

Impact of Decoding Medication Tradenames on Students' Performance and self-perception.

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Introduction

- Learning medication tradenames can be a memorization challenge for pharmacy & healthcare students.
- Academic communication often utilizes generic names. In contrast, interactions with patients mostly utilize tradenames.
- In parallel, healthcare practitioners' self-confidence in their knowledgebase can possibly impact their dispensing patterns.

Objectives / Hypotheses

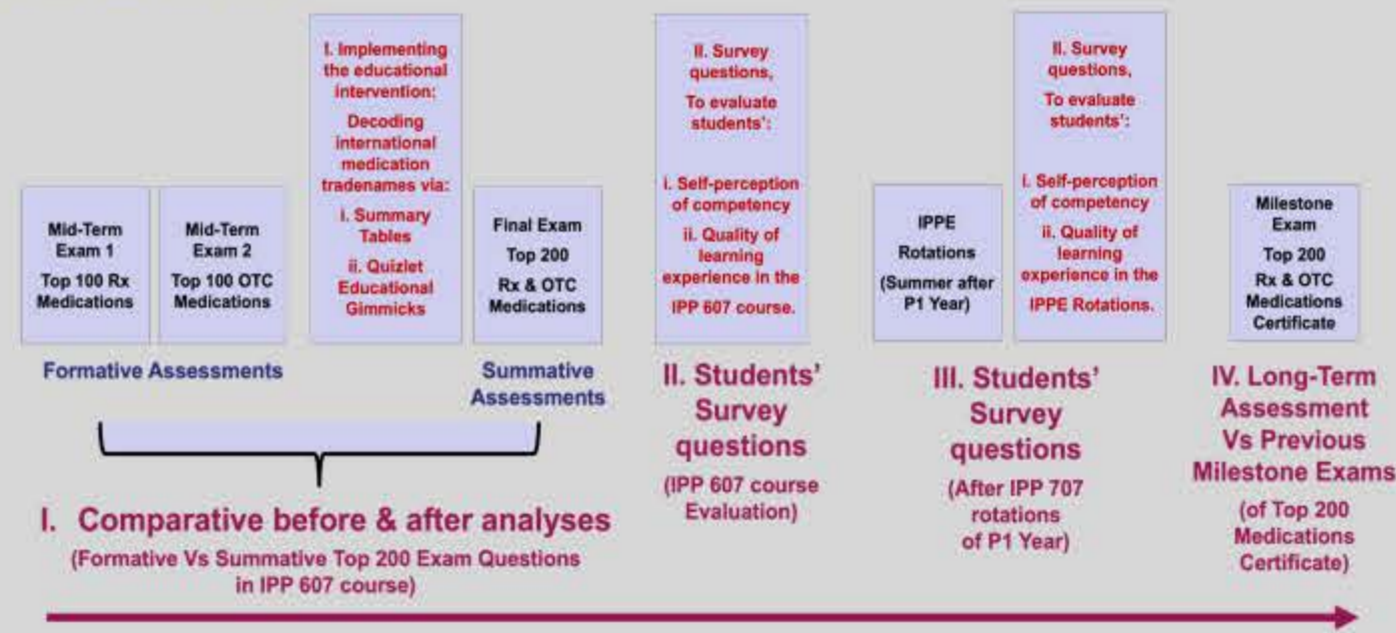
- The purpose of the current study is to assess whether the introduction of decoding of medication tradenames (explanation of techniques, or expressions used in medication tradenames) of the Top 200 medications in USA & internationally, can result in:
 - Improved pharmacy students' academic performance in the Top 200 Medications exam questions in BOTH:
 - IPP 607: Introduction to Pharmacy Practice course.
 - Milestone Exam (Top 200 medications certificate).
 - Improved pharmacy students' self-perception of competency & quality of learning experience using Self assessment questionnaires after their:
 - IPP 607: Introduction to Pharmacy Practice course.
 - IPPE Rotations (IPP 707 rotations after their P1 Year).

