MyDispense and Digital Rx in education: Code, Care, or Crisis?

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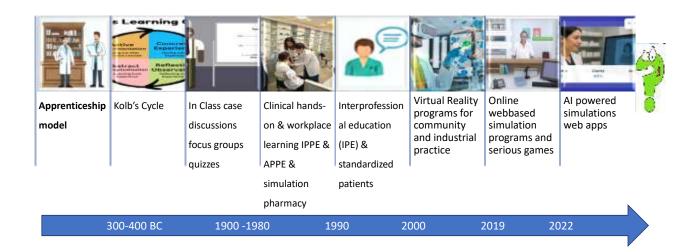
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Experiential learning & simulation evolution in Pharmacy





The Poll Question

Is Technological 'Uptake' in Pharmacy Education an Undeniable Necessity, or Does It Risk Diluting Essential, Proven Teaching Practices?

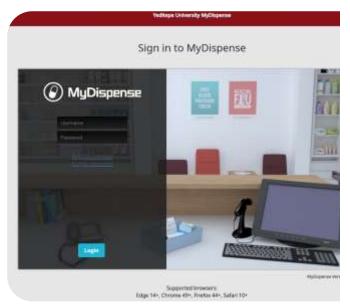
Comparing traditional methods with computer-based simulations for effective learning

MyDispense: The Most widely used Virtual Simulation in PE

European Society of Clinical Pharmac

What is it?

- A virtual Platform for Practice-Ready Pharmacists
- An Immersive Comprehensive Pharmacy Ecosystem for both hospital & community
- The Power of Controlled Errors with Immediate Feedback & Standards



What's Mydispense



Unlimited Scenarios

+3M scenarios

Students has un limited scenario exposure many shared already

Hours spent

24/7 hours

Available all day and night across browsers

Types of exercises:

Prescription Dispensing (C/H)
Prescription Validation (Rx/EHR)
Product Selection (OTC/IP)

Regular updating cycle for clinical content



What's Mydispense

Dispensing & Medication Safety

Dispensing in community pharmacy or hospital pharmacy validating different prescriptions labelling, stock and expire management

Practice courses (IPPE & APPE)

Decision making & Problem solving in different Therapeutic areas

Special populations, Cardiovascular diseases., Diabetes., HIV and AIDS, Immune-system diseases., Neurodegenerative diseases., Viral diseases., Optical or skin diseases

> Both didactic and practice courses

Communication and Counseling

- Gathering patient history
- **Providing Drug information**
- Communication of medication
- Patient Counseling,
- Healthcare professional communication

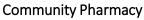
Other areas

- MTM
- Immunization
- **Ethics and Law**
- OTC
- Independent prescribing
- Lab Values/Diagnostic Tests
- Non-Sterile Compounding
- Deprescribing?

What's Mydispense







Hospital

Provide comprehensive training for faculty



Patient EHR

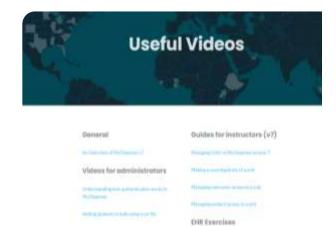
Regularly assess the effectiveness of simulations

Allocate funds for advanced simulation tools



How to start?

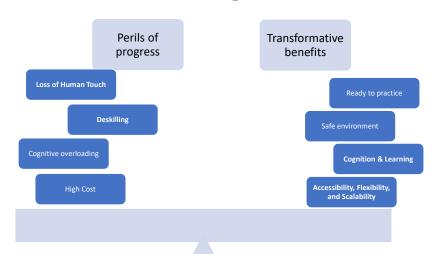
- 1. **Request Access**: Email keith.sewell@monash.edu or mydispensel@monash.edu to initiate the setup.
- 2. **Setup Timeline:** Deployment is typically completed within 2 days to 1 week.
- 3. **Minimal IT Involvement**: You only need to provide a domain name; Monash University hosts the website. IT assistance is required only once for initial setup.
- 4. **Content & Administration:** Setup is easy. One designated Administrator can manage user enrollment. Many demo cases are already available for immediate use.



