

# Multidisciplinary e-learning Platform for Medication Safety (MELODY)

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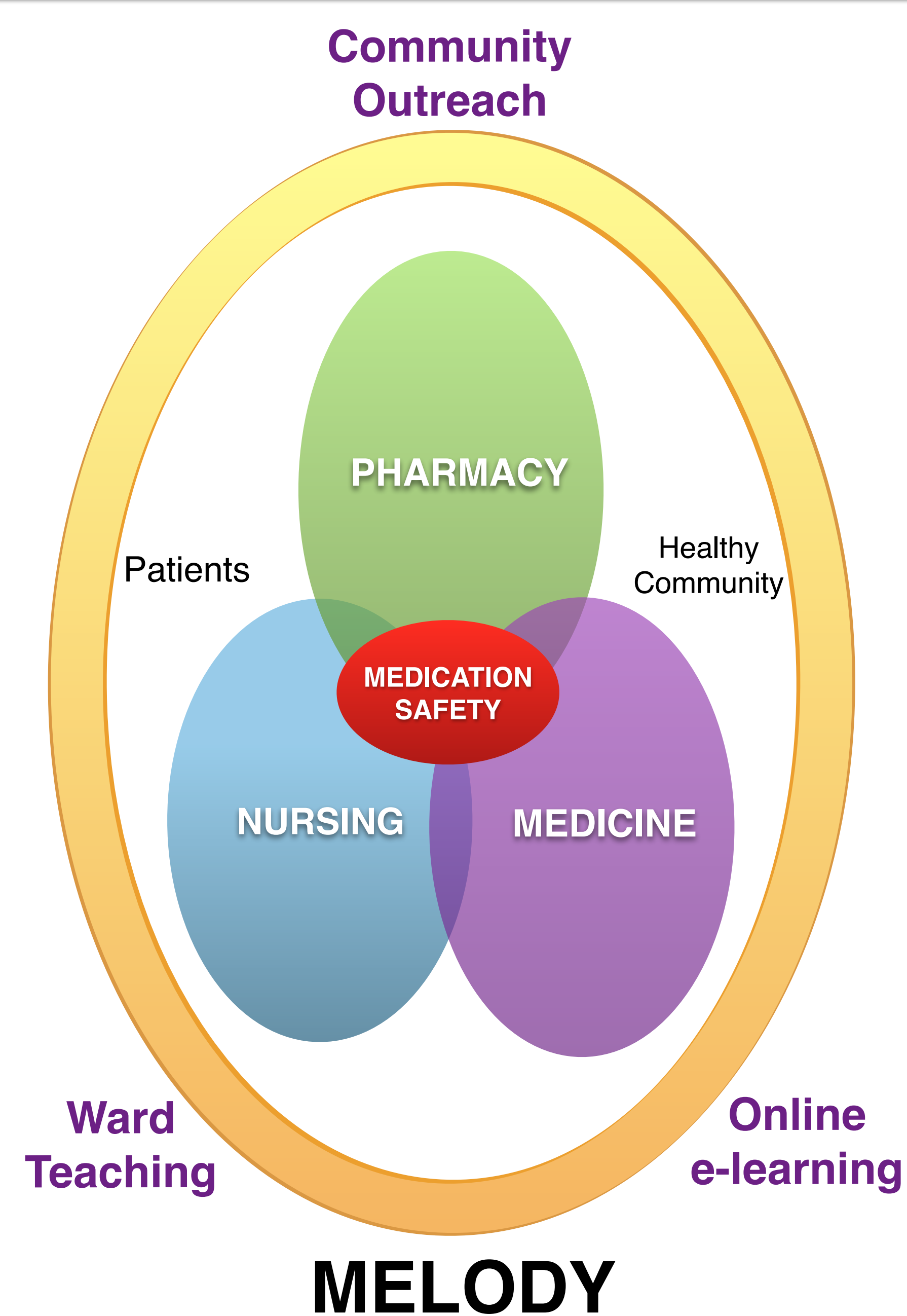


## Introduction:

MELODY is designed to be the first cross-disciplinary curriculum for medication safety that consists of three teaching environments (1) Community Outreach; (2) Online e-learning Platform; and (3) Ward Teaching. MELODY can enhance multidisciplinary collaborations both in teaching and learning to disseminate the same message “MEDICATION SAFETY” that applies in all 3 professions (medicine, pharmacy, nursing).

