

# Pharmacoeconomics and Management in Pharmacy I

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# Introduction

- The aim of this unit
  - To impart a basic understanding of the concept of pharmacoeconomics
  - To develop the basic skills required to apply this understanding in a practical context
- At the end of the unit
  - You will have a grasp of the basic principles of pharmacoeconomics(PE) and be in a position to evaluate and criticise literature on the subject
  - You will realise that PE is applied to everyday situations, including one of those most relevant to us, pharmacy administration
  - You will be in a position to apply your newly acquired knowledge to practical use

# Introduction

- I expect

- You to take an open-minded approach and research practical examples and utilise them both in lectures and also in written evaluation

- I will

- Make the subject as interesting as possible and try my best to connect the theoretical with real-world applications

# Basic concepts and definitions

# Pharmacoeconomics

- Is a multidisciplinary concept
- Encompasses **pharmacy** and **economics**
- By definition is the study of the financial aspects of pharmaceutical care

# Pharmaceutical Care

- The responsible provision of **drug therapy** for the purpose of achieving definite outcomes that improve a **patient's** quality of life<sup>1</sup>

<sup>1</sup> Hepler, D.D. & Strand, L.M., Opportunities and Responsibilities in Pharmaceutical Care, Am.J. Pharm.Educ., 53, 7S-15S(1989).

# Economics

- The study of the utilisation and distribution of scarce resources which could have a variety of potential applications, both in a present and also in a future context
- By nature, no resource is infinite and thus a system for its allocation must exist, or be devised

# Pharmacoeconomics

- Is thus the science of applying economic theory to pharmaceutical healthcare ends
- Scarce pharmaceutical resources are put to the best possible use
- And implemented to achieve the best cost to effect benefits
- A more technical definition is.....



# Definition of Pharmacoeconomics (PE)

- **Description and analysis** of the **costs and consequences** of pharmaceutical products and services and their impact on individuals, health care systems and society.

# PE as a science

- It is a new discipline
- Only started being mentioned in literature in the 1980's, with the first PE journal published in 1979
- Becoming even more relevant as financial realities become more important
- In pharmacy one must achieve a balance between needs and resources

