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New Investigator Presentations

Chair: Dr Caroline Sasser, University of North Carolina (USA) and Monash University (AUS)

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Linking assessment to real life practice – comparing work based assessment (WBAs) and objective structured clinical examinations (OSCEs) using mystery shopping

Dr Angelina Lim

Linking assessment to real life practice - comparing work based assessments (WBAs) and objective structured clinical examinations (OSCEs) using mystery shopping

Advances in Health Sciences Education
https://doi.org/10.1007/s10459-023-10284-1

RESEARCH

Check for updates

Linking assessment to real life practice – comparing work based assessments and objective structured clinical examinations using mystery shopping

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Aims

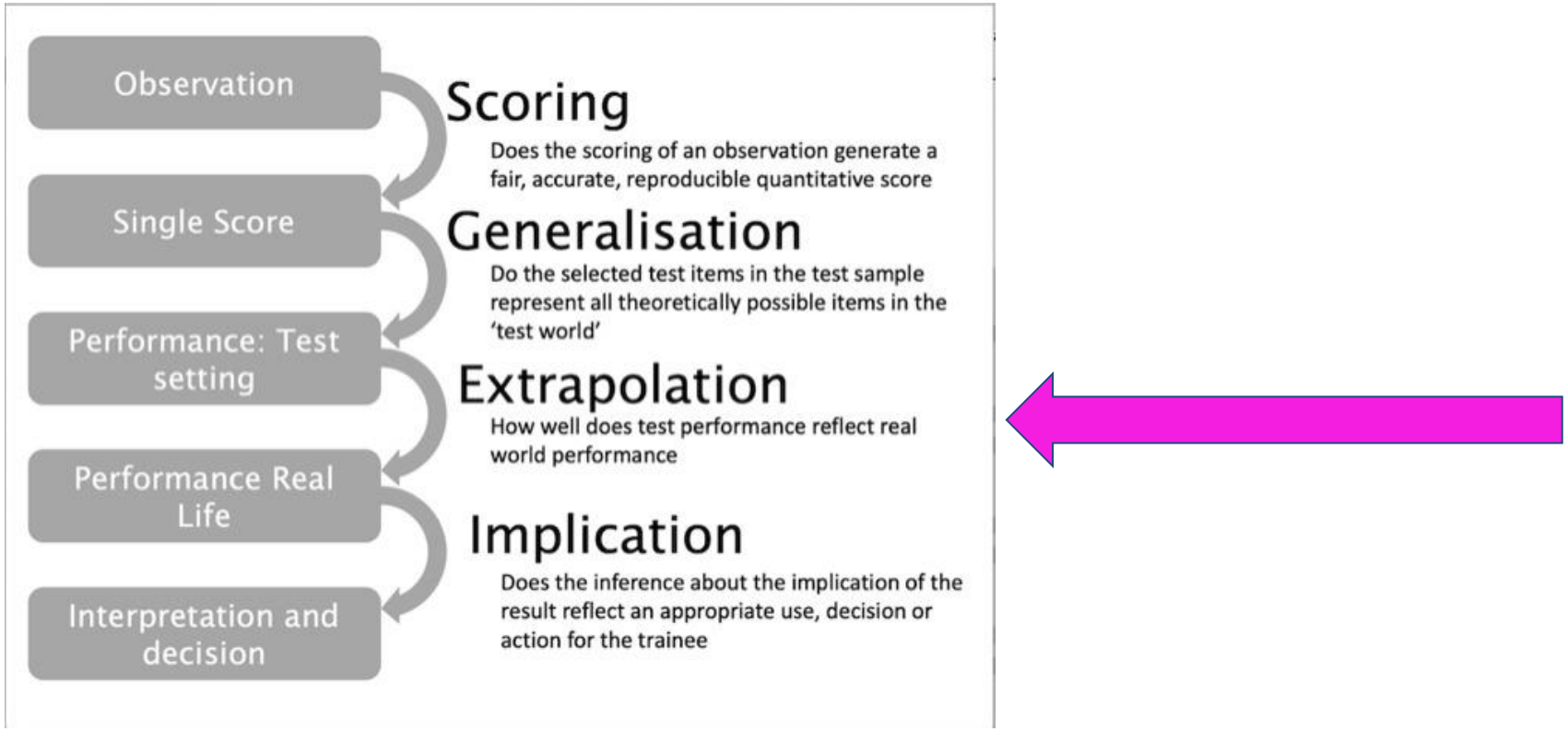
- Compare performance of students in OSCEs to their performance in real-life using the same clinical scenario using mystery shopping
- Understand factors affecting student performance in a real life setting to inform future assessments

Contribution to the field:

- Test the inference of extrapolation within Kane's Validity framework
- Limited literature investigating the performance of OSCEs in practice

Kane's Validity framework *(Kane 1992)*

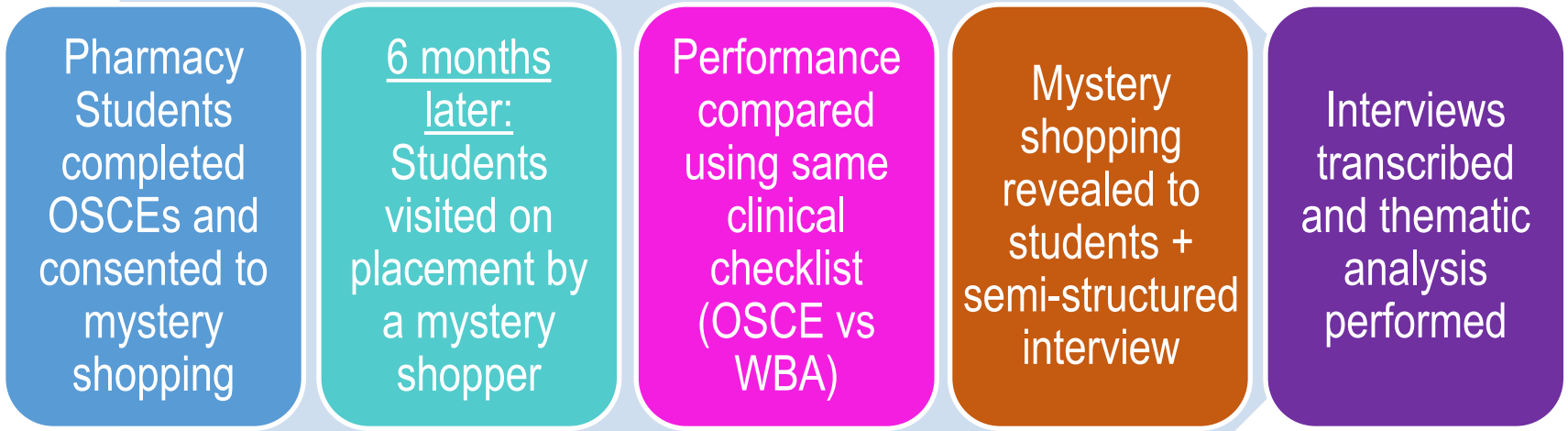
Assessments should be purposeful, fair, robust and extrapolate to preparing students for practice



