



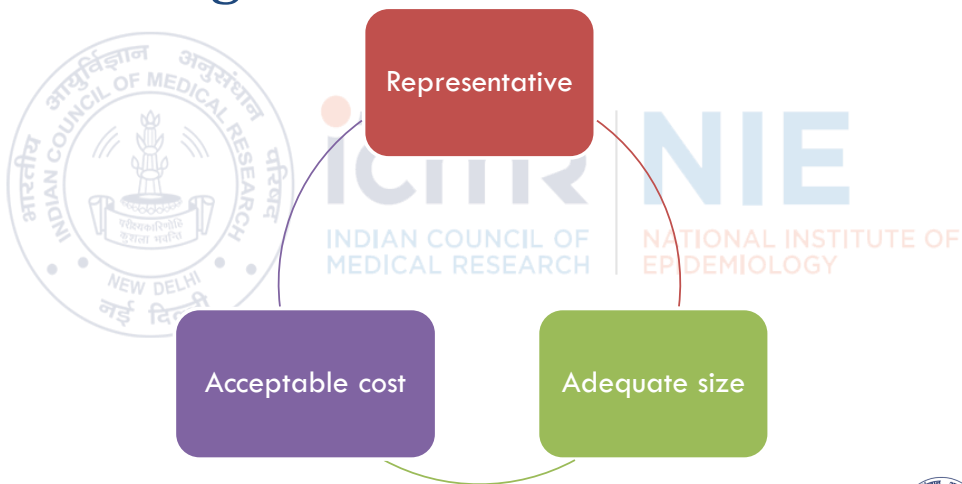
Selection of study population

Dr. P. Ganeshkumar
MD

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Study subject and population Connecting the link