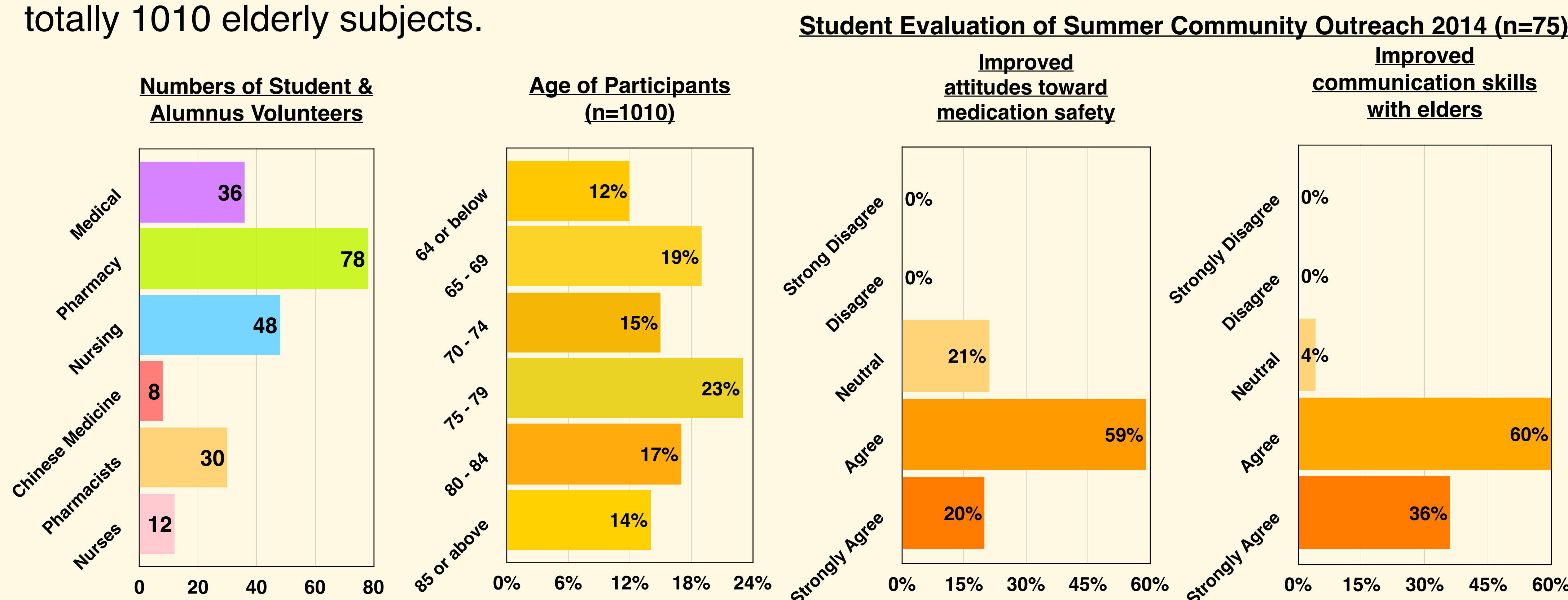
## Objectives:

- To improve and increase awareness of medication safety in students of the Faculty of Medicine for the goal of healthy community in Hong Kong;
- To develop the first cross-disciplinary e-teaching platform in the Faculty of Medicine;
- To enhance multi-disciplinary collaborations and learning through this teaching platforms for staffs and students;
- To encourage the use of e-learning platform in teaching medicine curriculum;
- To utilize simulations and animations of various case scenarios on medication safety from different perspectives (medicine, nursing and pharmacy);
- To provide the first-hand observations for students to identify medication errors during clinical clerkship thus giving the teaching hospitals an untapped and invaluable resource for spotting and preventing medication errors.



## Community Outreach:

In 2013, a student outreach team, CU CHAMPION(Community Health And Medication-safety Promotion Inter-school Outreach Network) was formed to encourage students of the Faculty of Medicine to participate in health and medication safety promotion for the needy in the community. By participating in the Outreach, students could gain first hand experience to explore, and address the elderly subjects' health and drug-related problems. In Summer 2014, CU CHAMPION conducted 17 outreach sessions in 14 elderly community centers, serving totally 1010 elderly subjects.



