

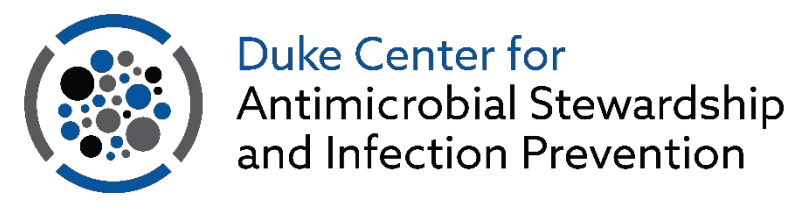
Antimicrobial Stewardship Knowledge, Attitudes, and Practices (KAP) Among Health Care Providers in a Community Hospital Network

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Background

Drivers of inappropriate antimicrobial use can be linked to deficiencies in knowledge, attitude and practice (KAP). Healthcare worker KAP is not well described, and surveys to assess KAP are not standardized in the United States.

Understanding healthcare personnel KAP related to antimicrobial stewardship (AS) may prove valuable for future AS initiatives. Utilizing a consistent and validated KAP survey is important for comparison across practices within the United States.

- Methods**
- We utilized an internationally validated survey translated for use in the United States that contained 41-questions related to AS KAP.
 - The first 21-questions were answered by all respondents
 - The final 20 questions were only answered by healthcare personnel who prescribe antibiotics
 - Prescribers, pharmacists, nurses, and administrators at 40 community hospitals within the Duke Antimicrobial Stewardship Outreach Network (DASON) were invited via e-mail to take the anonymous, voluntary web-based survey (via RedCAP).
 - Reminders to complete the survey were given at regularly scheduled stewardship meetings and reminder emails were sent to enhance survey response.
 - Responses were collected from February 21, 2024 – April 30, 2024.

Figure 1. Response Inclusion

| | | |
|-----------------|---------------------------|---|
| Total Responses | Complete Survey Responses | Total Number of Hospitals Who Responded |
| 168 | 167 | 24 |

Results

Table 1. Survey Participant Demographics

| Category (N=167) | n (%) |
|--|------------|
| Years of experience in profession, median (IQR) | 15 (15.3) |
| Years of experience in current institution, median (IQR) | 8.5 (14.3) |
| Hospital Location | |
| Georgia | 17 (11) |
| North Carolina | 125 (75) |
| South Carolina | 3 (2) |
| Virginia | 20 (12) |
| Currently in training | 15 (9) |
| Able to prescribe antibiotics | 24 (14) |

