animal health.

▪ Decision making

▪ Livestock ownership
Behavioral challenges to vaccination (cont.)

Communication and transparency

“We cannot declare the number of livestock we own because the government will impose taxation on us and we don’t know where the money go” (Farmer, Sikasso, Mali).

“Why should we pay the same price to vaccine shoats and cattle?” (Farmer, Mopti, Mali).
Behavioral challenges to vaccination (cont.)

Trust between parties

“Veterinarians have lost credibility and their service is no more respected by the farmers; the vets have no authority nowadays, compared to before privatization of the veterinary profession”

(Farmer in Mopti, Mali)
Behavioral challenges to vaccination (cont.)

Policy enforcement

“If the animal keeper is intimidated or threaten by the vaccination controller of the area, then he/she can comply with vaccination easily” (Veterinarian, Sikasso, Mali).
Behavioral challenges to vaccination (cont.)

Perception of disease risk and their impact

What is important to the farmer?

Which disease is a priority to the farmer?

How is the disease affecting livelihood

Value of small ruminant versus cattle
Final thoughts

Increase vaccine adoption

Product profile

Private sector

Social participation (incentive)

Innovation

Policy
Thank you

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