

Statistics in Healthcare

Prepared by Dr. Hesham Mousli

MHA613
Introduction Lecture

Introduction

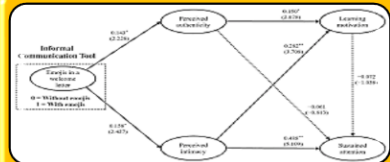




Teaching Team



Course Intended Outcomes



Course Structure



Mutual Expectations

Teaching Team

- This Course Will Be Presented By: **Dr. Hesham Mousli.**
- PhD. in Biomedical Informatics & Medical Statistics from Alexandria University.
- Dip. Hospital Management & Operational Excellence from the American University in Cairo (AUC).
- Dip. Healthcare Quality from American University in Cairo (AUC).
- Dip. Clinical & Hospital Pharmacy from Alexandria University.
- Certificate in Infection Prevention & Control (IPC) from the American University in Cairo (AUC).
- Adj. Lecturer of Pharmacy Practice, Arab Academy for Science & Technology (AAST).
- Instructor of Logistics of Hospital Management, Arab Academy for Science & Technology (AAST).
- Extensive experience in Healthcare Industry.

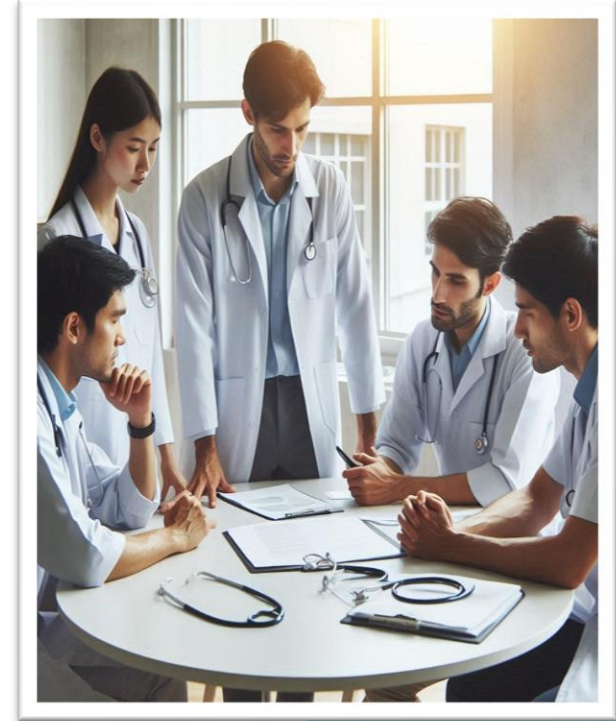
Course Intended *Objectives*

- This course aims to provide you with key statistical tools for healthcare data analysis.
- Learn to summarize data using descriptive statistics.
 - Apply inferential statistics to draw conclusions from samples.
 - Develop skills in hypothesis testing for evidence-based decision-making.
 - Explore regression analysis to predict healthcare outcomes and examine relationships between variables.