Methods:

Study design:

Sequential Explanatory Mixed Methods Approach



Quantitative data is not enough to diagnose a problem, we need to know why

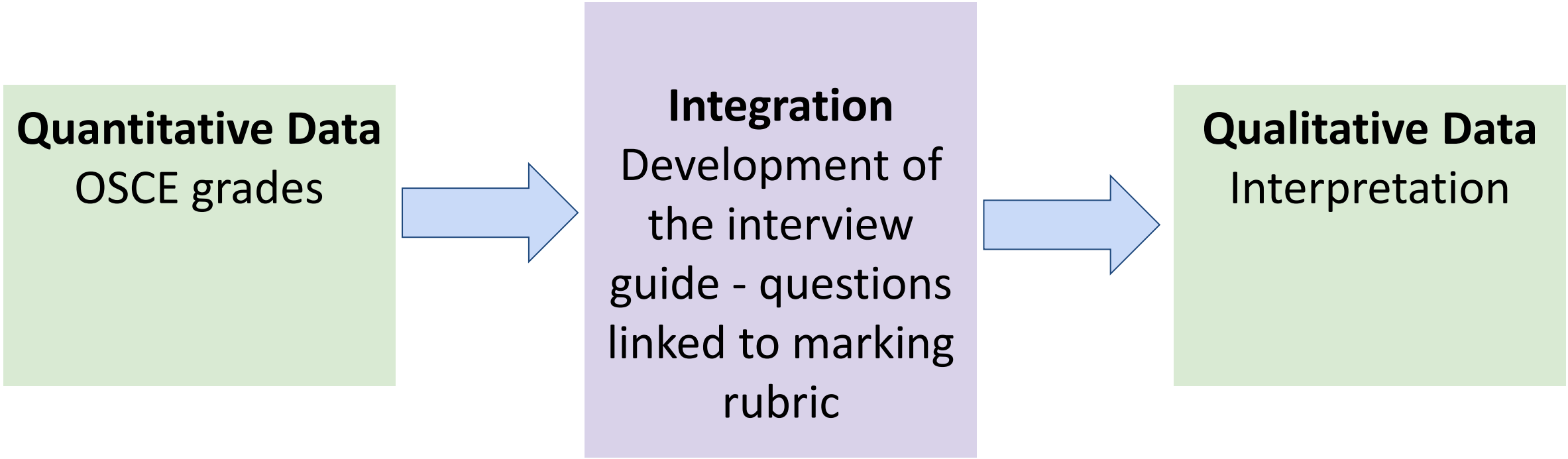
Methods:

Combating Challenges e.g., Logistics/Interference:

- Workplace supervisors notified prior to visit by the mystery shopper
- Supervisors asked to ensure student were on floor
- Students were aware of visit
- If students asked the supervisor for support, we rang the supervisor later to elicit the student's recommendations

Photo: The Pharmacy Guild of Australia

Methods: Data integration



Results: Quantitative results

115 participants were visited by mystery shoppers

	OSCE score (%) Median, IQR	Mystery shopping score (%) Median, IQR	P-value
Information gathering	87.5 (25.0)	33.3 (35.7)	< 0.001
Disease management	66.7 (40.0)	33.3 (66.7)	< 0.001

Results: Quantitative results

	N	OSCE Score (%)		Mystery Shopping Score (%)		
		Median (IQR)	***p*-value**	**Median (IQR)**	***p*-value**	
Category 1 (90 - 100%)	44	91.7 (8.3)	<0.05	40.9 (41.6)	0.467	<0.001
Category 2 (70 - 89%)	47	76.9 (8.3)		33.3 (33.3)		<0.001
Category 3 (50 -69%)	24	63.6 (8.4)		36.4 (48.9)		<0.001