## Students' Duties in Community Outreach

1. **Registration** : Pharmacy, Chinese Medicine
2. **Health Survey** : Pharmacy, Chinese Medicine
3. **BP & ECG Monitoring** : Medical
4. **Glucose, Cholesterol, BMI Monitoring** : Nursing
5. **Summary** : Pharmacy, Chinese Medicine
6. **Drugs Counseling** : Registered Pharmacist

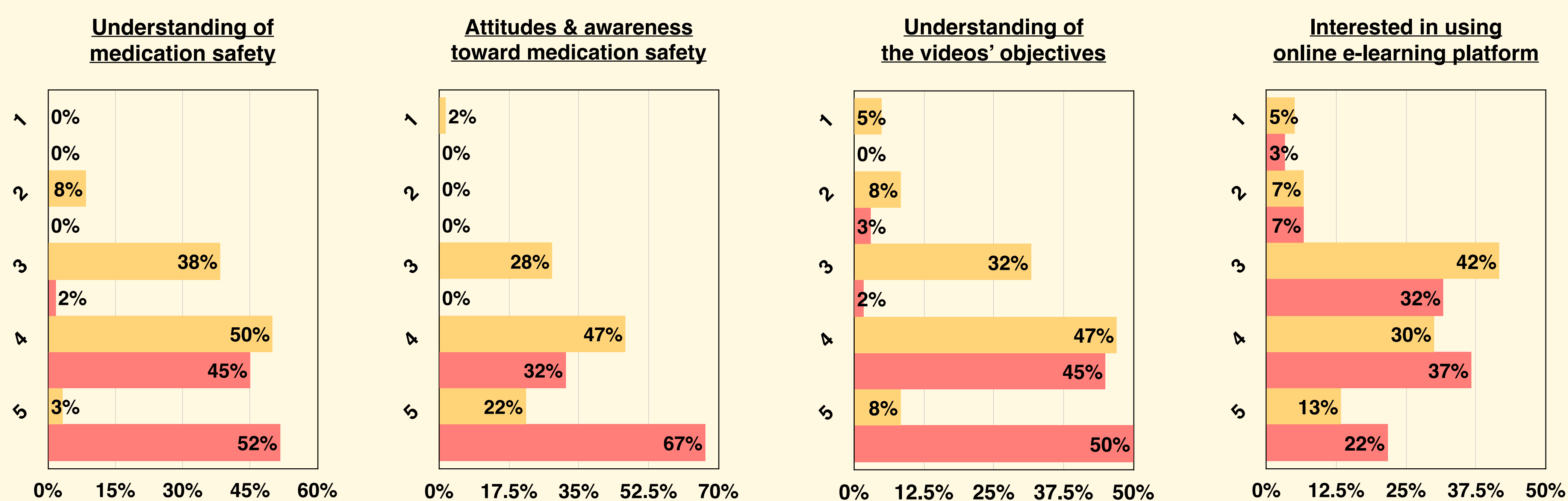
\*BP : Blood Pressure ECG: Electrocardiography  
BMI : Body Mass Index

## Online e-learning Platform:

A series of 12 Medication Safety videos are developed to provide first-hand observations for students to identify medication errors and understand the proper use of medications. These videos are now available at CUHK online e-learning platform (Blackboard) for the students to review and take quizzes based on each video scenario.

Interim Student Evaluation Before and After Watching the Medication Safety Videos, Fall 2014 (n=60)  
\*1 (Lowest) - 5 (Highest)

BEFORE  
AFTER



## Topics of the videos

1. A Fetal Error (IT/IV Injection)
2. Attention on Drug Labels
3. Distraction and Interruption
4. Double Prescription
5. Drug Allergy
6. Error-prone Abbreviation
7. LASA in Pharmacy
8. Language Barrier
9. Same Drug, Different Formulation
10. Wrong Drug
11. Wrong Infusion
12. Wrong Patient

\* IT : Intrathecal  
IV : Intravenous  
LASA : Look Alike Sounds Alike

## Ward Teaching:

It is important to ensure medication safety as healthcare professionals for the patients to enhance a healthy community. Ward teaching requires students to proactively discover medication errors, and medication safety issues in ward setting. The following examples were discovered by a group of final year pharmacy students during their clinical clerkship at Prince Wales Hospital from January to April 2014:

- Poor Documentation
- Polypharmacy
- Poor handwriting
- Renal Function
- IV medication infusion rate
- Management of common disease states
- Improper use of digoxin and antibiotics
- Improper use of medication in heart failure patients
- Lack of continuous monitoring for important panels
- Use of Medication should correlate with the actual status of patients