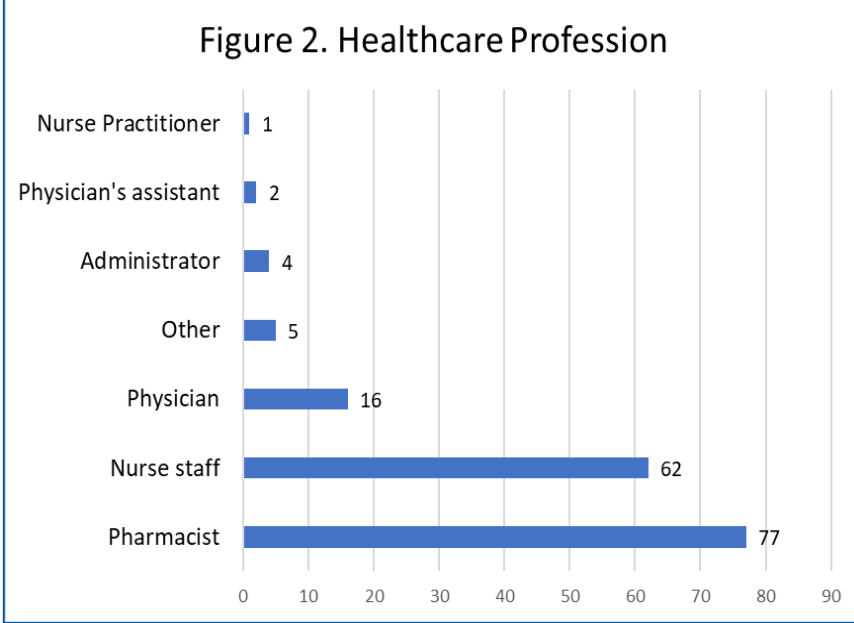


Table 2. Knowledge-based Statements

| Knowledge Statements for All Respondents (N=167) | Strongly Agree or Agree, n (%) |
|---|--------------------------------|
| Appropriate use of antibiotics may reduce antibiotic resistance | 159 (95) |
| Inappropriate antibiotic use can harm patients | 159 (95) |
| The incidence of antibiotic-resistant organisms can be reduced by optimizing antibiotic prescribing patterns and infection prevention and control practices | 158 (95) |
| I trust the microbiology test results that I receive at my healthcare facility | 149 (89) |
| I am familiar with the term antibiotic stewardship | 148 (89) |
| I have access to locally endorsed infectious diseases treatment guidelines used at my healthcare facility | 113 (68) |
| I am able to access my healthcare facility's updated antibiogram | 108 (65) |
| Antibiotic resistance is a problem at my healthcare facility | 42 (25) |

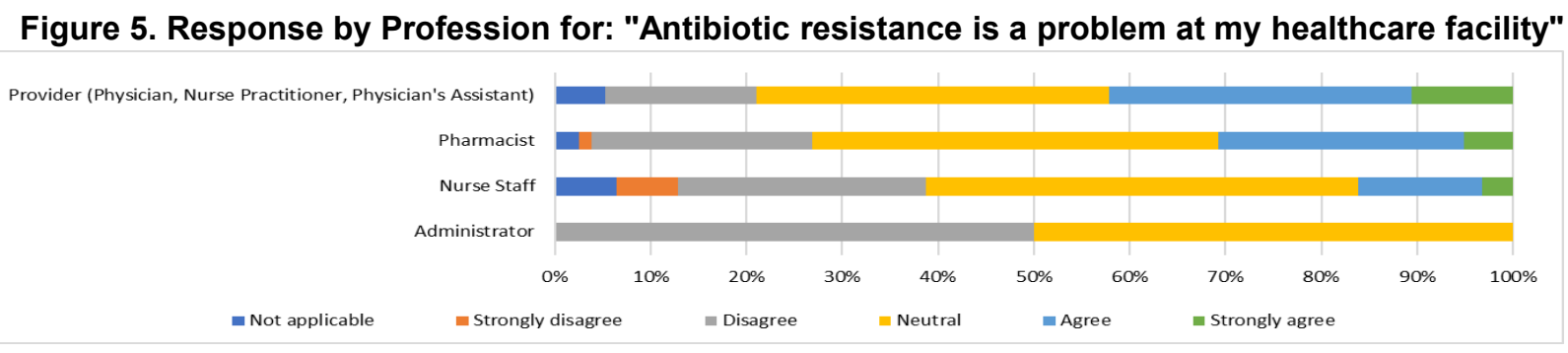
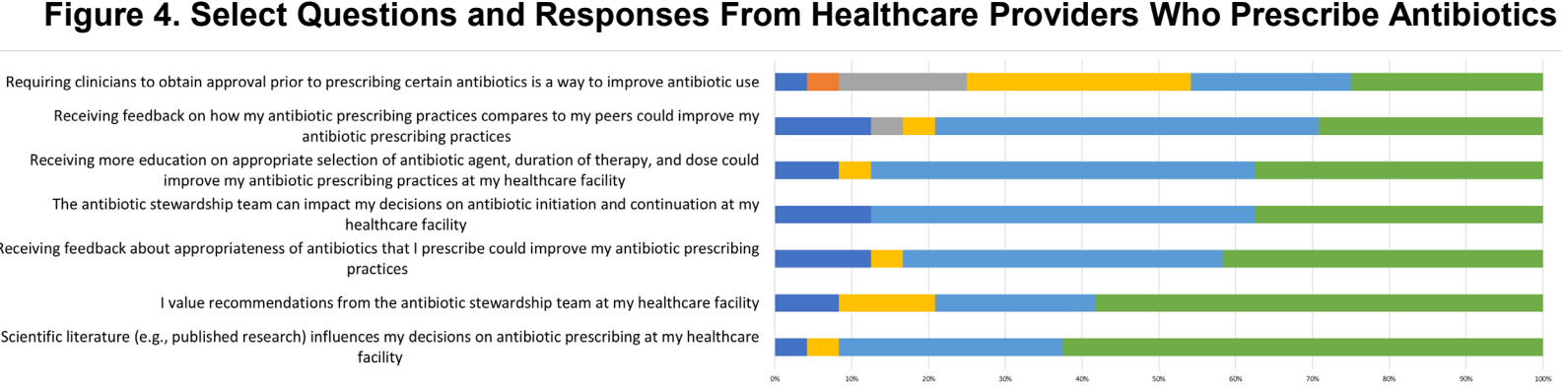
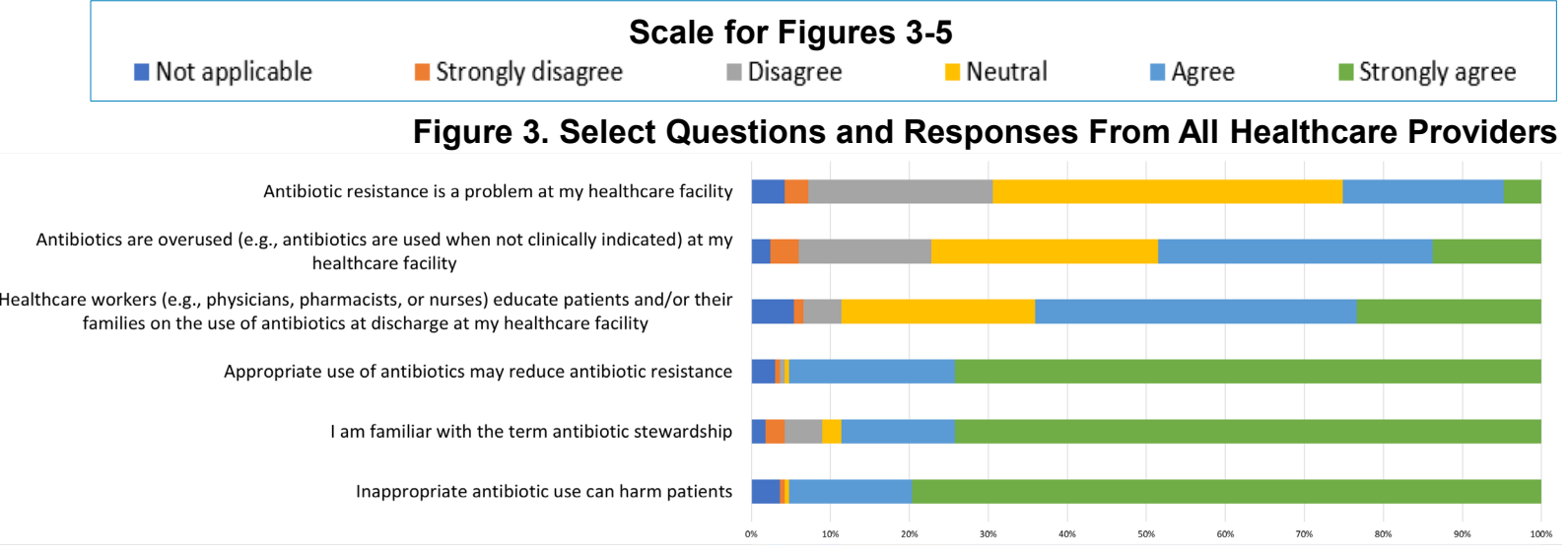
Table 3. Attitude-based Statements

| Attitude Statements for All Respondents (N=167) | Strongly Agree or Agree, n (%) |
|--|--------------------------------|
| Optimizing antibiotic use is a priority at my healthcare facility | 141 (84) |
| I value recommendations from the antibiotic stewardship team at my healthcare facility | 131 (78) |
| I feel comfortable recommending an intervention to my colleagues on antibiotic use | 115 (69) |
| More guidance from the antibiotic stewardship team could improve antibiotic use at my healthcare facility | 110 (66) |
| The importance of antibiotic stewardship is communicated (e.g., via posters, emails) at my healthcare facility | 105 (63) |



Conclusions

- Healthcare providers within DASON were aware of the importance of AS and its effect on antimicrobial resistance and patient outcomes, however few found that resistance was a problem at their own institution.
- Prescriber feedback was seen as a valuable educational tool, as most prescribers valued AS feedback and agreed feedback would improve antibiotic selection.



References: 1. Hosp Pharm. 2016;51(2):149-157. doi:10.1310/hpj5102-149. 2. Heliyon. 2023;9(10):e21166. Published 2023 Oct 18.