Results: Quantitative results

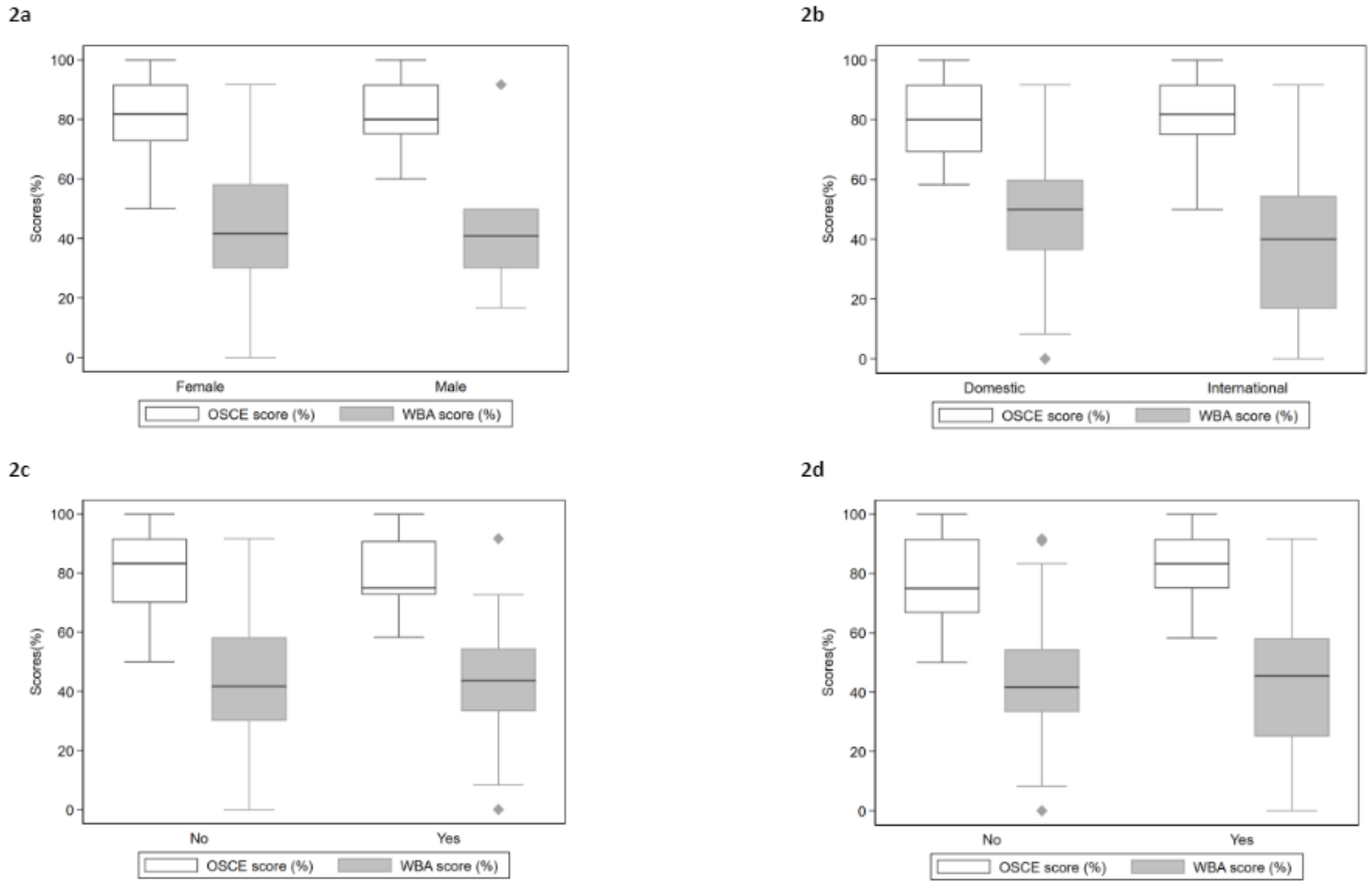
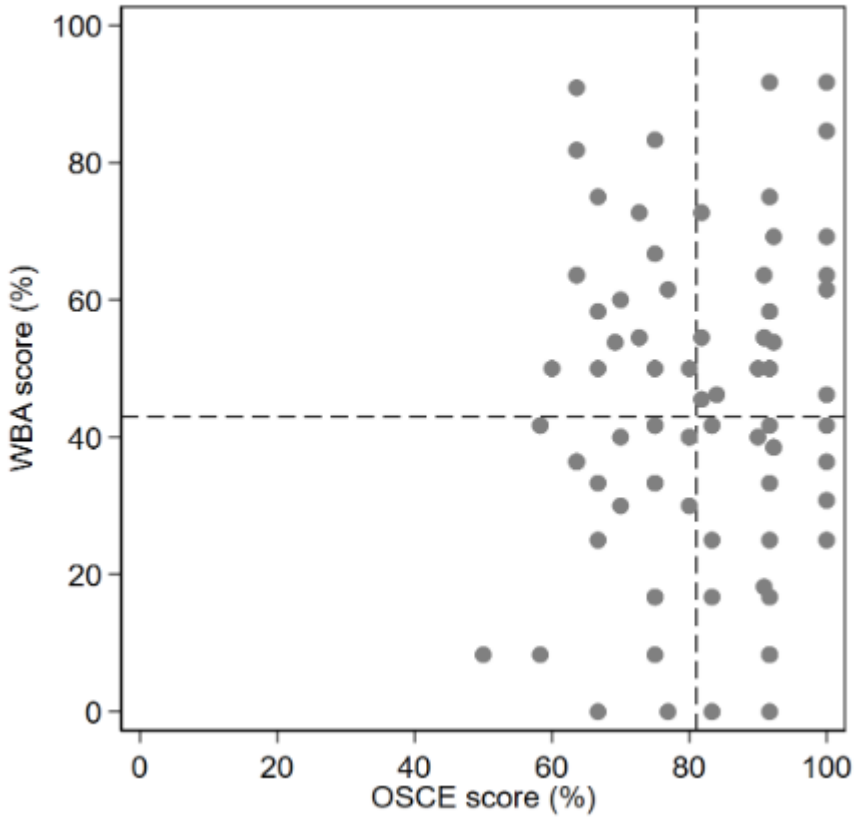


Figure 2. Comparison of student Characteristics across OSCE and Mystery shopping (WBA) performance: 2a) Gender; 2b) Student category (Domestic/International Status); 2c) Graduate entry status; 2d) Previous or current work experience

Results: Quantitative results



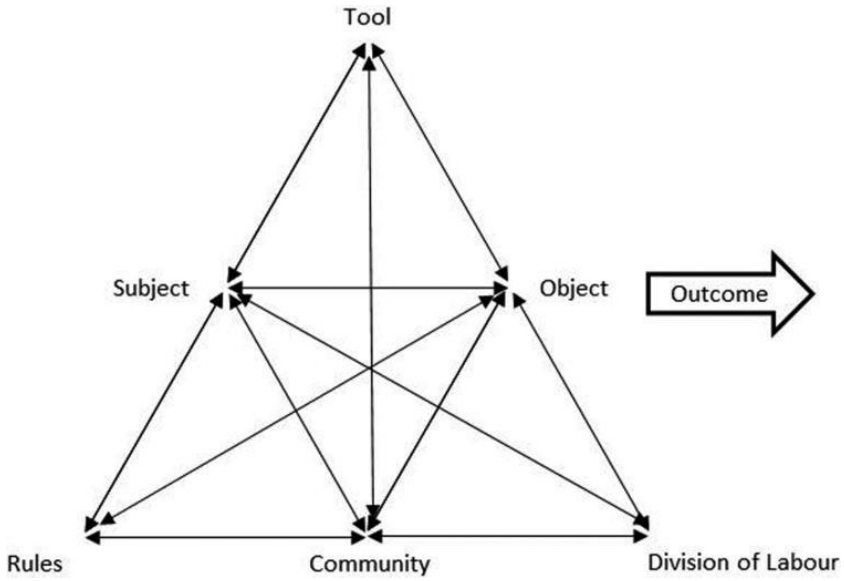
Results: Qualitative results

Main Theme	Subtheme
The fundamental design of the OSCEs differ from real life	Assessment preparation is different from preparing for practice
	Case realism was achieved and the assessment cases do reflect real life cases
	The exam environment is not realistic
	Feedback from a real life scenario is perceived as more beneficial than feedback from an assessment
	The simulated patient is still perceived to be not a real patient
The work environment has intrinsic factors impacting on the student behavior and performance, meaning simulation can never be fully replicated	The work supervisor or team can impact on WBA performance
	Their perceived role in the workplace can impact on WBA performance
Students have individual learning characteristics that affect the change in performance in WBA and OSCEs	Students who are concerned about their communication skills are even more impacted in real life
	Students who have had previous or current work experience in pharmacy feel more confident with dealing with real life cases
	Students are still unfamiliar with teaching content even after the assessment

Results: Qualitative results

Why didn't they perform as well as they did in the OSCEs – given it was the same case???

Even though the task was the same,
Their goals and environment changed
Activity theory *(Engestrom et al. 1999)*



Results: Qualitative results

Why didn't they perform as well as they did in the OSCEs – given it was the same case???

Their goals changed – Activity theory *(Engestrom et al. 1999)*

- Few students mentioned knowledge retention being an issue
- Lacked autonomy to manage the patient at the workplace
- Scared to ask too many medical history questions – just focused on the request
- Worried about patient's time
- Student concerns about their inexperience, concern about "ruining the business"

Results: Qualitative results

BUT….they:

- said managing a real life patient is easier!
- liked having the products in front of them to go through the different options
- valued the feedback from the WBA rather than the OSCE (more personalised?)
- valued OSCEs and agreed they helped prepare them for WBAs

Thoughts for educators

- Extrapolation inference challenging to test!
- Students recommend both OSCEs then WBA to consolidate knowledge
- OSCEs till have a place in building student confidence in managing real patients
- Challenging to get workplace supervisors to give students more opportunities at the workplace
- OSCE performance does NOT translate to real-life practice, BUT students felt they need OSCEs to help prepare for practice….even worse if they are no OSCEs?
- OSCEs may lead to students memorising processes and clinical information to regurgitate during the assessment – BUT is this a negative? Students don't think so, and academics propose it's dangerous to teach targeting questioning in undergraduate space
- Unlearning after assessment?