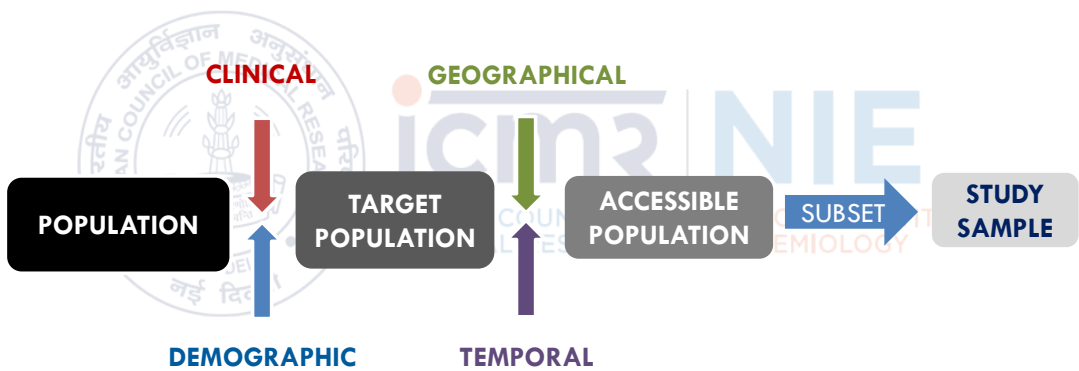


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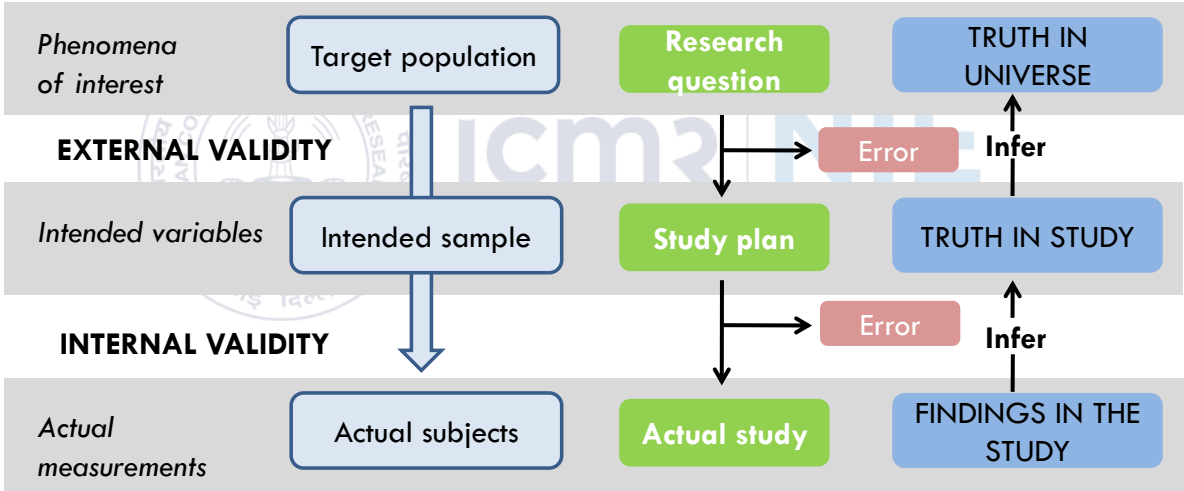
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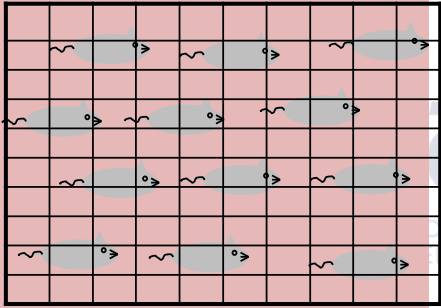
Population and sample



Choosing study subjects that represent the population

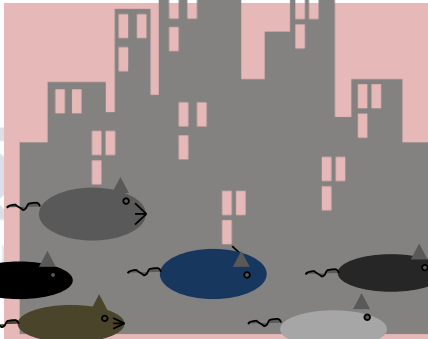


Internal and External validity



Lab mice
genetically identical

INTERNAL VALIDITY



Street mice
genetically different


EXTERNAL VALIDITY

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Answering the research question



Find the right answer to the study question



Generalizable to all mice

Lab mice
genetically identical

YES
Specific rat with similar genetic profile

Not necessarily

Street mice
genetically different

Not necessarily

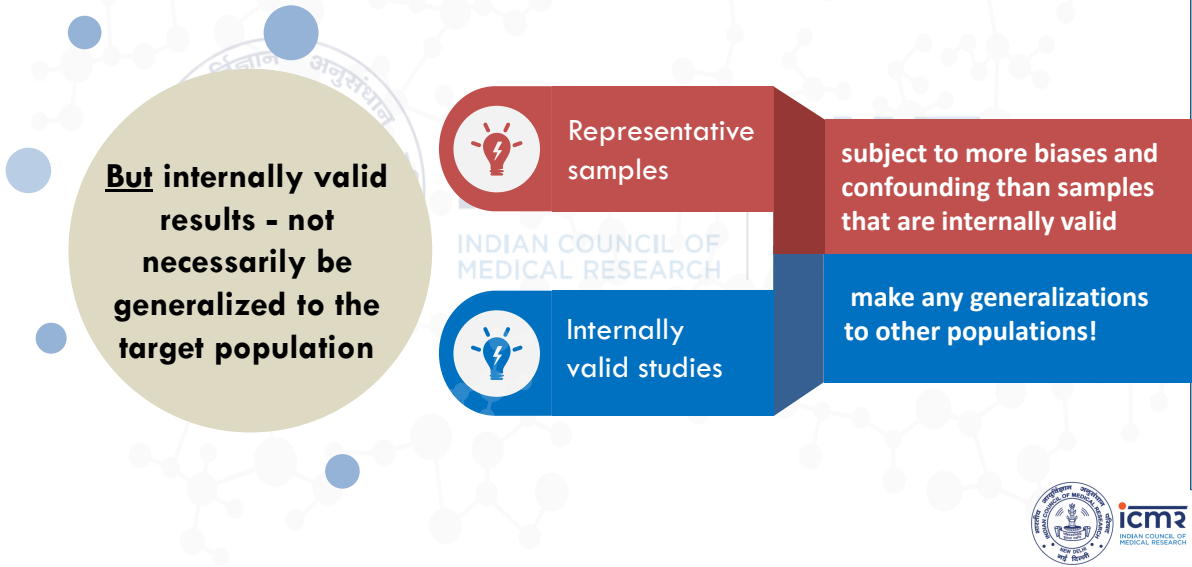
Not necessarily
Depends on validity of findings

