Note: This is Online Appendix 1 of Ogwuche, A., Ekiri, A.B., Endacott, I., Maikai, B-V., Idoga, E.S., Alafiatayo, R. et al., 2021, 'Antibiotic use practices of veterinarians and para-veterinarians and the implications for antibiotic stewardship in Nigeria,' *Journal of the South African Veterinary Association* 92(0), a2120. https://doi.org/10.4102/jsava.v92i0.2120

Questionnaire

Your participation in this survey is valued. Please indicate below your consent to participate before proceeding to complete the survey.

Yes, I consent No, I do not consent

Questionnaire

Demographic information

- 1. Which of the following best describes your profession? Select one
 - a. Farmer
 - b. Veterinarian
 - c. Para-veterinarian
 - d. Farm manager
 - e. Others, please specify
- 2. Which of the following best describes your employment status? Select one
 - a. Private practice
 - b. Non-governmental organization employee
 - c. Government employee
 - d. Research
 - e. Teaching
 - f. Others, please specify
- 3. How many years of veterinary work/practice experience do you have? Select one
 - a. 1-5 years
 - b. 6-10 years
 - c. 11 years or more
 - d. Prefer not to say
- 4. Please indicate your age group:
 - a. 25 years or less
 - b. 26-35 years
 - c. 36-45 years
 - d. 45 years or older
 - e. Prefer not to say
- 5. What is the <u>highest</u> level of education you attained? Select one
 - a. Secondary school certificates (SSCE)
 - b. Post-Secondary certificate (NCE)
 - c. Polytechnic certificate (OND/HND)
 - d. Veterinary degree (DVM/BVS)
 - e. Bachelor's degree (B.Sc.)
 - f. Post graduate degree (MSc/MPH/PhD or more)
 - g. Others, please specify

6. What type of animal species/animals do you see most commonly in your practice? Select all that apply a. Cattle b. Goats c. Sheep d. Dogs e. Cats f. Rabbits g. Chicken (layers, broilers, breeder, backyard) h. Turkey i. Fish/Aquaculture j. Wildlife (wild animals kept in a zoo or park) k. Exotics kept by humans (parrots, tortoise, snakes, etc.) l. Other, please specify **Prescribing practices** 7. Do you often prescribe/use antibiotics in or as part of your practice? a. No b. Yes 8. In what species of animals do you often prescribe or use antibiotics? Check all that apply a. Cattle b. Goats c. Sheep d. Dogs e. Cats f. Chickens g. Turkey h. Fish/Aquaculture i. Other, please specify 9. What are the two most common reasons for prescribing or using antibiotics? Check all that apply a. Disease prevention/prophylaxis b. Therapeutic/treatment c. Growth promotion d. Other, please specify 10. What type of disease is often targeted for prevention or treatment with antibiotics? For what type of disease do you often administer antibiotics. Check all that apply a. Bacteria b. Viral c. Fungal d. Protozoal e. Helminth (worms) f. Others, please specify

11. If response to question 8 includes Fish, what are the two most common reasons for prescribing or using

antibiotics to fish?

- a. Control of disease outbreak
- b. Disease prevention/prophylaxis
- c. Therapeutic/treatment
- d. Growth promotion
- e. Other, please specify
- 12. If response to question 8 includes Fish, what class of disease is often targeted for prevention or treatment with antibiotics in fish? Check all that apply
 - a. Bacteria
 - b. Viral
 - c. Fungal
 - d. Protozoal
 - e. Helminth (worms)
 - f. Others, please specify
- 13. What are the top five antibiotics you most commonly use or prescribe? Check top five that apply
 - a. Enrofloxacin
 - b. Gentamycin
 - c. Neoceryl/Keproceryl[®] (Neomycin, Erythromycin, Oxytetracycline, Streptomycin and Colistin)
 - d. Tylosin
 - e. Oxytetracycline
 - f. Doxycycline
 - g. Penicillin
 - h. Enrofloxacin
 - i. Furazolidone
 - j. Doxy-get (Doxycycline, Gentamycin)
 - k. Neomycin, Chloramphenicol and Oxytetracycline (NCO)
 - 1. Norfloxacin
 - m. Neomycin
 - n. Flumequin
 - o. Tetracycline
 - p. Streptomycin
 - q. Amoxicillin
 - r. Ampicillin
 - s. Ciprofloxacin
 - t. Metronidazole
 - u. Other, please specify
- 14. What are the two most common source of antibiotics used in your practice? Check all that apply
 - a. Agro-store (non-veterinarian)
 - b. Veterinary clinic (veterinarian)
 - c. Distributor
 - d. Open markets
 - e. Others, please specify
- 15. How many times in the last/previous year did you use the laboratory to aid your clinical diagnosis?
 - a. None
 - b. 1-2 times
 - c. 3-4
 - d. 5-6
 - e. More than 6 times

- 16. What type of tests do you commonly request when submitting samples for laboratory testing? Check all that apply

 a. Pathology/Post Mortem examination
 b. Microbiological culture and identification
 c. Microbiological culture and identification and sensitivity
 d. Serology
 e. Do not submit samples
 f. Others, please specify
- 17. How often do you undertake microbiological culture and sensitivity testing before starting antibiotic treatment? Check one
 - a. Never
 - b. Sometimes (1-5 times a year)
 - c. Frequently (more than 5 times a year)
 - d. Don't know
- 18. Of the following sources of information, what are the top three sources you most commonly use to guide your decisions on choice of antibiotic used? Check all that apply
 - a. None
 - b. Manufacturer labels found on bottle/sachet or leaflet
 - c. Antibiotics guidelines developed and kept by my practice
 - d. Personal experience
 - e. Government issued guidelines
 - f. Consult colleagues
 - g. Others, please specify
- 19. Have you encountered or are you aware of any Nigeria government issued guidelines on antibiotic use in animals (these may be at national/regional/state/local levels)?
 - a. No
 - b. Yes
 - c. Don't know
- 20. If response to question 19 is yes, have you ever used the government issued guidelines on antibiotic use to support your decision making on use of antibiotics in practice?
 - a. No
 - b. Yes
 - c. Don't know
- 21. If response to question 19 is yes, what was the format of the guidelines you encountered? Check all that apply
 - a. Leaflets
 - b. Brochures
 - c. Reports
 - d. Radio announcements
 - e. Others, please specify
- 22. In your opinion, do you think government regulation or legislation on antibiotic use in animals can influence the use of antibiotics by animal health professionals (vets, paravets)?
 - a. No
 - b. Yes
 - c. Don't know