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Systems Thinking and Breaking down Interprofessional Siloes: outcomes from a simulation intervention

Dr Vesa Chang

PES2024 | AGENTS OF CHANGE

Systems Thinking and Breaking Down Interprofessional Siloes: outcomes from a simulation intervention

Presented by

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Post-doctoral Research Fellow, Department of Anaesthesia and Intensive Care, Chinese University of Hong Kong, Hong Kong, China

Acknowledgement of Country

Metro South Health recognises and pays respect to the traditional custodians of the land and waters—the Yugambeh, Quandamooka, Jaggera, Ugarapul, Turrbal and Mununjali peoples—and to Elders, past, present and emerging.

Artist | Kylie Hill

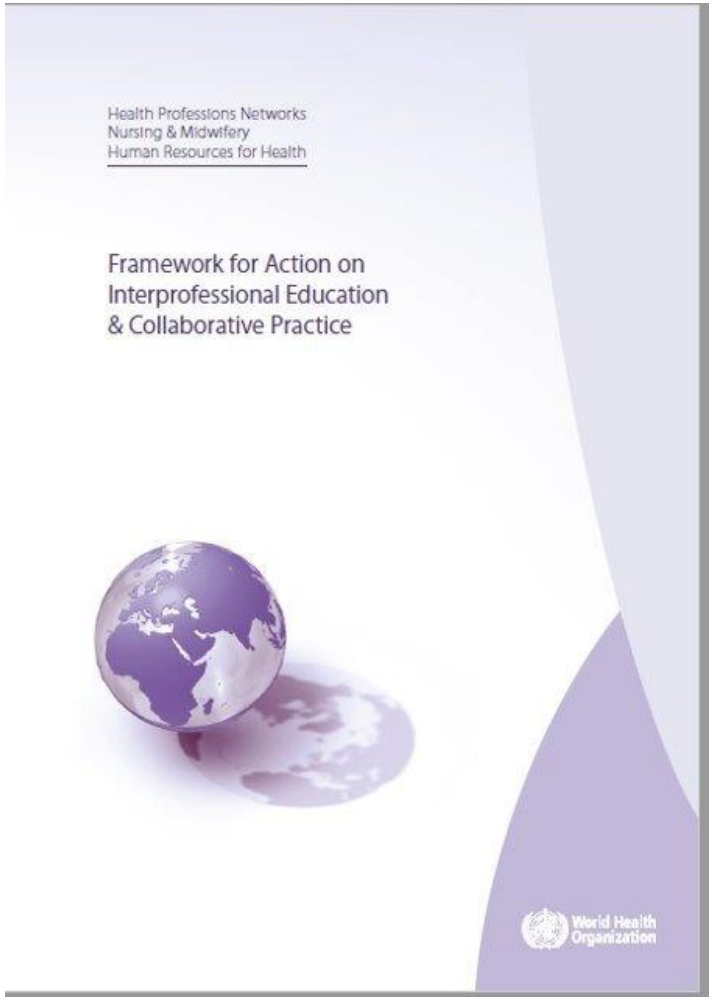
Nil conflicts of interest

Definitions

Interprofessional learning (IPL)
Two or more professions learn about, from and with each other to enable effective collaboration and improve health and social outcomes

Interprofessional Collaborative Practice (IPCP)
Provision of comprehensive health services by multiple health workers from different professional backgrounds who seek to work with patients, families, caregivers, and communities to provide the highest quality of care across settings.

World Health Organisation (2010). Framework for Action on Interprofessional Education & Collaborative Practice.



Outcomes of IPCP

Patient outcomes:

- Improved patient satisfaction, patient education
- Decreased length of stay
- Reduced mortality rates
- Improved health outcomes, particularly for people with chronic disease
- Better service use, reduced admission and readmission rates, reduced complication

Healthcare professional outcomes:

- Improved interprofessional collaborations and healthcare
- Improved professionals' experiences and job performance
- Reduced staff turnover
- Reduced errors

Organisational outcomes:

- Improvements in organisational structure and processes
- Improved access to and co-ordination of health services
- Improved teamwork factors result in better performance measures
- More appropriate use of specialist clinical care

Schmutz et al., 2019: BMJ Open 20192019;9:e028280.doi:10.1136/bmjopen-2018-028280;
Wei et al., 2022: Journal of Interprofessional Care, DOI: 10.1080/13561820.2021.1973975

Competencies for interprofessional learning and collaborative practice

.

Canadian Interprofessional Health Collaborative (2010). National Interprofessional Competency Framework. Vancouver

“Serious Games” and Low fidelity simulation

Serious Games are games primarily focused on education, to teach medical and health sciences
Low fidelity simulation removes many of the physical elements from the work scenario and focus on how the learner arrives at clinical decisions. Reducing the learner’s cognitive load to provide clarity on the desired outcomes of the scenario

Aim

We aim to evaluate the impact of an experiential, low-fidelity simulation, ‘serious game” – Friday Night at the ER®, across clinical teams in five hospitals and health services.

Methods

- Interprofessional clinical teams were invited to attend a 2.5- to 3-hour workshop across five hospitals and health services
- Informed consent and demographic data were obtained
- Survey was provided immediately prior the workshop and at 6-8 weeks post-workshop

Measures pre and post

1. Interprofessional teamwork and collaborative **BEHAVIOURS** at individual and team levels
2. Staff **ATTITUDES** towards interprofessional collaborative practice
3. Staff **KNOWLEDGE** of interprofessional collaborative practice competencies

Attitudes Towards Interprofessional Health Care Teams Scale (ATIHCT)
Adapted Interprofessional Collaboration Scales (ICS)
Systems Thinking Scale (STS)

Semi-structured interviews

Friday Night at the ER®

Process:

1. Game play
2. Personal Reflection and Group Debrief
3. Follow up

Objectives:

- Collaboration
- Innovation
- Systems Thinking

Results

- 519 healthcare professionals
- 35 FNER sessions
- 13 trained facilitators
- 31 participants were excluded
- 296 participants completed pre- and 116 participants completed post-
- 15 participants attended a semi-structured interview

Demographics of Survey respondents

Number of participants (n = 116) presented in n (%)

