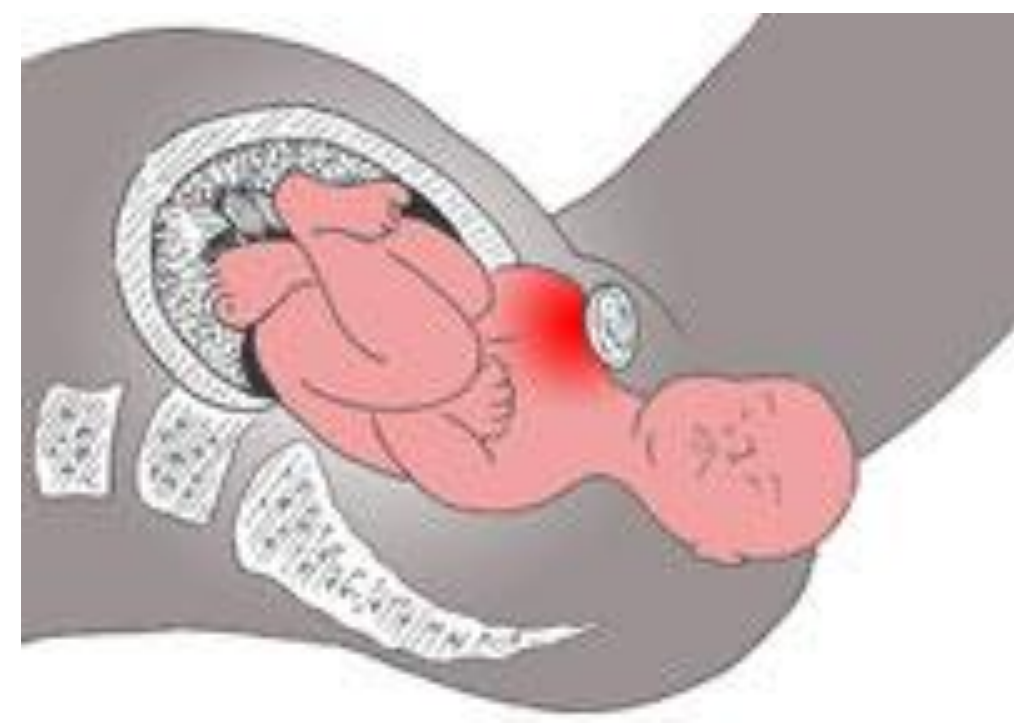


1. Clinical Problem



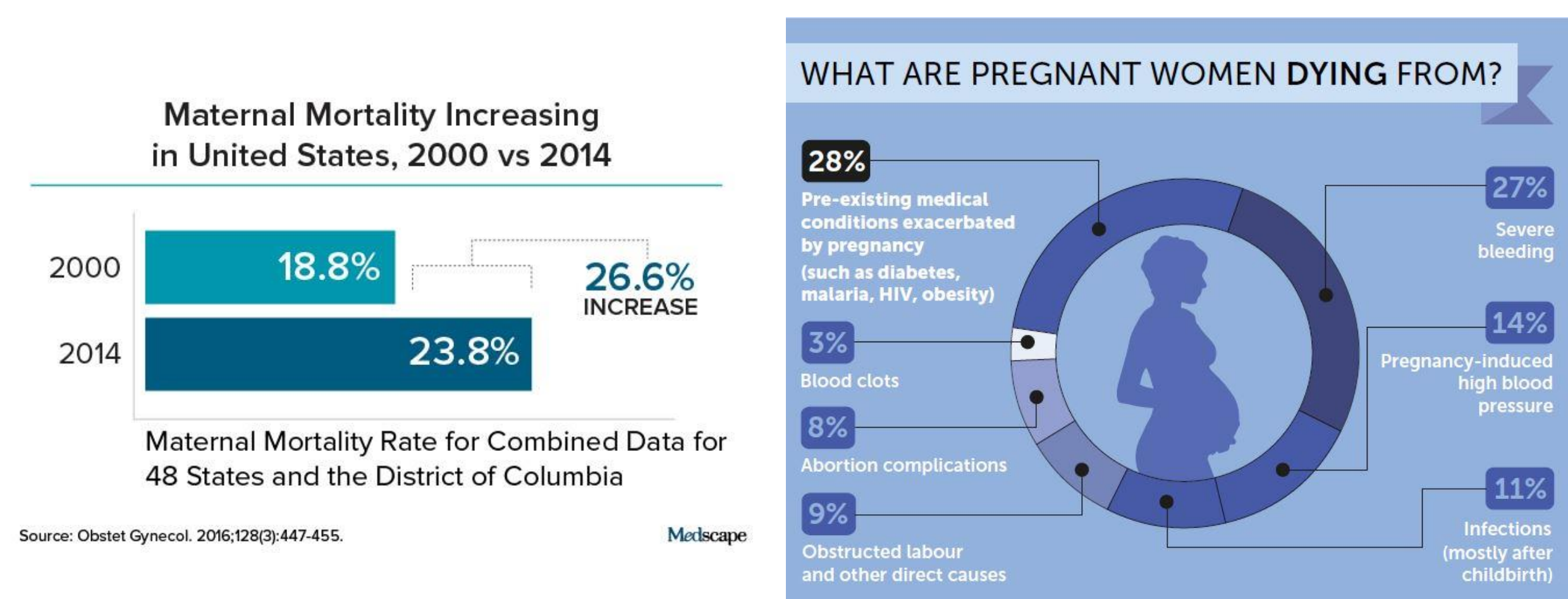
Shoulder dystocia is a rare obstetrical emergency occurring in 0.2 – 3% of vaginal deliveries. It is when the head delivers and the shoulders become impacted behind the maternal pubic bone. Simulation training should be utilized to improve skills and knowledge to reduce perinatal mortality from shoulder dystocia.