# PE as a dispenser of pharmaceutical 'justice'



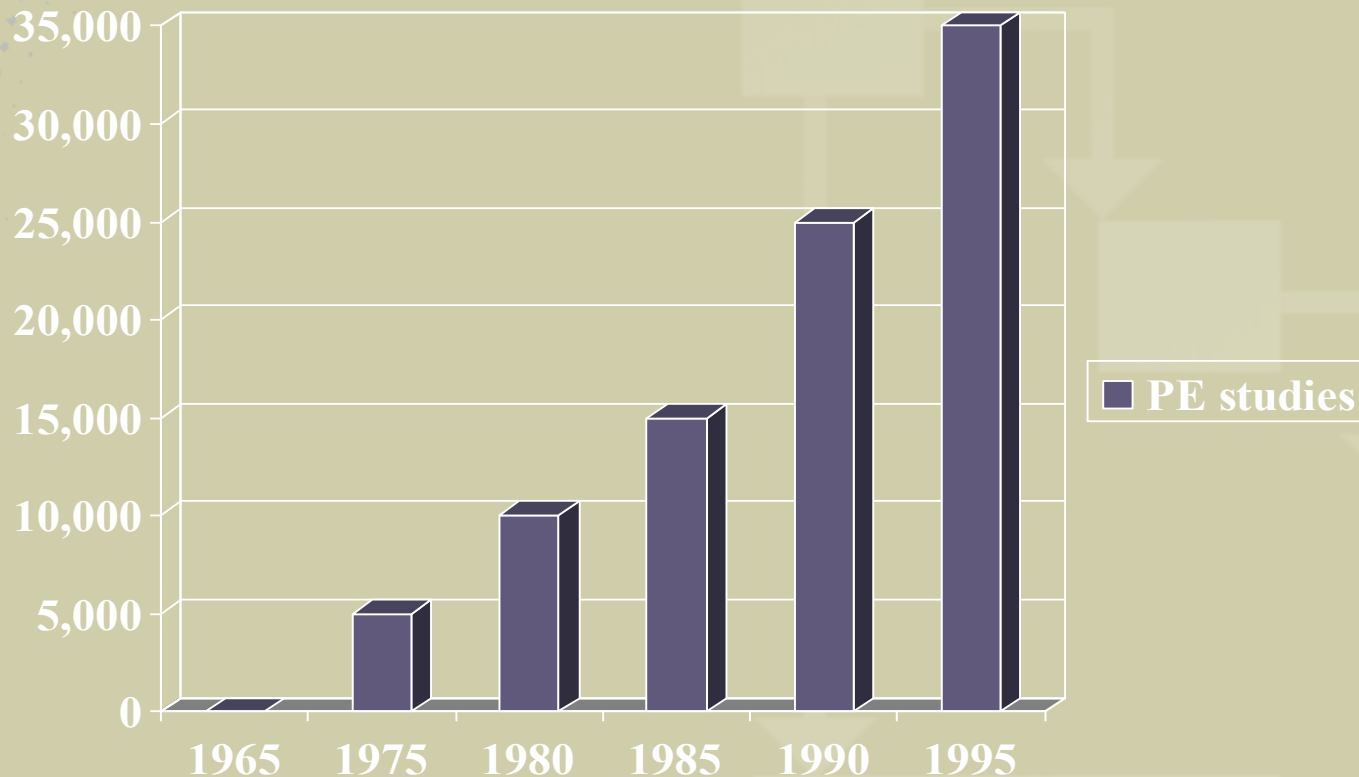
# PE and the practice of pharmacy

- PE allows decisions to be taken on who, how and when to treat
- Hard choices must be made when practising pharmacy, as there are never enough resources to treat all potential patients
- PE is often ignored by administrators due to time and or budgetary constraints, resulting in even more misuse of valuable resources

# Social Context

- PE enables pharmaceutical care to be put into real-life context
- Innovation in pharmacy is futile without the possibility of evaluating its widespread, affordable and accessible application
- Can be on a macro- or micro-economic scale

# The increase in PE studies over time



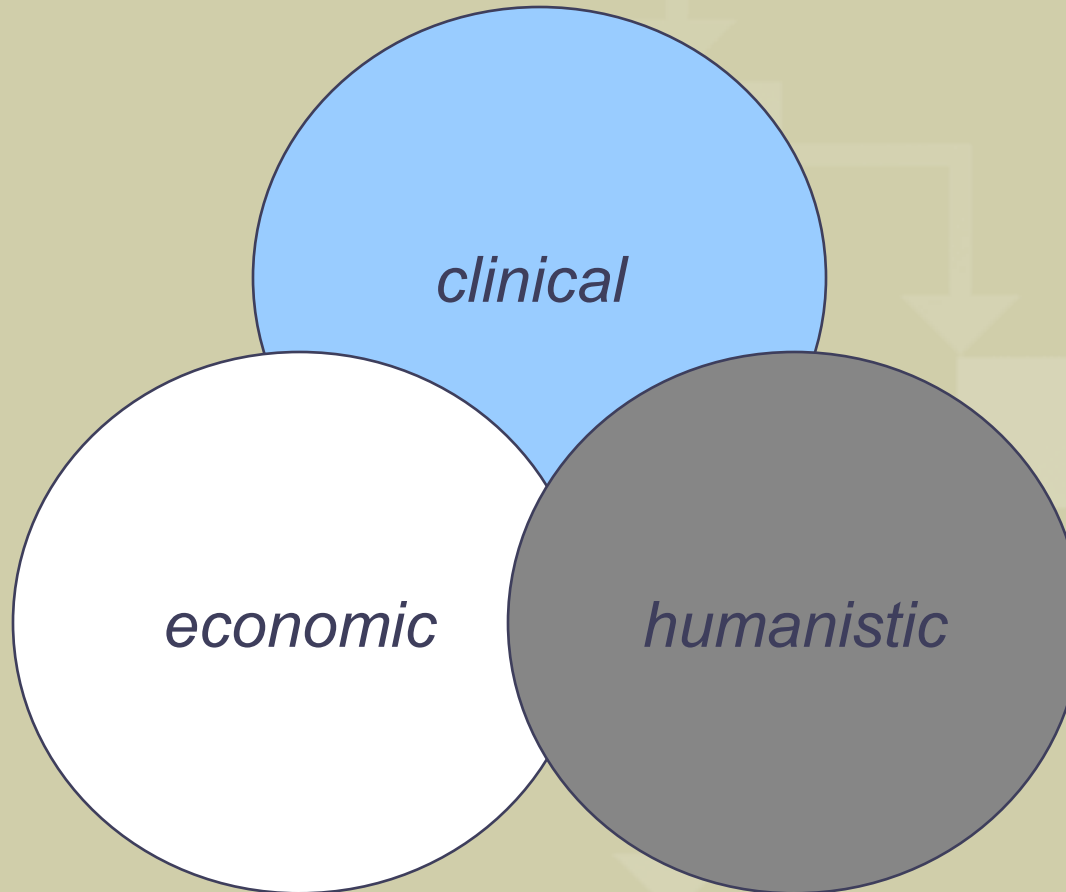
# PE, clinical pharmacy and pharmaceutical care