Gender	
Female	92 (80)
Male	23 (20)
Other	1 (0)
Age	
Under 24	2 (2)
25 – 30 years	19 (16)
31 – 35 years	14 (12)
36 – 40 years	10 (9)
41 – 45 years	23 (20)
46 – 50 years	17 (15)
50 years +	31 (27)
Years as a Health Professional	
Less than 1 year	1 (0)
1 – 2 years	4 (3)
3 – 5 years	12 (10)
6 – 10 years	18 (15)
11 – 15 years	13 (11)
16 – 20 years	16 (14)
20 years +	52 (45)
Profession	
Medicine	42 (36)
Nursing	12 (10)
Allied Health	56 (48)
Oral Health Professional	6 (5)

Survey responses

	Pre	Post	Significance
Systems Thinking Scale			
Mean (SD)	62.6 (7.8)	66.1 (7.0)	p <.001
ATIHCT			
Mean (SD)	3.1 (0.4)	3.2 (0.4)	p = 0.006
Adapted ICS			
Communication - Mean (SD)	14.5 (2.1)	16.7 (2.1)	p <.001
Accommodation - Mean (SD)	14.5 (2.4)	16.6 (2.1)	p <.001
Isolation - Mean (SD)	8.8 (1.5)	10.0 (1.4)	p <.001

Demographics of Interview participants

Number of participants (n = 15) presented in n (%)

Gender	
Female	12 (80)
Male	3 (20)
Age	
25 – 30 years	1 (7)
31 – 35 years	3 (20)
36 – 40 years	3 (20)
41 – 45 years	2 (13)
46 – 50 years	2 (13)
50 years +	4 (27)
Years as a Health Professional	
1 – 2 years	1 (7)
3 – 5 years	0 (0)
6 – 10 years	1 (7)
11 – 15 years	6 (40)
16 – 20 years	2 (13)
20 years +	5 (33)
Profession	
Medicine	2 (13)
Nursing	3 (20)
Allied Health	9 (60)
Oral Health Professional	1 (7)

Themes and quotes from interviews

Improved self-awareness

“I thought that I was a lot better at that [collaboration] and then I took over completely and I was busy telling the other two when to play, what to do, how many to do handing out things to them. It was an eye opener for me.”

Enhanced relationships and communication

“I thought it was fascinating, how much conversation was stimulated by the game … it may be breaking down those walls. I guess … how we interact on the ward in our very sort of separate silos versus being in that room and then having the more open discussions. It was a really positive experience.”

Themes fand quotes from interviews

Engagement and satisfaction

“I really enjoyed it… a great thing for building morale, especially with everybody getting a bit burnt out or just fatigued”

Collaboration in action

“come back together in a weeks time and have another meeting or discussion or reflection as a group just to carry that conversation forward. So that there is then that commitment to potentially actually actioning change in a more concrete way”

Conclusion

- It was fun!
- Simulation and serious games are an effective and emerging pedagogy within health professional education.
- A statistically significant positive shift in attitudes towards IPC and systems thinking was observed
- The large-scale implementation of this intervention was successful across multiple hospital sites and clinical teams

Thank you for listening

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- Nigel Fellows
- Susan Stoikov
- Louise Nicholls
- Meegan Nevin
- Sue Pager

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The development of clinical training in the United Arab Emirates pharmacy schools: the impact of international accreditation bodies

Dr Amad Al-Azzawi

PES2024 | AGENTS OF CHANGE

The development of clinical training in the United Arab Emirates pharmacy schools: the impact of international accreditation bodies

Dr Amad Al-Azzawi PhD, MSc, MEd

July 7, 2024

UNIVERSITY OF TORONTO
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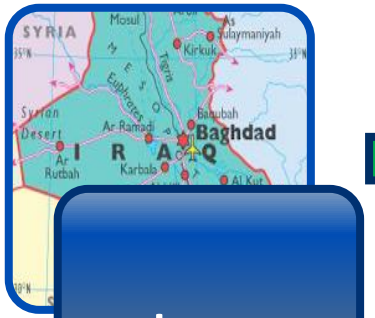
Positionality

PHD
PP



Iraq

PP
Faculty

UAE

2 PHD, Student

Canada

Faculty

UK

Domestic and International student's clinical training experience in Canada, Al-Azzawi, A. (2023).

CT experience, country perspective, North American, UK, and Australia, Al-Azzawi, A. (2021).

Background

Clinical training is an essential element in developing the quality of a program and in gaining international recognition.

