

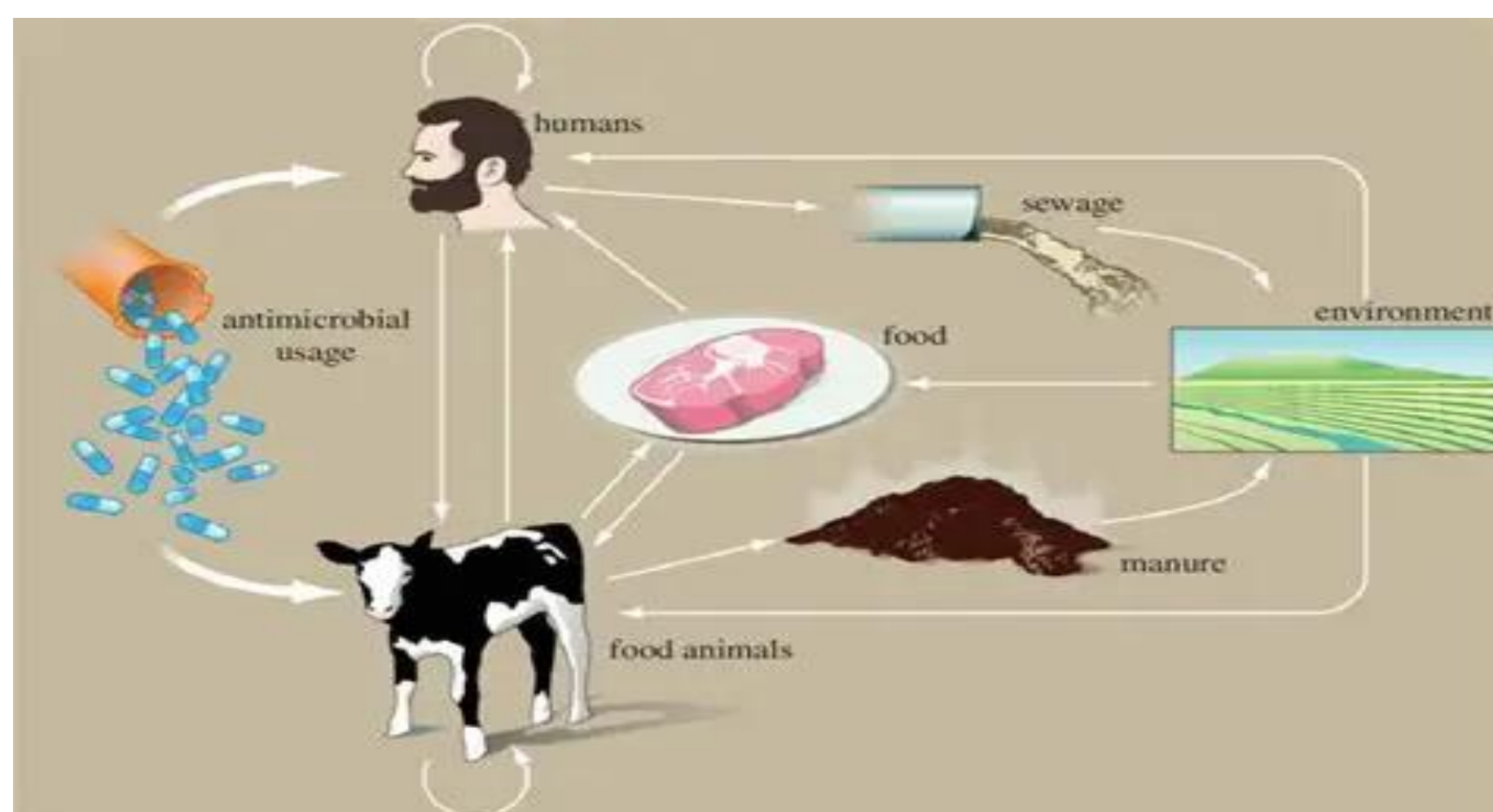
## Bridging Gaps in Antibiotic Stewardship: Knowledge, Attitudes and Practices of Livestock Farmers in a One Health Context