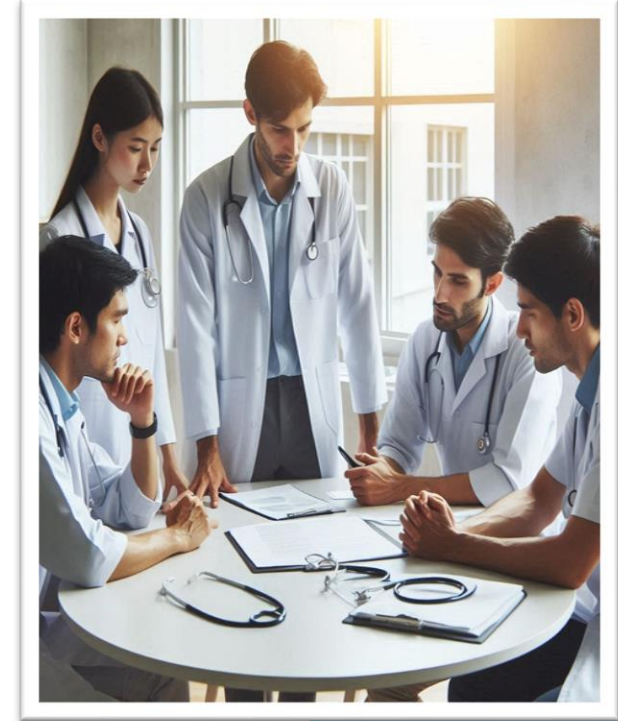
Course Intended *Outcomes*

1. Interpret data on patient outcomes, resource utilization, and operational efficiency.



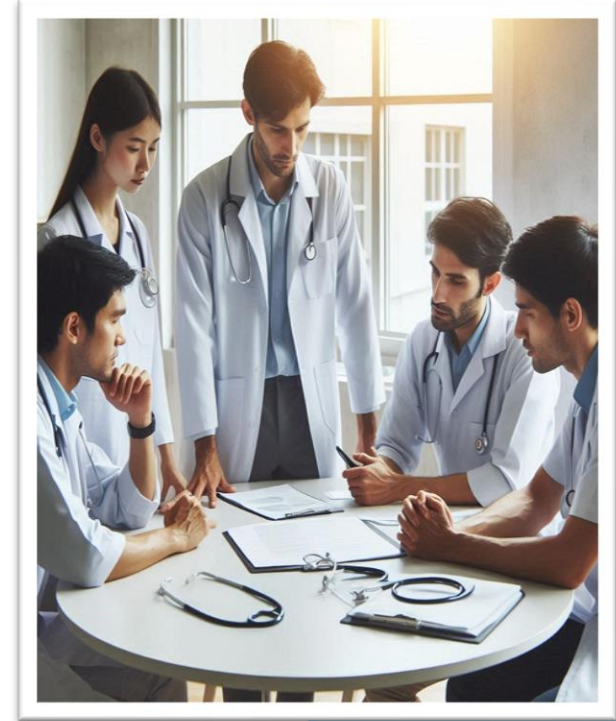
Course Intended *Outcomes*

2. Forecast trends and make decisions in uncertain scenarios, such as resource allocation or demand prediction.



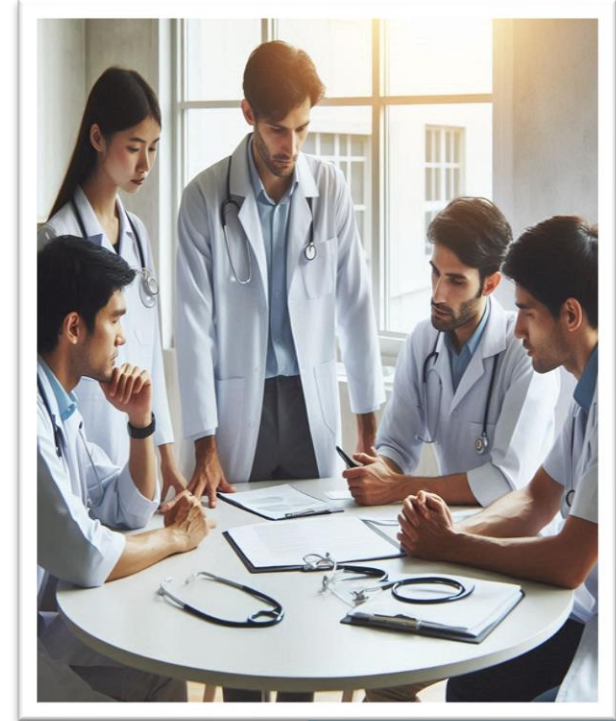
Course Intended *Outcomes*

3. Evaluate clinical interventions or administrative changes to assess likely effectiveness, costs, and risks before implementation.



Course Intended *Outcomes*

4. Make informed adjustments to health policies or operational strategies to ensure optimal implementation outcomes.



Course Structure

- **Course Code :** MHA613
- **Credit Hours :** 3 Credit hours .
- **Course References :** *Statistics for health care management and administration: Working with Excel (3rd ed.)*, by John F. Kros and David A. Rosenthal.
- **Classes:** Recorded lectures .
- **Discussion Class :** For any questions & Interactive learning.
- **Self-study:** Search & Reading are needed.



Expectations (From Our Side)

- You will be treated with professionalism and respect.
- Lectures to be well-prepared, with resources provided in advance.
- Guidance and additional resources to be available to support your learning.
- Assessment support to be provided throughout the course.
- Sessions to be engaging and relevant to your academic development.
- Our team to be enthusiastic, responsive, and committed to making learning enjoyable!



Expectations (From Your Side)

- **Show Respect:** Maintain professionalism and respect towards staff and peers.
- **Commit to Lectures:** Listen to all recorded lectures weekly.
- **Manage Time:** Use your time effectively.
- **Engage Actively:** Participate in sessions to deepen understanding.
- **Enjoy Learning:** Embrace and enjoy the learning process.





Thank You