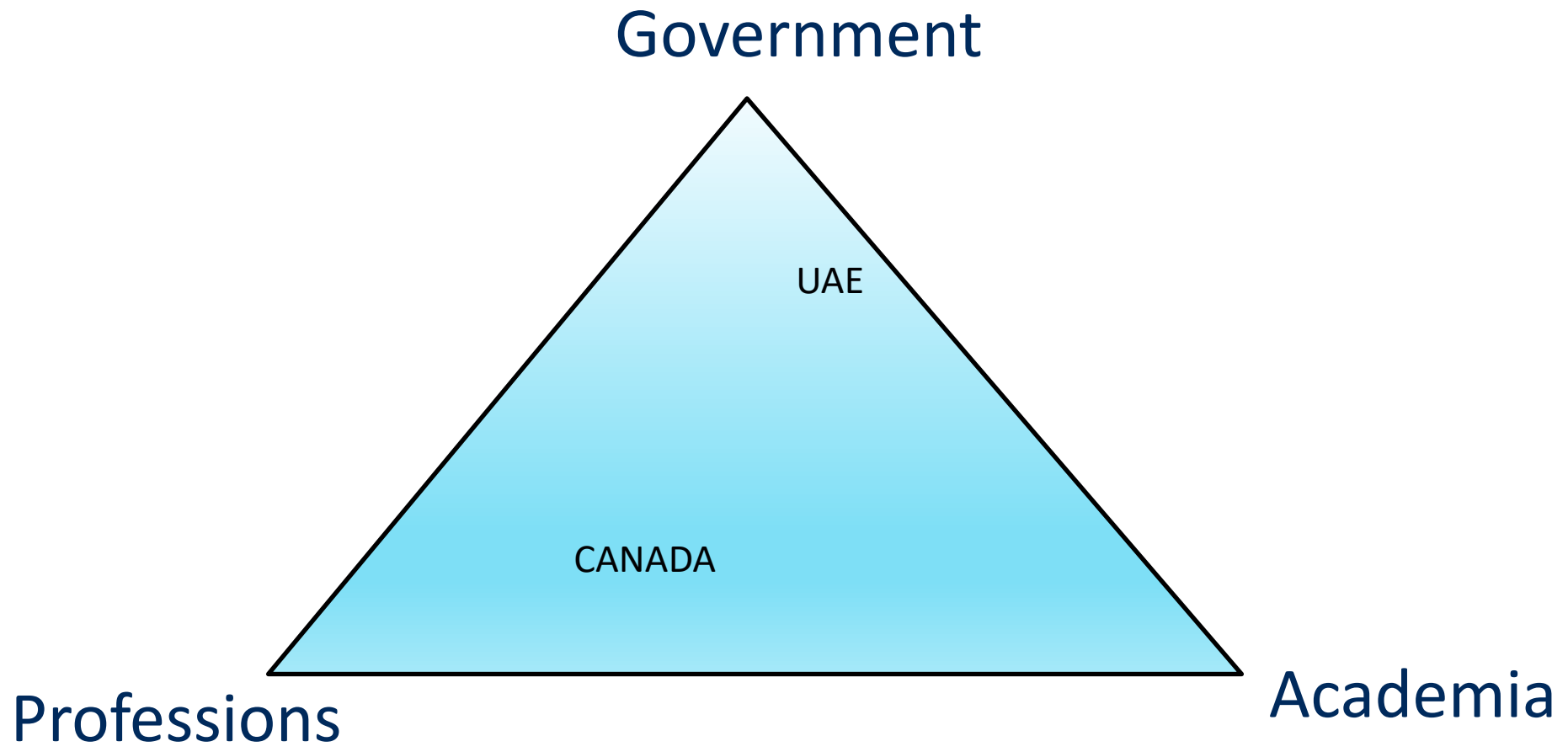
Pharmacy Models

	United Kingdom	North America	UAE
Degree	MPham	PharmD	BPharm, BSc in Pharmacy
Admission	Post secondary	Postgraduate	Post secondary
Duration	4 years	2 - 4 , 4 years	4 - 5 year
CT experiential learning during study	50 - 500 hours	> 1700 hours	250 - 500 hours
CT experience experiential learning after graduation	52- week pre-registration	None	Pre-registration period

Pharmacy Schools in the UAE

No.	Emirate	Established	The pharmacy institute	Undergraduate Degree	Graduate Degree
1.	Al Ain , Abu Dhabi	2006	College of Pharmacy, Al Ain University	Bachelor of Science in Pharmacy	Master of Science in Pharmaceutical Sciences, Master of Science in Clinical Pharmacy
3.	Dubai	1992	Dubai Pharmacy College for Girls	Bachelor of Pharmacy	Master of Pharmacy (Clinical Pharmacy)
4.	Ajman		College of Pharmacy, Gulf Medical University	Bachelor of Pharmacy, Doctor of Pharmacy (PharmD)	Master in Clinical Pharmacy, The Master of Science in Drug Discovery and Development
5.	Ajman	1996	College Of Pharmacy and Health Sciences, Ajman University	Bachelor of Pharmacy (BPharm)	Master of Science in Clinical Pharmacy (MSc in Clinical Pharmacy)
6.	RAK	2007	RAK College of Pharmacy, Medical and Health Sciences University	Bachelor of Pharmacy (BPharm)	Master of Science in Clinical Pharmacy, Master of Science in Pharmaceutical Chemistry, Master of Science in Pharmaceutics
7.	Sharjah		The College of Pharmacy University of Sharjah	Bachelor of Pharmacy	Master of Pharmaceutical Sciences, Doctor of Pharmacy (Pharm D), Doctor of Philosophy of Pharmaceutical Sciences
8.	Abu Dhabi	2006	Fatima College of Health Sciences	Bachelor of Pharmacy	

UAE Landscape



Accreditation

- 2000, The Commission for Academic Accreditation (CAA).
- 2016, Memorandum of Understanding (MoU) was the Accreditation Council for Pharmacy Education (ACPE).
- 2019, established Competency framework
- 2023, ACPE ‘certification’ to ‘international accreditation’

ACCREDITATION COUNCIL FOR PHARMACY EDUCATION

CAA ACCREDITS
Commission for Academic Accreditation

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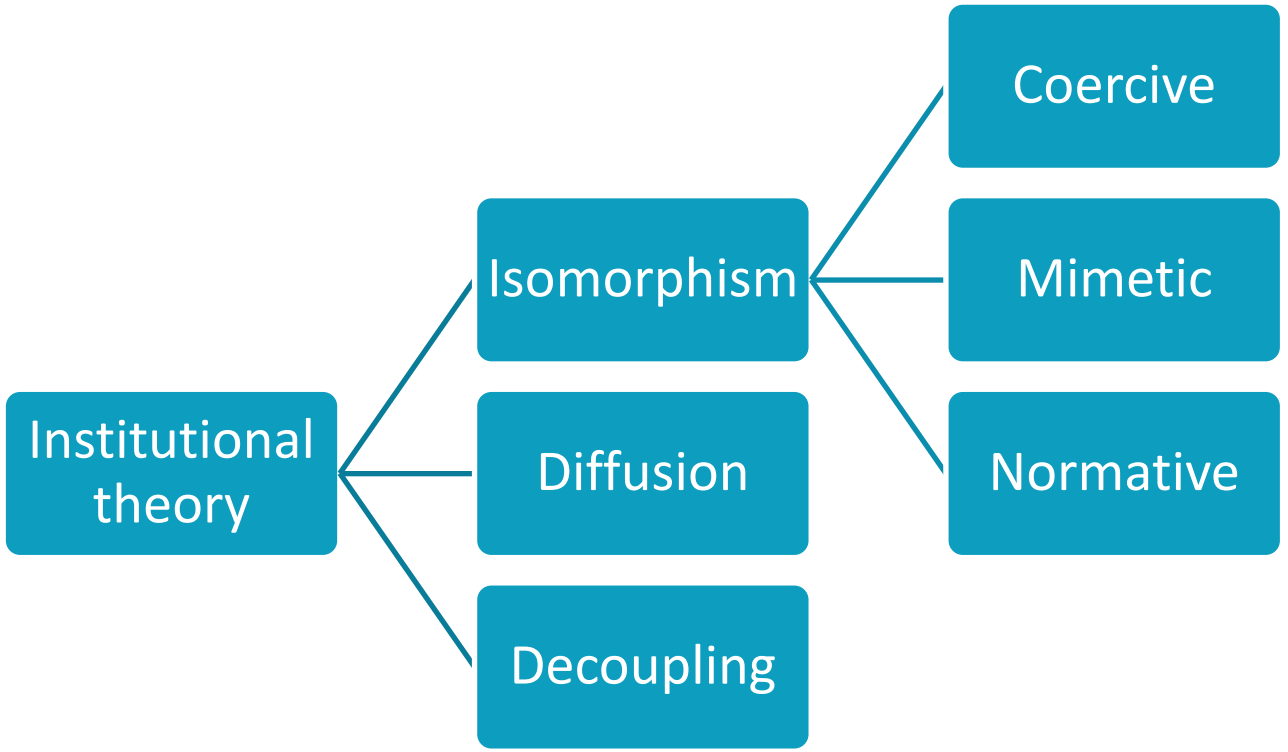
AL-AZZAWI 2024

Research Question

How has the North American model of CT in pharmacy education been implemented in the UAE?