# Conflicting interests in healthcare administration

- There is an overlap of functions
- Various interests vie for primacy
- Taking an objective view while prioritising the patient's well-being



# *Interlinked Subsets of Clinical Decision-Making*



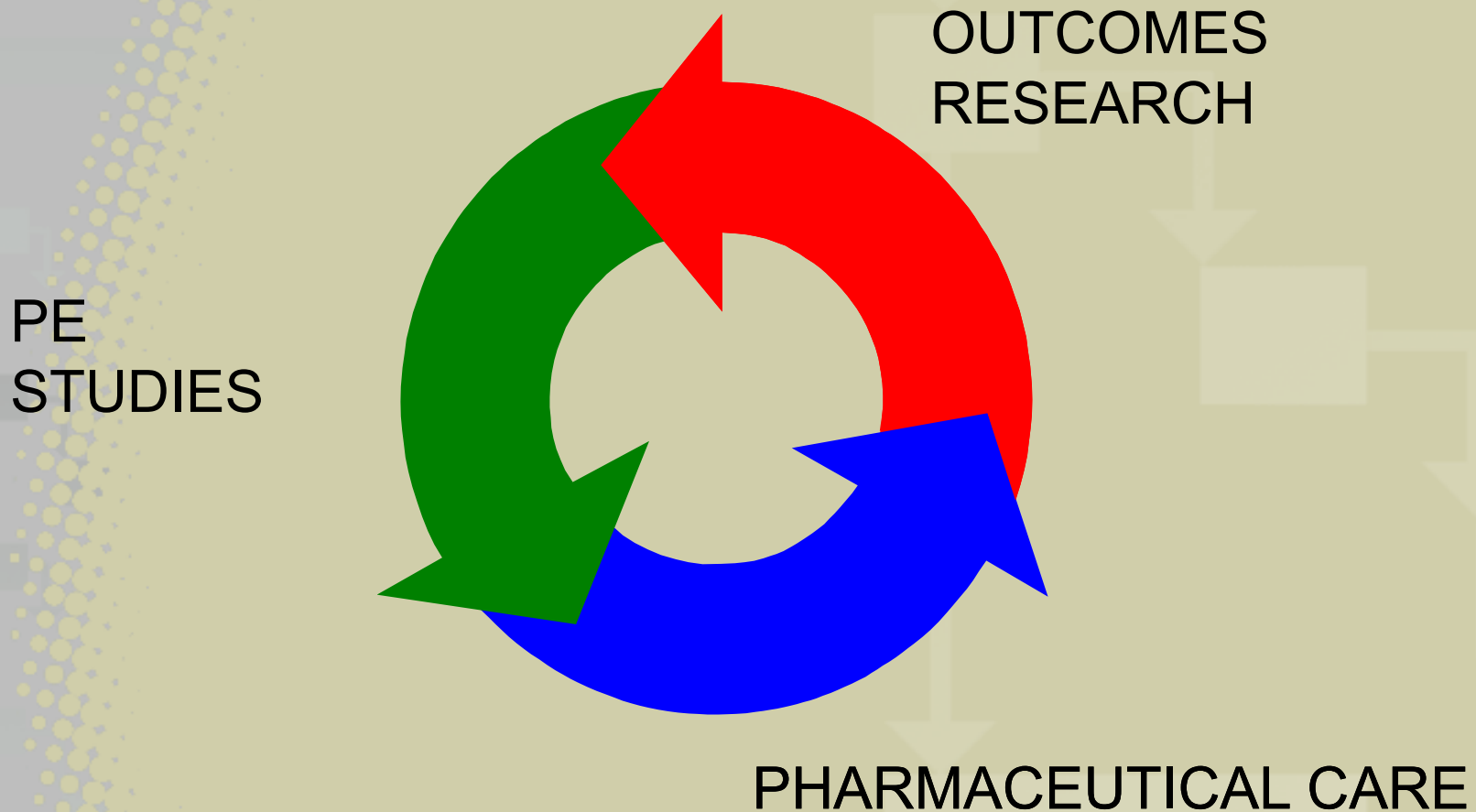
# Outcomes to be considered

Outcome	
Clinical	Eradication of disease and physical survival
Humanistic	Quality of life, including physical, emotional and social well-being
Economic	Cost of treatment options, alternatives, and the global effect on society