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### INTRODUCTION & AIM

Antimicrobial resistance (AMR) is a critical global health challenge driven by inappropriate antibiotic use across human, animal and environmental sectors (1,2). In livestock farming, irrational antibiotic practices and poor awareness contribute significantly to the emergence and spread of resistant pathogens (3,4). Strengthening antibiotic stewardship at the community level is essential within the One Health framework. This study aimed to assess gaps in knowledge, attitudes and practices (KAP) related to antibiotic use among livestock farmers, which is essential to design effective interventions in the community to tackle AMR.



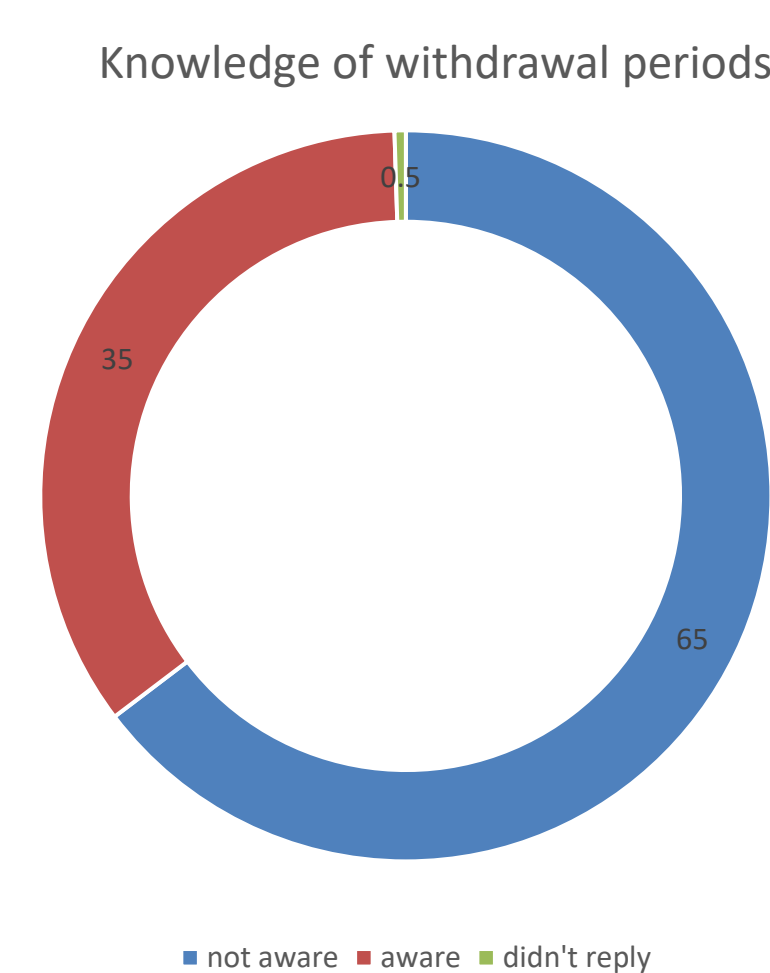
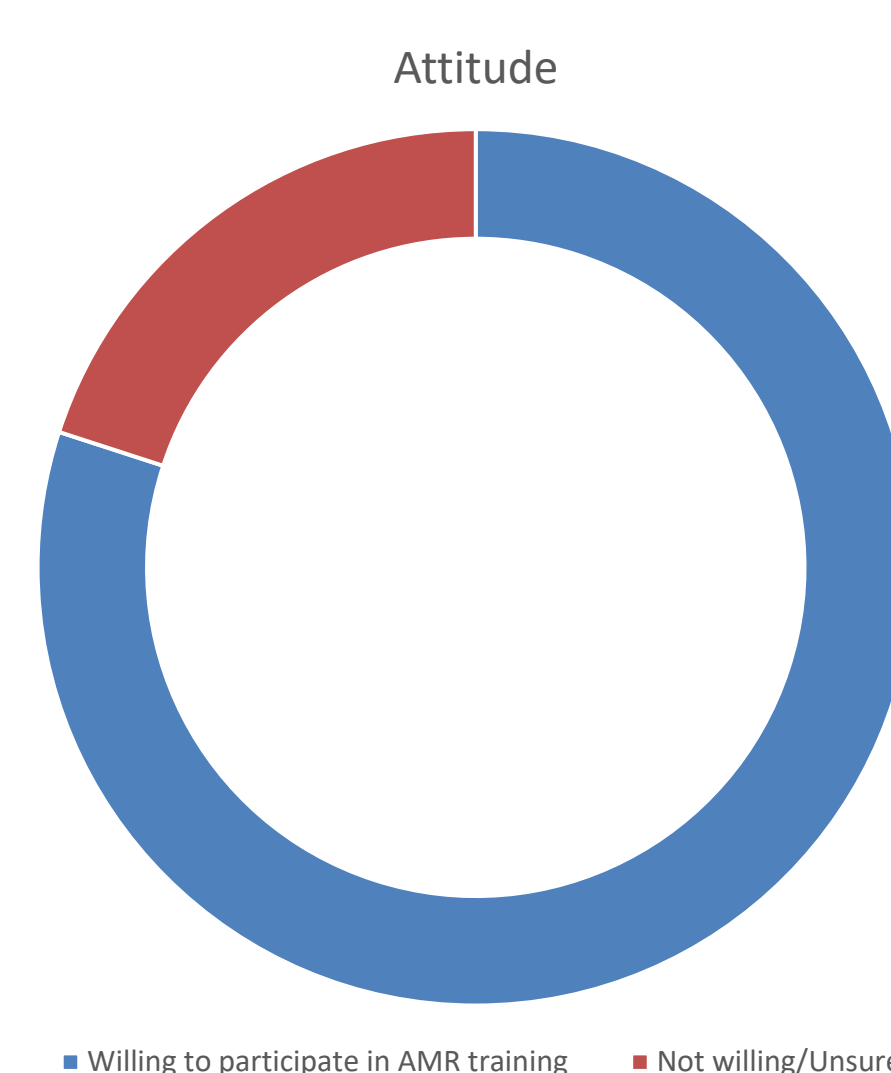
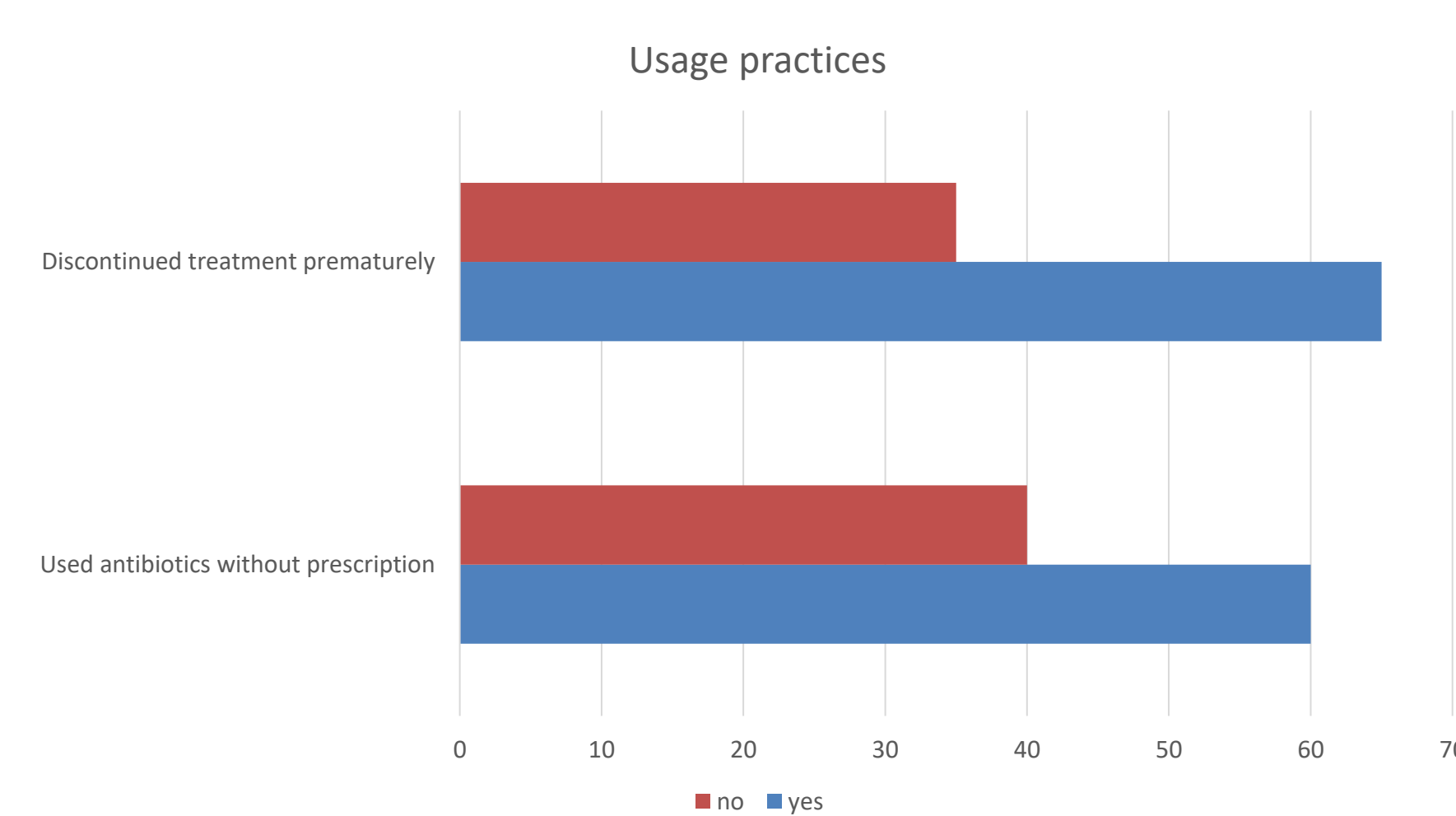
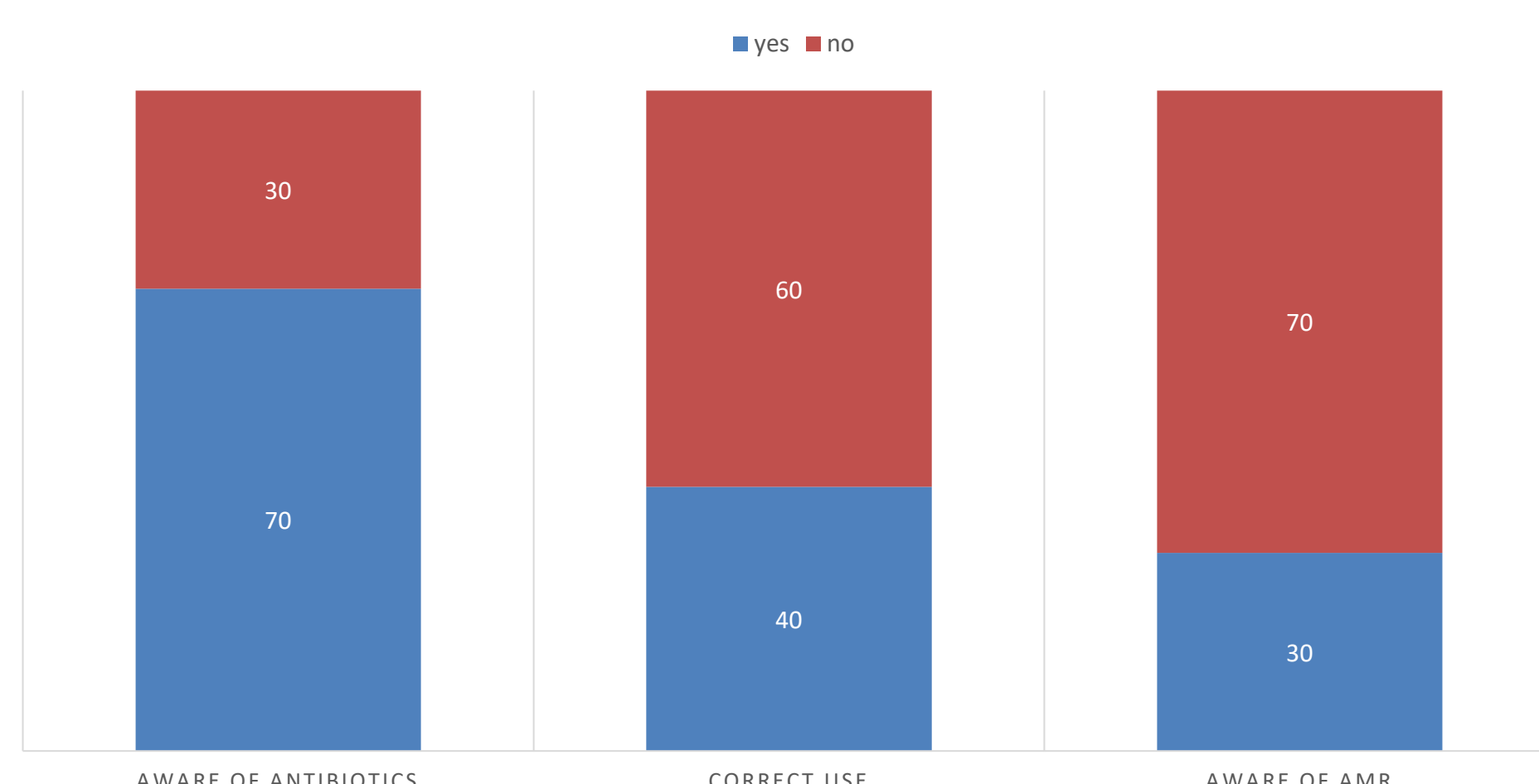
### METHOD