What are current policies and practices governing CT in the UAE at the emirate and federal

Theoretical Framework



Methods

- Case study
- Triangulation of three resources
- Policies by regulatory and professional bodies
- Documents, course description, study plans annual reports
- Interviews with stakeholders

Polices

2015

Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai, National Innovation Strategy

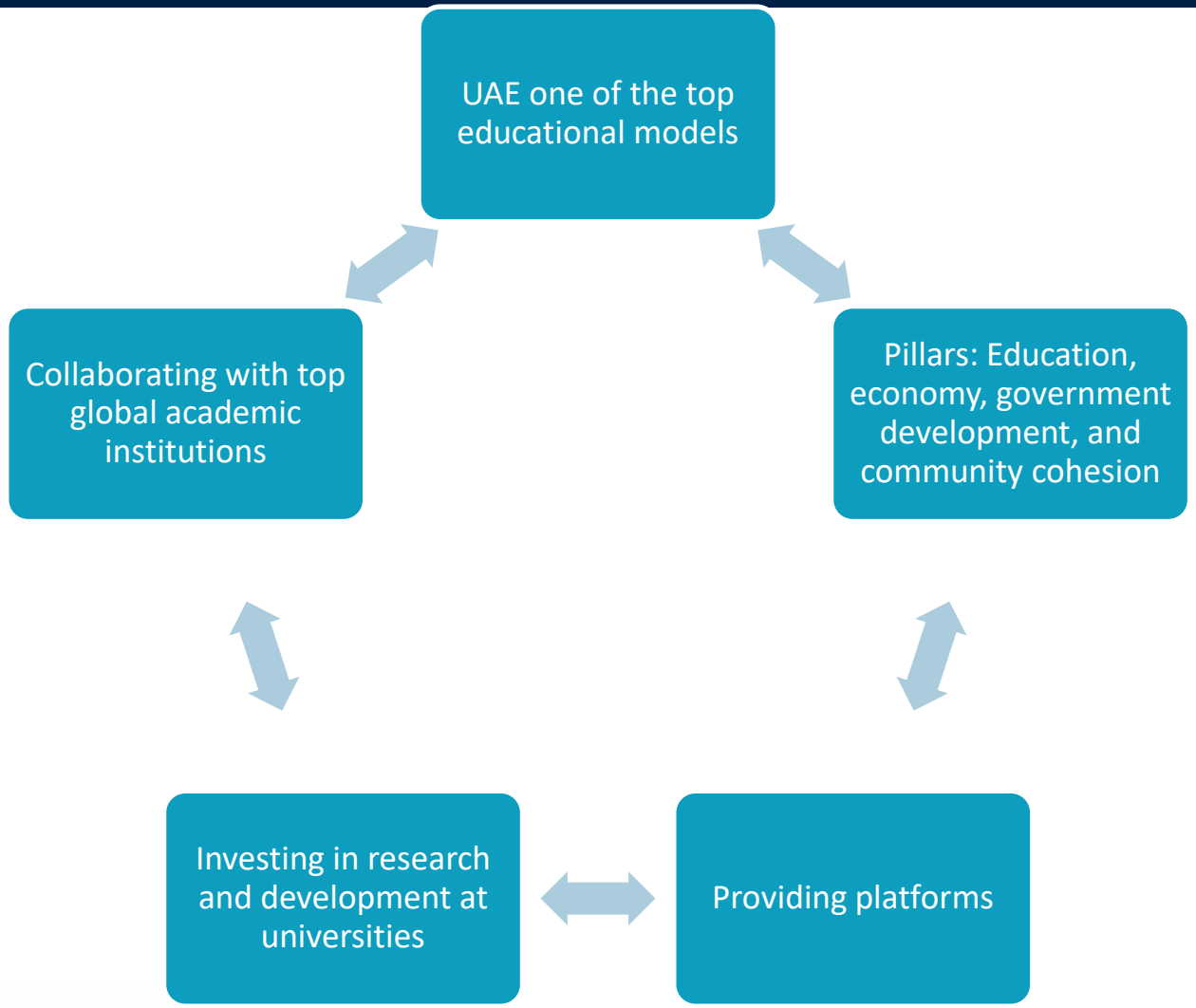
2017

The Minister of Education, the National Strategy for Higher Education 2030

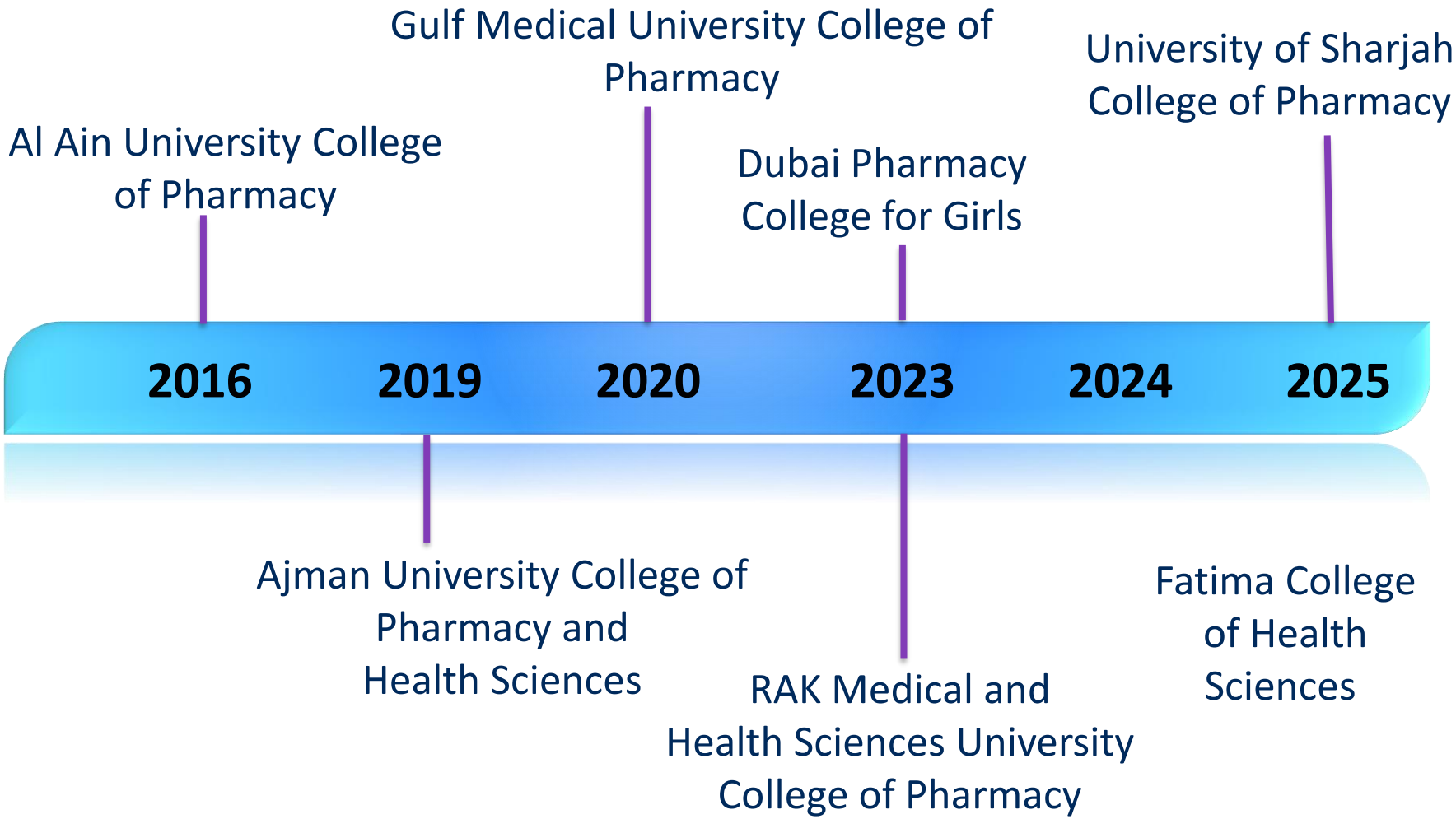
2017

Shaikh Mohammad Bin Rashid Al Maktoum (Vice-President and Prime Minister of the UAE and Ruler of Dubai), Centennial 2071 project

Results


UAE one of the top educational models
Pillars: Education, economy, government development, and community cohesion
Providing platforms
Investing in research and development at universities
Collaborating with top global academic institutions

Timeline



*Two-Years Post International-Accreditation Focused Visit

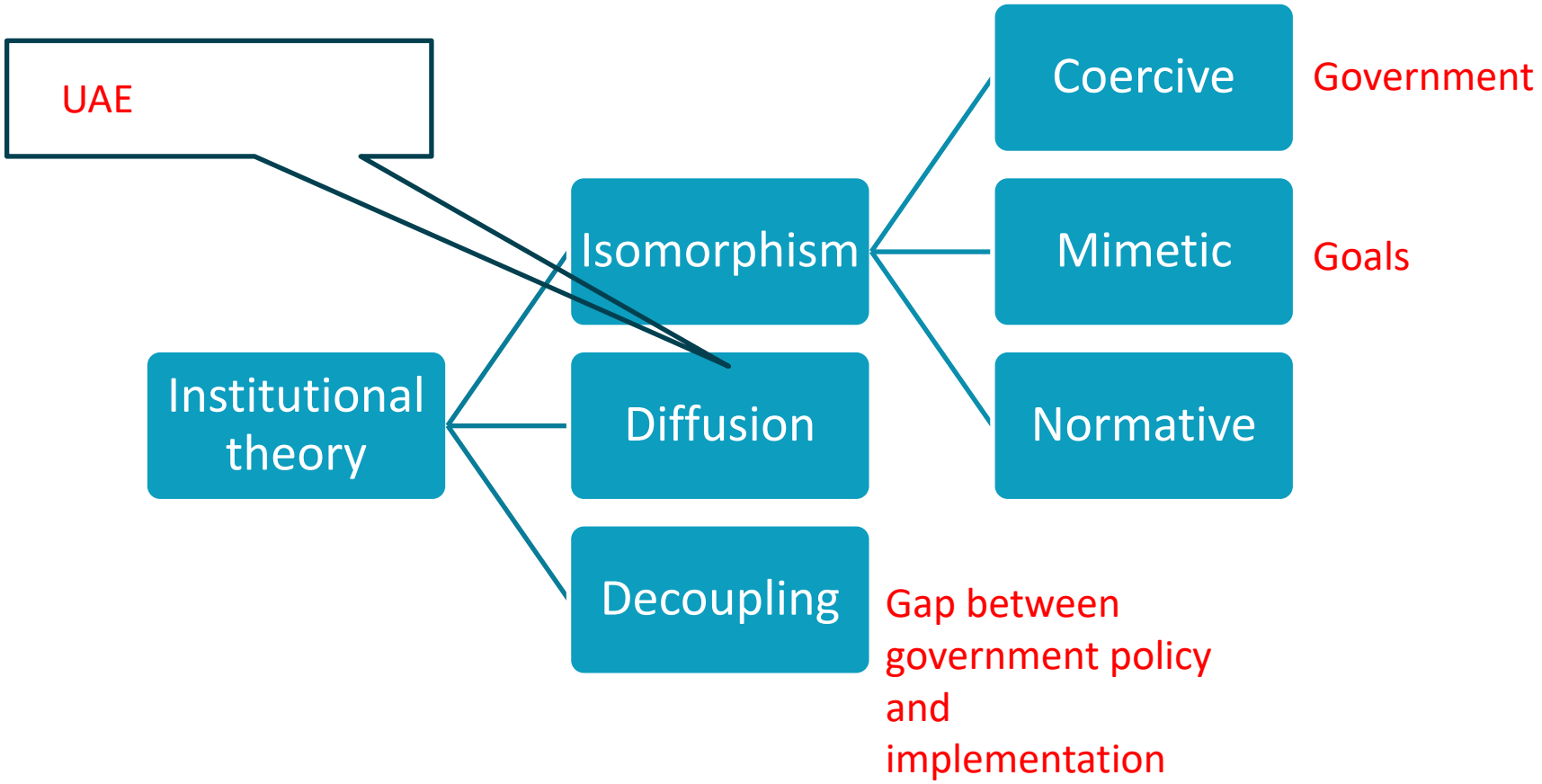
Comparison

	Before	After
Degree	BPharm BSc	BPharm, BSc, PharmD
Number of years	4 - 5	4.5 - 5
Credit hours	Majority below 150- 160 130	160
Basic sciences courses	10 - 12	5 - 7
Therapeutic courses	Third and fourth year	Spread through out the years
CT experience	Last year	Early exposure
Credit hours for CT	6 - 8	23 - 25
CT learning sites	Community, hospital and industry	Different hospital departments

Interviews

- Teaching practices, case-based learning, TBL, PBL
- Assessment, OSCE, daily reflective diary, case presentation
- Experiential learning, duration, variety of specialty
- Administrative, MOU with multiple hospitals
- Governmental policy, scholarships for citizens NAFIS
- Mentorship, initiation and development of academic and professional on-site mentors

Theoretical Framework



Points for Consideration

1- Academia

- Observation vs hands on training
- Research, experiential learning, communication skills , Impact on the professions, and ethical considerations
- Training for preceptors, hospital staff
- Validation of methods of assessments

2- Professions

- More CT spaces needed in the hospital and community pharmacy
- Inter professional training
- Change in culture behaviours in the hospital and health care system

3- Outside of Academia

- Professional legislation
- Society
- Government policy to provide jobs for pharmacists in a clinical role

Implication

Future Points

What is needed so a pharmacy graduate from a developing country can practice when landing in a western country same as their counterparts.

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