Features of MyDisponse



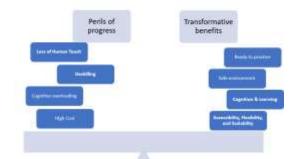
Undeniable Necessity, or Risk



Perils of progress:



- Not all innovation is necessarily good for humans
- Old is Gold
- Cost & TechnoEquity
- "Playing" while treating a patients
- Y prioritizes administrative efficiency over educational depth in an important Health discipline
- Too much screen time
- Always conflicting data showing no superiority
- Research is plagued by methodological flaws (Selection, leading to exaggerated benefit claims and justifying substitution

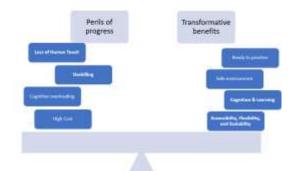


Performance, Attrition Bias) and commercial influence, "No educational outcomes beyond merely having a good time" Gharib AM Salahudeen MS et al 2024

Transformative benefits:



- Innovation raises from a need
- Exposure to Infrequent Scenarios
- Gen Z learning behaviors ... instant feedback
- Scalability, easy accessibility, and cost-efficiency avec Collaboration
- Foundational Knowledge and Active Learning
- Address critical systemic constraints
- Superiority in Core Clinical Skills and Performance
 - Kononowicz AA, Woodham LA, et al 2019
- Educational Research limitations are inherent.. finding of non-inferiority should be interpreted as a significant benefit!



ESCP invited me as a user & researcher not the company.. No conflict of interest @



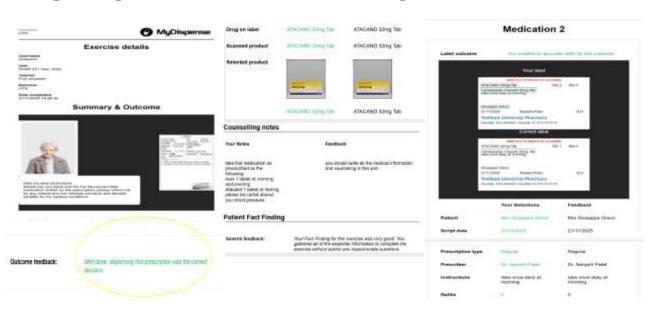
What's unique about Mydispense

- Heavily studied in multiple settings
- No intention to supplant but to supplement
- Both formative & summative with scenarios option
- Its free and will keep free "TechnoEquity"
- Collaboration networks already exist and supported

- Customized to local languages, Meds system and curriculum needs
 - Currently available in French
- Used in CPD and advanced specialist development & IPE
- Consistently upgraded to meet our everchanging practice

Mydispense feedback Report







Mydispense in Literature

57+ studies

- 65% or more use survey to evaluate student experiences
- Geographical Scope: United States, Australia, Saudi Arabia, South Africa, Namibia Malaysia, Turkey, Sri Lanka, and the United Kingdom, as well multi-continent studies
- 37% Mixed, 30% Quantitative, and 30% Qualitative Approaches.
- 3 Recent Systematic reviews
- 2 recent well designed controlled studies

Mydispense in Literature...

Study Objective: To review and appraise global literature on the applications of MyDispense within pharmacy education.

Key Results: The analysis identified 10 subthemes consolidated into four overarching areas where MyDispense supports education:

- Skill development (e.g., dispensing, communication, problem-solving)
- Application of theoretical knowledge to practice
- Supporting educational delivery
- Enhancing student outcomes

Rhora et al.
Journal of Phonosacoustical Policy and Practice (2023) 36:170 tstps://doi.org/10.1180/s40545-023-00010-0

Journal of Pharmaceutic Policy and Practi

VIEW.

MyDispense simulation in pharmacy education: a scoping review

Harjit Kaur Khera¹⁷, Emily Mannix¹, Reem Moussa¹ and Vivienne Mak²

Abstract

Background: MyClispierse is a first sudne virtual simulation software developed by Monarh University. The software for littles students to practice, apply and hone the slids of a pharmacia in a realistic environment without the potentially life-threatening consequences of a real-site-error. Although the focus of MyClippene was mitially on exposure to community pharmacy practice sconarios, its modular build and customizability, indicate that there are a wide range of applications that could be incorporated into pharmacy education. Therefore, this study reviews and appraises the literature on the use of MyClispense within pharmacy education.

Methods: A scoping review was conducted. The electronic databases (CNAHL, Oxid Embase, Ovid Medline, Google Scholar, and Scopus) were assisted to identify scholarly articles estated to MyDispense in pharmacy education from Sansary 2011 and August 2022.

Results: Forty-three papers met the inclusion criteria and were analysed in this scoping review. A total of 416 km/s sentances and segments of text were extracted from the papers and subsequently caregorized into 10 subthinms. The 10 subthinms were disposing skills, continualization skills, decision-making-problems saking skills, unation performance, pharmacy law, applying theoretical knowledge, support educators, pharmacy practice, feedback/reflection and practice in a risk free environment. In total, thus overarching themes summarize how Moltisperse is supporting pharmacy effection in supporting education; skill development application of knowledge and student outcomes.

