

Dairy farmer attitudes toward antibiotics and antibiotic use

A questionnaire-based study of Swedish organic and conventional dairy herds

AIM

Assess dairy farmer's perceived benefits and risks with antibiotics (AB) and AB use (ABU)

CONCLUSIONS

- Small differences between type of farm, although organic farmers tended to rate the benefits lower and rated the risks higher than the conventional farmers
- Experience of AB resistance was associated with increased perceived benefits and reduced risks
- Perceived benefits decreased and risks increased with increasing knowledge

MATERIAL AND METHODS

- Pen-and-pencil questionnaire
- Constructs to capture perceived benefits and risks with ABU were defined, 6-point scale
- Sent to a random sample of 300 organic and 500 conventional farmers
- One reminder, no incentives
- Response rate 30% and 20%, respectively
- Multivariable linear regression to assess some predictors of attitudes to ABU

FARM AND FARMER CHARACTERISTICS

| | Organic | Conventional |
|---|---------------|---------------|
| Number of milking cows (range) | 80 (40 - 460) | 75 (25 - 400) |
| Automatic milking system, % | 47.8 | 28.7 |
| Elementary agricultural school education, % | 75.3 | 62.4 |
| Post-secondary school education, % | 62.5 | 45.5 |
| % correct answers about AB/ABU (range) | 81 (69 - 94) | 81 (69 - 88) |

MULTIVARIABLE ASSOCIATIONS BETWEEN FARM / FARMER CHARACTERISTICS AND ATTITUDES TO ABU

| Variables | Category | Benefits | Risks |
|---|------------|---------------------|-------------|
| | | Coefficient | Coefficient |
| Organic production | Yes | -0.18 ^{ns} | 0.32 |
| | No | 0 | 0 |
| Have had experience of AB resistance | Yes | 0.51 | -0.24 |
| | No | 0 | 0 |
| Number of correct answers on questions about AB | Continuous | -0.06 | 0.08 |
| Intercept | | 4.74 | 2.93 |