A community-based, cross-sectional, questionnaire-based study was conducted among 30 livestock farmers in rural Karnataka. Data was collected using a structured, pre-validated KAP questionnaire covering domains of antibiotic awareness, AMR knowledge, usage practices and environmental factors. Responses were recorded in the local language and analyzed using descriptive statistics.

### RESULTS & DISCUSSION

Although 70% of participants were aware of antibiotics, only 40% correctly identified their appropriate use for bacterial infections. Awareness of AMR was limited (30%), reflecting trends reported in similar settings (5). Inappropriate practices were prevalent, with over 60% of farmers reporting non-prescription antibiotic use and nearly half discontinuing treatment prematurely, undermining antibiotic stewardship (6). Knowledge gaps regarding withdrawal periods and antibiotic residues in animal products were significant. Environmental dimensions of AMR, including contamination of soil and water, were poorly recognized (7). Despite these gaps, a majority expressed positive attitudes toward improved practices and willingness to participate in stewardship training.

#### KNOWLEDGE



### CONCLUSION

Substantial gaps in antibiotic stewardship exist among livestock farmers, driven by inadequate knowledge and unsafe practices. Targeted interventions including farmer education, improved veterinary access and regulatory enforcement are essential. Integrating these strategies into a One Health framework is crucial in mitigating AMR and promoting sustainable antibiotic use (3,8).

### FUTURE WORK / REFERENCES

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