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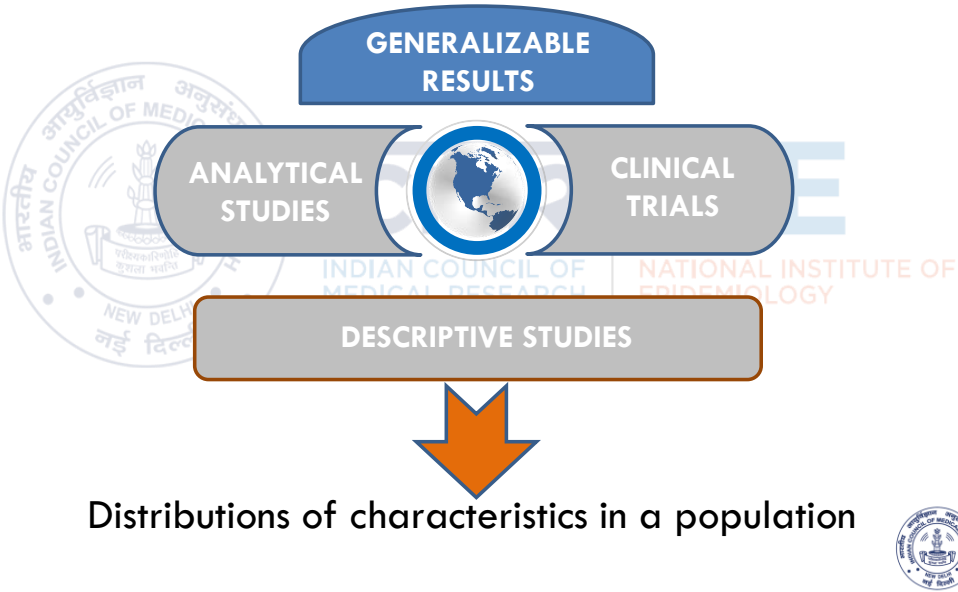
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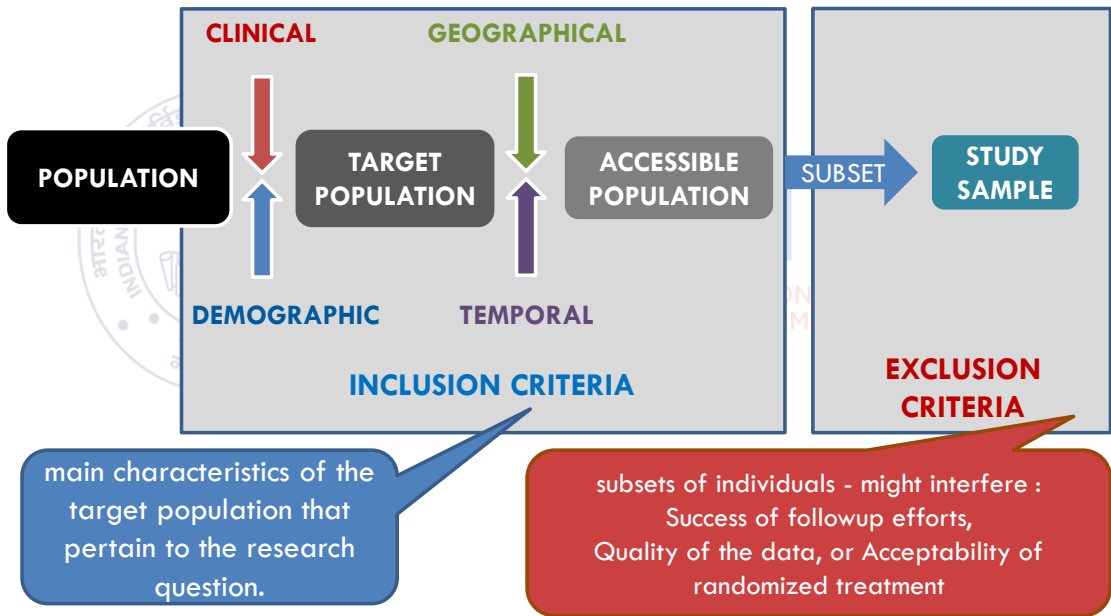
Trade-off : Internal validity & Generalizations