Methods

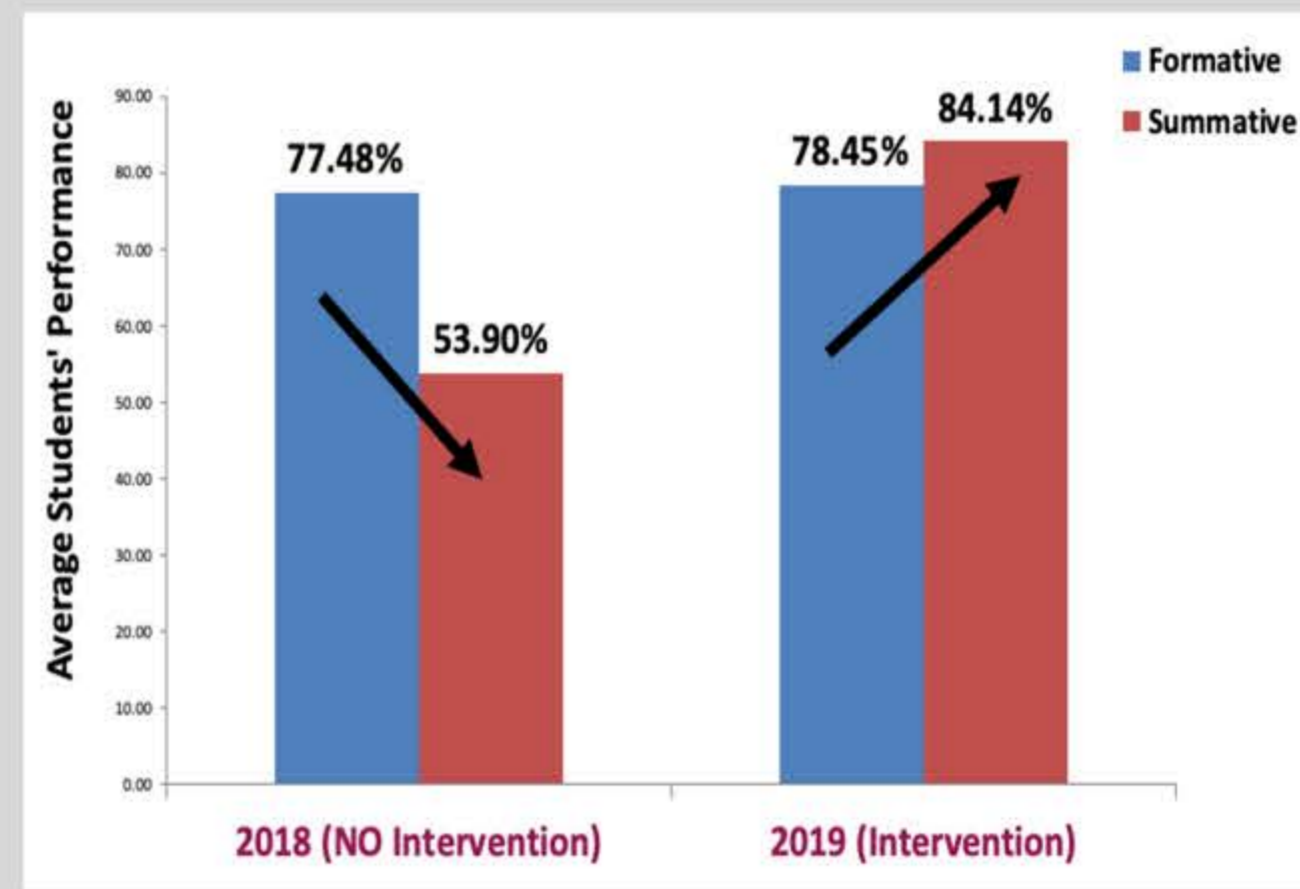
- Baseline performance of students in formative assessment questions before implementing the educational intervention of decoding international medication tradenames, will be compared versus their performance on final summative assessment questions after the intervention.
- The average performance of students who received the educational intervention in questions specific to the Top 200 medications in cumulative Milestone assessment will be compared versus the average students' performance in similar questions from previous academic years without the education intervention.
- Survey questions will be used to evaluate students' self-perception of competency & quality of learning experience.

This study has been approved by the California Northstate University Institutional Review Board (IRB Protocol Number: 1908Q02Q53) and is supported by the CNU ITLE HEALTHCARE EDUCATION GRANT 2020 AWARD (HEGA).