Conclusion: The scoping review found that MyCimpenue was mostly used to support education and student skill development. These findings can be used to support pharmacy educators globally on the various uses and applications of MyCispenue in their teaching.



Mydispense in Literature...

Study Objective: To systematically review students' perceptions regarding the barriers and facilitators of using the MyDispense simulation platform in pharmacy

Key Findings: Facilitators (Reasons for Success)

- · Develops Competency: Improved dispensing/counseling skills and understanding of pharmacy law.
- Engaging Experience: Interactivity and immediate feedback.
- User-Friendliness and a Safe Learning Environment.

Key Findings: Barriers (Obstacles to Use)

- Learning Curve: Initial difficulty in navigating the platform.
- IT Issues: Technical problems and connectivity issues.
- Limited Realism and Applications in some scenarios.





Barriers and Facilitators of Using MyDispense from the Student Perspective: A Systematic Review

Owen Colline 10, Buth McCarthy 1 and Laura J. Sahm 1,2,10

- Pharmacoutral Care Resourts Garage, federal of Pharmacy, Lieonensty College Corb., T12 88AF Cork, Instandruth recorder/heccie (E.M.)
- Pharmary Department, Mercy University Hospital, Generally Place, 712 WESt Cork, Indianal Correspondence: Lashmillian Inc. 1915;19:140-1408

MyDiopense is a high-fidelity, loss-stakes community pharmacy simulation, allowing students to practice dispensing skills. A systematic review was conducted to identify students' perceptions regarding burriers and facilitators of MyDispense in pharmacy education. PubMed, CINAHL, and EMBASE databases were searched from 2015 to 2025 in January 2025 using combined keywords, proximity searching and Boolean operators. Studies investigating MyDispense and gathering students' perceptions were included. Record screening was conducted by two independent reviewers (OC and LS). Any identified records from database searching and hand searching of included study reference lists were imported to Reyyan and subjected to independent review. Conflicts were resolved through a third party (RMcC), and discussions were held until consensus was reached. Fifteen studies wore included in this review. Seven studies were conducted in USA, six in Asia, see in UK, and one in Australia. All studies utilised purposive sampling. Somple sizes ranged from 33 to 322 students. All studies included surveys to gather student perceptions. Other data tion mothers, included consistenct and interess and fore

Recent randomized studies

BMC Medical Education 20128 of all 889 Western Checkers (2021) 21:497 https://doi.org/10.7180/s12809-020-07028-7 Online simulation versus traditional classroom learnings in clinical pharmacy education: effect on students' knowledge, satisfaction and self-confidence

Keywords: Clinical pharmacy inducation. Self-confidence, MyOspenie, Clinice constation having: Tryditarial Occurrent learning





Live and learn: Utilizing MyDispense to increase student knowledge and confidence in caring for patients with diverse religious backgrounds

William E. Norton Jr.*, Clark D. Kebodemox.*, Adam Phillips.*, Krista L. Donohoe.*, Lauren M. Galdaa.**

ARTICLEINFO

Mydispense in Literature...

Purpose: Evaluate the effectiveness of a one-day accelerated dispensing course for Graduate Entry (GE) Vs Undergraduate (UG) students.

Educational Activity: 🍼 The course, identical to the standard three-week UG course, utilized the MyDispense simulation software.

Key Findings:

- Student Reception: The accelerated course was well received by GE students, who found MyDispense relevant, easy to navigate, and helpful for preparation.
- Assessment Outcomes: GE students performed significantly better, with a 5.1% failure rate compared to 32.6% for the UG cohort.
- Safety: UG students were more likely to provide unsafe instructions on prescription labeling for three out of four prescriptions compared to GE students.



Experiences in Teaching and Learning

An accelerated dispensing course for grad entry students - Can we teach dispensing skills over a day?



Harjit Singh", Ali Haider Mohammed , Emily Stokes", Daniel Malone", Justin Turner ', Bassam Abdul Rasool Hassan ', Angelina Lim '

undry of Phymosy and Phemounded Aumen, Monah Liberniy, Refelle, VK. 2012, Aumala Slavi of Phemosy, Minah Liberniy, Bildayia, Baider Sowney, Sologie 47505, Bildayia Spiemons of Phemosy, Al-Raftins Utbersity (1989, Righlist, Frag.

A B S T A A C Y

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Future Work

 Start a ESCP mydispense network for content exchange

 A portal for the society to be used in master classes and workshops

 Seek a grant with RC for PPR exercises in MD or by our own







The Poll Question

Are you with or willing to utilize Mydispense or similar portals for any kind of education or research? Shall we Code, Care or Mix

Comparing traditional methods with computer-based simulations for effective learning



MERCI BEAUCOUP....