Generalizing the Study Findings



Selection Criteria



Selection Criteria - example

Designing Selection Criteria for a Clinical Trial of Low Dose Metformin to reduce dysmenorrhea in females with poly cystic ovary		
Inclusion criteria (Specifying populations relevant to the research question and efficient for study)	Demographic characteristics	Females in reproductive age group (15 -44 years)
	Clinical characteristics	Females with Poly cystic ovary with dysmenorrhea
	Geographic characteristics	Patients attending OPD of the hospital in that region
	Temporal characteristics	Between Jan 1 – Dec 31 of specified year
Exclusion criteria (Subset of population will not be studied because of)	Interfere with loss to follow-up	Chances of moving out of location or marriage
	Interfere with quality of data	Patients already on metformin therapy for other cause
	Being at high risk of possible adverse effects	Hypersensitivity to metformin / Renal dysfunction

Clinical versus Community Populations



Research question involves patients

Source of study subject:
Hospitalized or clinic-based patients



True population based samples

Difficult and expensive to recruit
But useful - public health and clinical
practice in the community



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Recruitment

FEASIBILITY

Important factor to consider in
choosing the accessible population
and sampling approach



GOALS OF RECRUITMENT

Subjects adequately
representing the target
population

Enough subjects to meet
the sample size
requirements



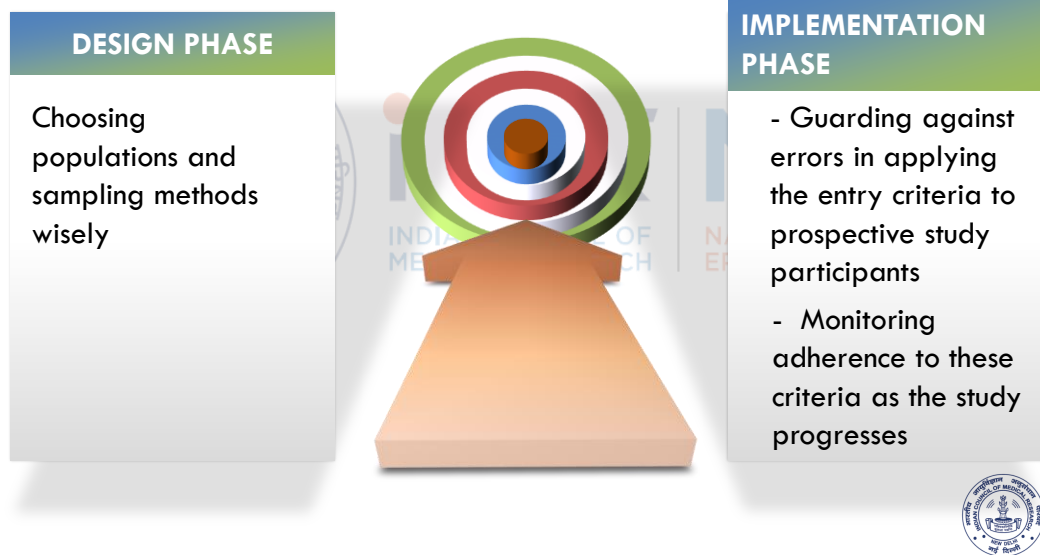
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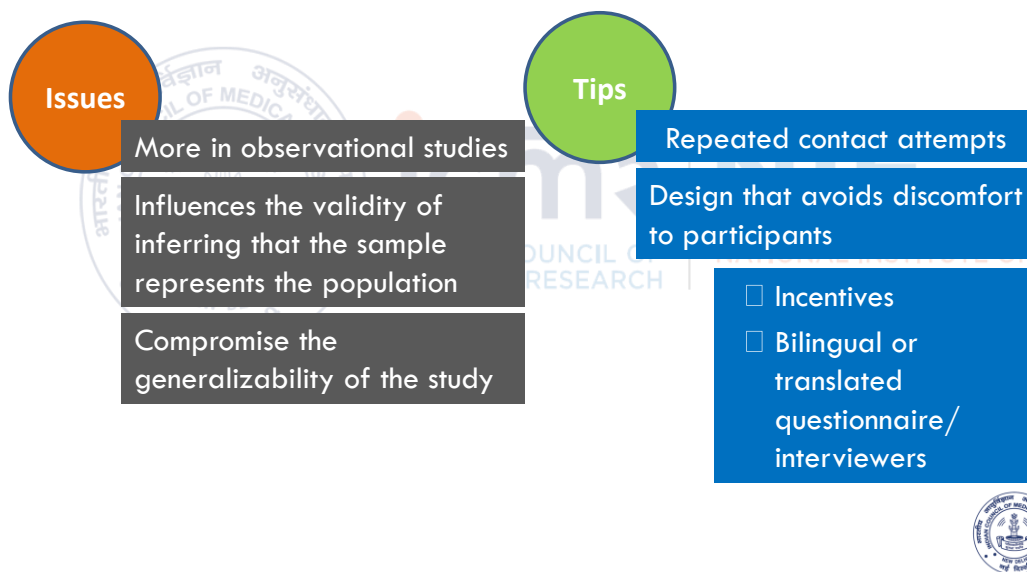
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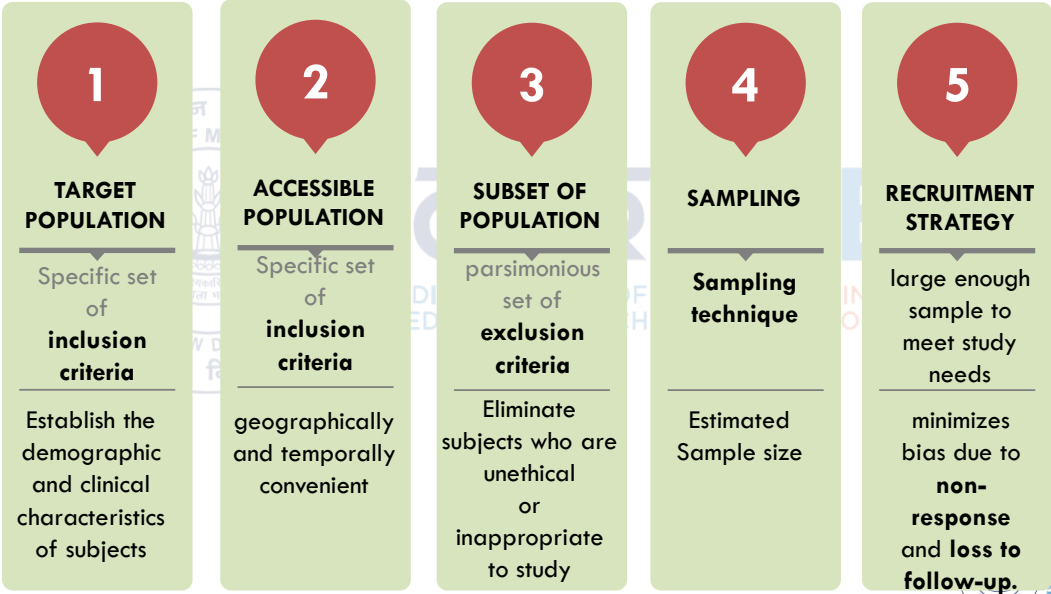
Achieving a Representative Sample



Non responses in a study




Selection of study population - steps





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Thank you