# Clinical implications of PE

- Time and money can only be spent once-choice is inevitable
- Pharmacoeconomics and outcomes research strengthens the evaluation process
- Enables the delivery of better value in patient care
- Increases access to pharmaceutical care

# Cyclical relationship between Outcomes, Pharmacoeconomics and Pharmaceutical Care



# Aims & Uses

- The primary aim is to enable providers to supply a high quality pharmaceutical service at the lowest possible cost
- Outcomes research helps to answer some of the tricky questions posed earlier
- By setting a measure of cost-efficacy to a particular health treatment

# Aims & Uses

Main applications of  
pharmacoeconomic studies



Drug Therapy  
Evaluations

Justify the cost of  
pharmaceutical care

# Application

## Outcomes research-

A manner in which to evaluate the economic implications of research in general

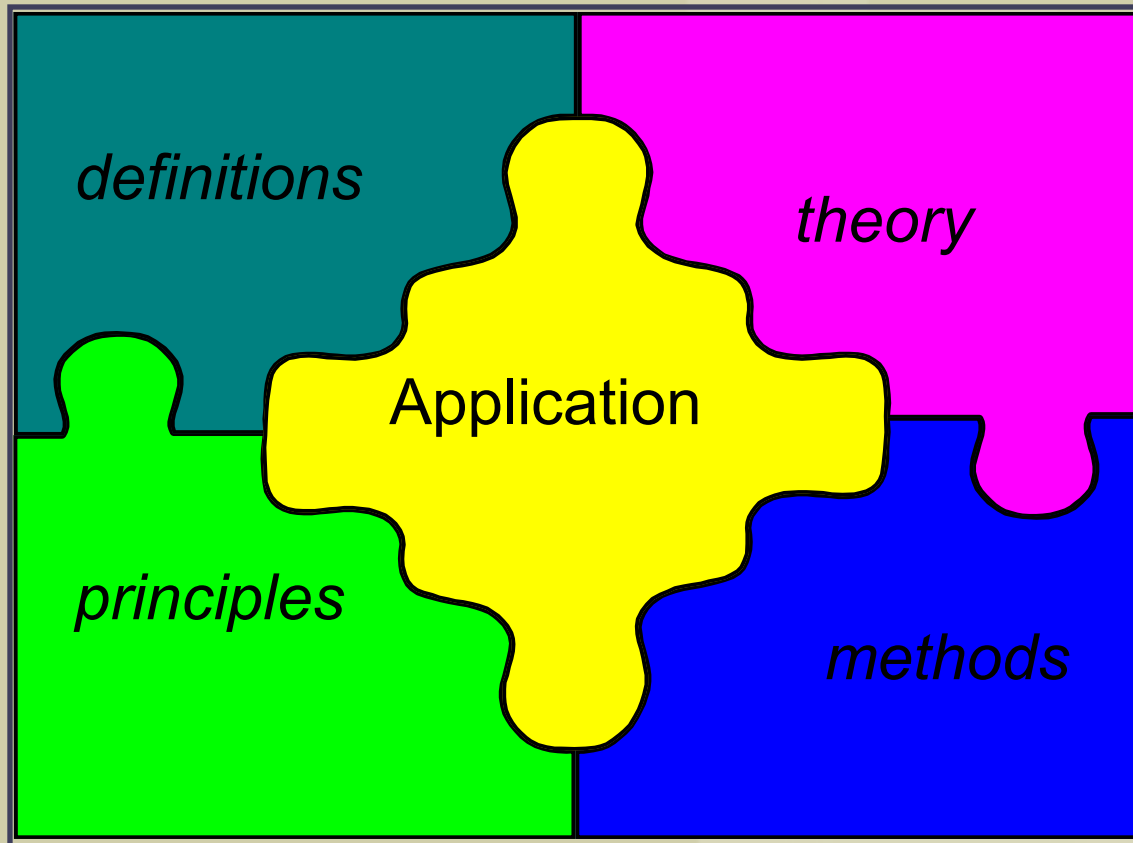
## Cost-

A quantification of the value of resources consumed by a program or drug therapy of interest

## Consequences-

A measure of the effects, outputs or outcomes of program or drug therapy of interest

# Applied Pharmacoeconomics





# Perspective

- Patient- the actual recipient of treatment
- Prescriber- the professional choosing the treatment
- Provider- the institution supplying it
- Payer- the one forking out the money
- Societal- the global effect of the cost on others

# Bibliography and Acknowledgements

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