Contraceptive Research
Perspectives on Laboratory and Field Research Considerations

Moderator: Elly Hiby, PhD
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Limited to pZP in dogs (South African trial)

Inconclusive results re contraception but DO NOT use MFA

Most of projects have been surgical sterilization – over 200,000 dogs sterilized in various projects (65,000 in Bhutan, 65,000 in Haryana, 21,000 in Jamshedpur, 40,000 in Costa Rica) – may be of interest to this audience?

Cost runs around $20 in Asia, and $12 in CR
pZP project in South Africa

- Working with South African shelter with expert veterinary staff support – provided dogs; spayed and adopted out at end of study

- Ultimately unsuccessful – inconclusive results
Catching dogs

- Metal tongs & wire nooses – definitely inhumane
- Nets – better but dogs learn and still humane issues
- Hand-catching – 60% in Jamshedpur and has big impact on local community! Educate by doing.
Must understand human-dog interaction and dog demographics

Big variation across globe in “private”/street dog distributions and overall human-dog ratios (from 1 dog per 1,000 humans to 800)

Human density dependence

![Graph showing the relationship between human density and dog population in Haryana State, India. The equation is $y = -5E-05x + 0.9573$ with $R^2 = 0.45125$.](graph.png)
Use local veterinarians – train young graduates to do high volume, small incision surgeries.

Jaipur project showing time of surgery and size of incision.

Post-op pain also varies by incision length.
From Jamshedpur Project – some veterinarian to veterinarian differences – not seen below – but big variation by age of dog (but not gender)

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Surgical Sterilization Projects

- Possible to develop veterinary skills to perform quick (under 10 minutes) surgeries with low rate of adverse outcomes – ca. $15-20 per animal

- Bhutan, Jamshedpur, Haryana, Philippines – 10,000s of surgeries (post-op mortality – not incl. euthanasia) around 0.2-0.6% – lower in Jaipur – ca. 0.1%

- Engage community for best results
Do survey of community before starting if appropriate to determine # of private & street dogs

Huge variation in number of dogs from one community to another but number in each community relatively stable over time

Try to catch dogs by hand (food treats) to start – has positive impact on community-dog interaction

Handling and vaccinating/treating/sterilizing dogs has positive educational impact

Dog numbers not necessarily reduced even with intensive sterilization – dog numbers “culturally” determined?