

FACTORS ASSOCIATED WITH INAPPROPRIATE USE OF ANTIBIOTICS AMONG ANIMAL HEALTH PROFESSIONALS IN FIVE DISTRICT, RWANDA, 2021

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Almost 70% of animal health professionals used antibiotics inappropriately

Abstract Reference
PP03

BACKGROUND

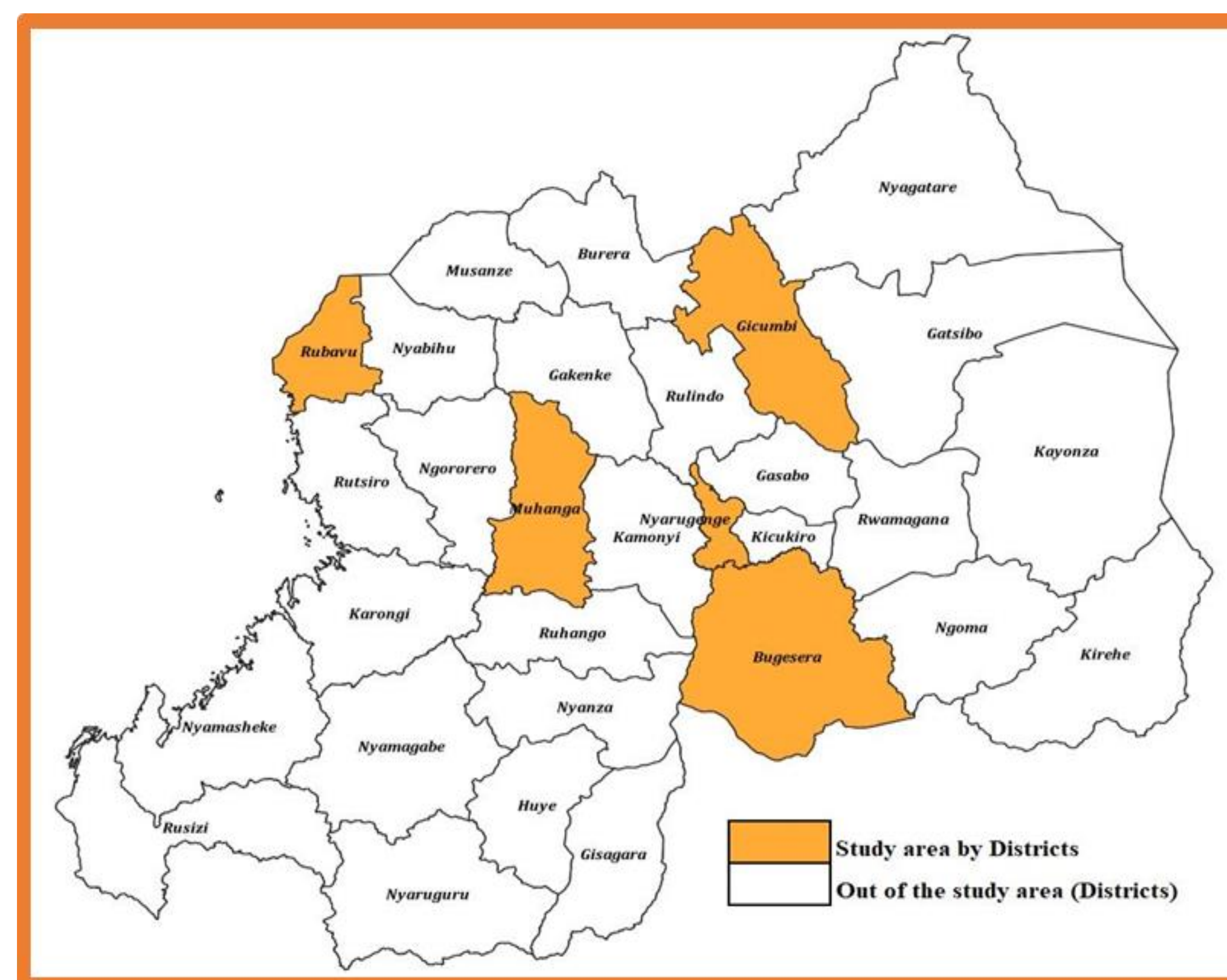
- Antibiotic resistance (ABR) is a global health security concern.
- Transmission of ABR from animals to humans occurs either directly from animals to humans or through the food chain and / or the environment.
- Misuse of antibiotics is the leading factor in the development of antibiotic resistant pathogens.
- This study aimed to determine the factors associated with inappropriate use of antibiotics among animal health professionals in Rwanda

METHODS

- Cross sectional study enrolled animal health professionals
- Five districts randomly selected randomly , one district by province.
- Structured questions were used during face to face interviews.
- Inappropriate use of antibiotics
 - _ the use of antibiotics (ATB) for any reason other than treatment,
 - _non-completion of required courses and/or
 - _use of high dose (overdose) of antibiotics
- Data collected included socio-demographics of respondents, elementary knowledge on antibiotics and the perceptions on antibiotic resistance
- Logistic regression
- Factors associated to inappropriate use antibiotics

Data collected included socio-demographic of respondents, elementary knowledge and perceptions on veterinary antibiotics and antibiotic resistance. Logistic regression was used to identify the factors independently associated to inappropriate use of antibiotics

RESULTS



- Among 256 respondents, 174 (68%) used ATB inappropriately.
- Males were 198 (77%) and age ranged from 21 to 56 years old (median of 32 years).
- Statistical analysis found that factors associated with inappropriate use were:
 - ❖ Being aged of 24 years and below (OR=5.05; 95% CI=1.47, 17.38; P=0,017);
 - ❖ Low trust to veterinary antibiotics available in the local market (OR=8.87; 95% CI= 4.53, 17.35; P<0.01),
 - ❖ Insufficient knowledge (OR=2.37; CI=1.19-4.71, P=0.02)
 - ❖ Not acquiring any continuous education (OR=2.17; 95% CI=1.15, 4.12; P<0,01).

CONCLUSIONS

- This study identified high levels of inappropriate antibiotic use among animal health professionals.
- There is need for continuous education among animal health professionals and expanded focus to reflect on the impact of their practice on one health and public health security.

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