Research Design



I. Comparative before & after analyses (Formative Vs Summative Top 200 Exam Questions in IPP 607 course)



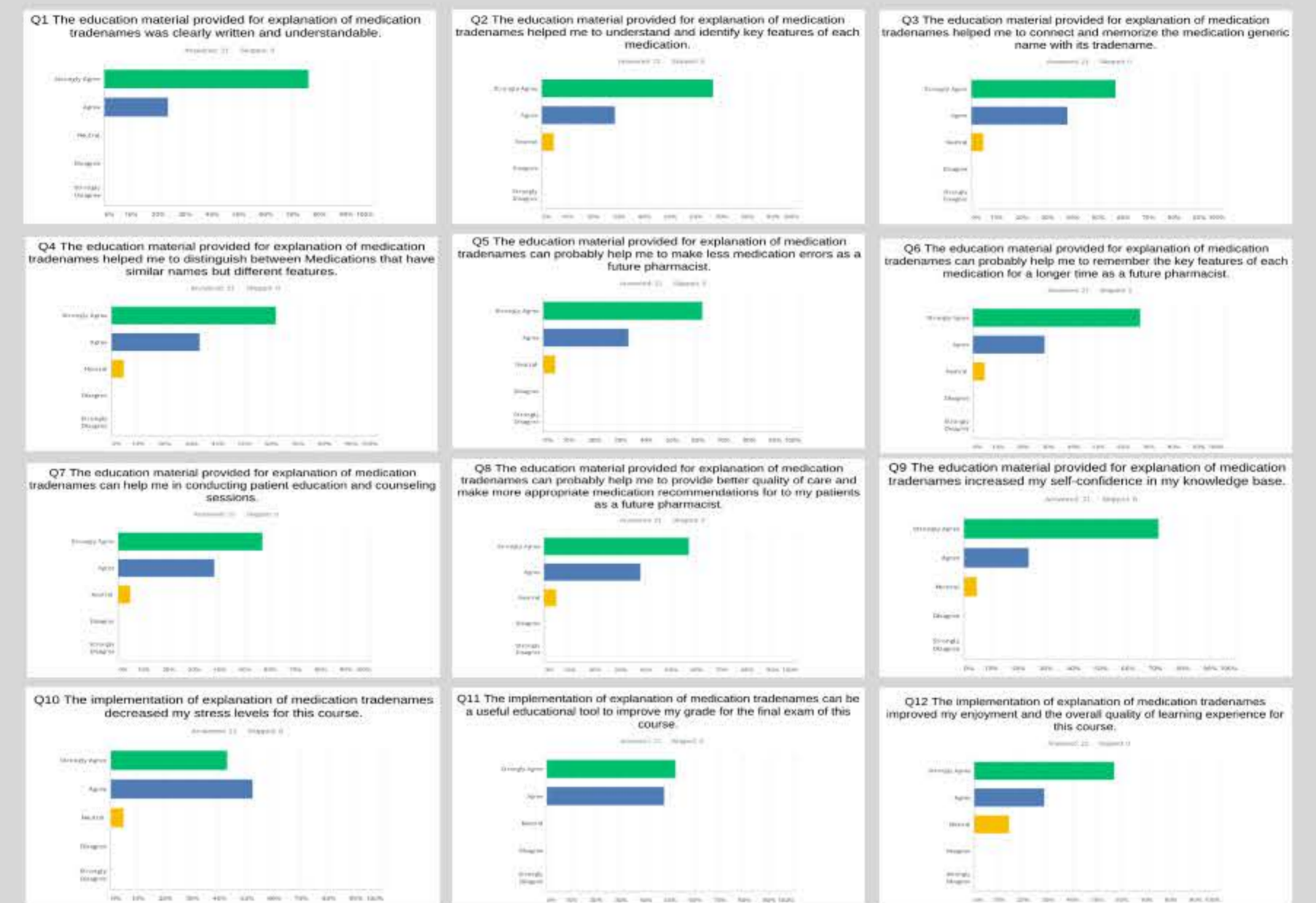
- According to preliminary analysis as compared to formative assessments, overall aggregate averages of students' performance on summative assessment questions decreased by 23.6% (from 77.5% to 53.9%) on the year prior to the intervention, whereas, it was increased by 5.7% (from 78.5% to 84.1%) on the year the education intervention was implemented.

Methods

Generic Name	Trade Name	Explanation of Trade Name	Common FDA Label Indication
FUROSEMIDE	Lasix	It is a Diuretic that has an effect that "Lasts" for "SIX hours".	Edema related to heart failure, renal failure; Hypertension
CLONIDINE	Catapres	CATA: means "Take down", press (blood pressure).	Hypertension Attention-deficit hyperactivity disorder
OMEPRAZOLE	Prilosec OTC Zegerid OTC	A proton pump inhibitor to reduce Gastric acid secretion "Pr" denotes "proton H+" "Lo" denotes "Low" "Sec" denotes "secretion"	Heartburn & indigestion:
LOPERAMIDE:	Imodium	Immodium: "IMMObilizes" the bowel's mode of transport; i.e: stops bowel movement.	Acute diarrhea, traveler's diarrhea Chronic diarrhea
PHENAZOPYRIDINE	Pyridium, Azo	Pyridium: It denotes the chemical composition as it contains phen "AZO"- "Pyridine" (C11H11N5). AZO: also means "Nitrogen" which is important for the drug effectiveness as urinary Tract Analgesic.	Dysuria (pain, burning, and other discomforts of the lower urinary tract caused by infection, trauma, surgery, endoscopic procedures, or the passage of catheters).

Results

II. Fig. 2: Preliminary results for Survey questions used to evaluate students' self-perception of competency & quality of learning experience:



Conclusion / Implications

- Supplementing Pharmacy curricula with the art & science of formulating the Top 200 medication tradenames can possibly improve students' academic performance, long-term retention & learning experience.
- Furthermore, decoding the hidden messages in tradenames can potentially help to improve future pharmacists' self-perception & confidence in their healthcare education, which can ultimately enhance their clinical services in different fields of practice.