2. PICO Question

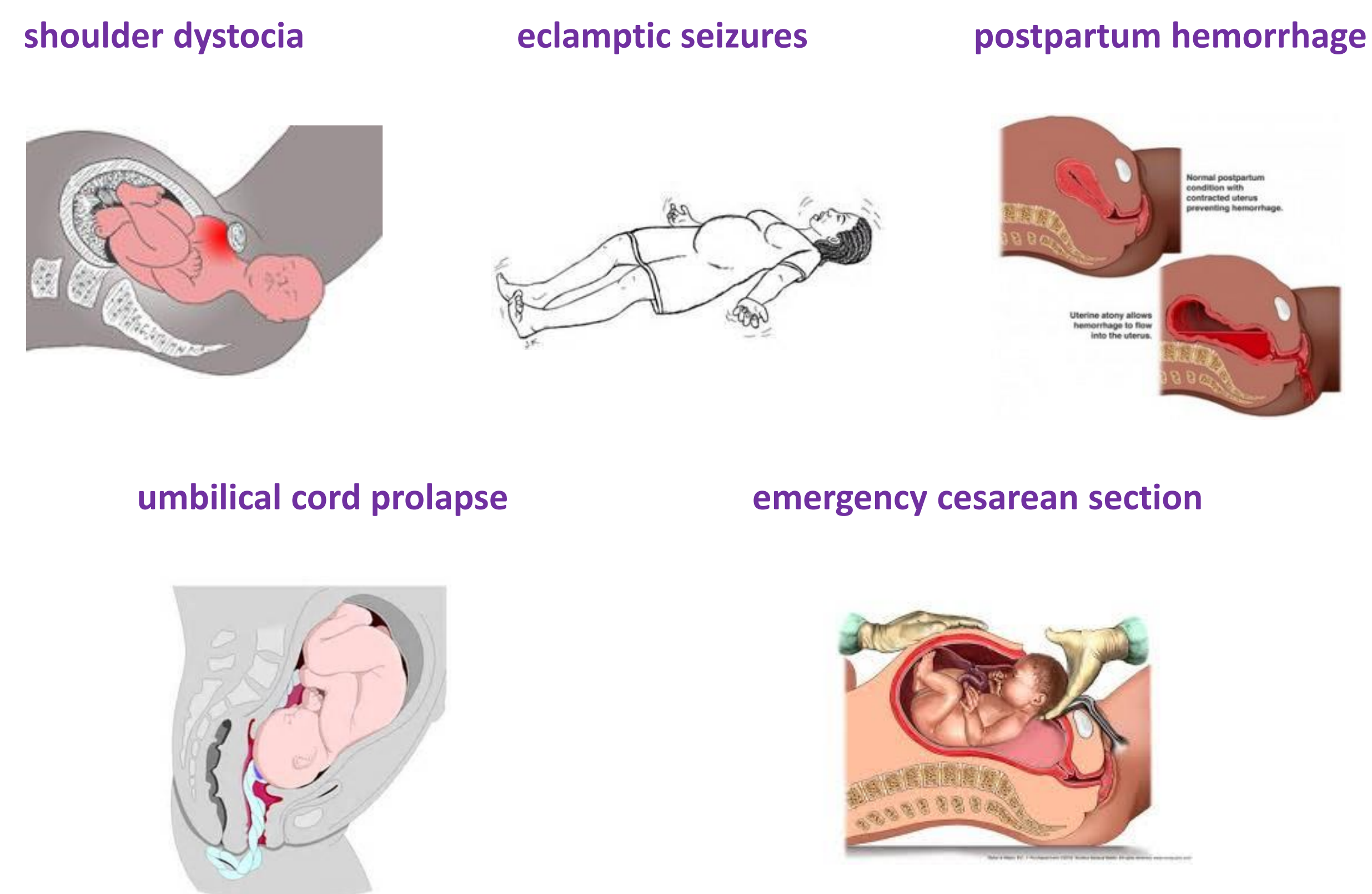
In labor and delivery nurses, how does a simulation program for obstetrical emergencies compared to no simulation program, effect knowledge & competency of the staff?

3. Background/Significance

A pregnancy related maternal death has been defined as a death occurring during pregnancy or the year following the end of a pregnancy due to a pregnancy complication (CDC, 2014a).



Obstetrical emergencies identified as causing poor perinatal outcomes consist of:



4. Literature Review

Cass, Crofts, & Draycott (2011)

Relief of shoulder dystocia

Before simulation	After simulation
42.9%	83.3%

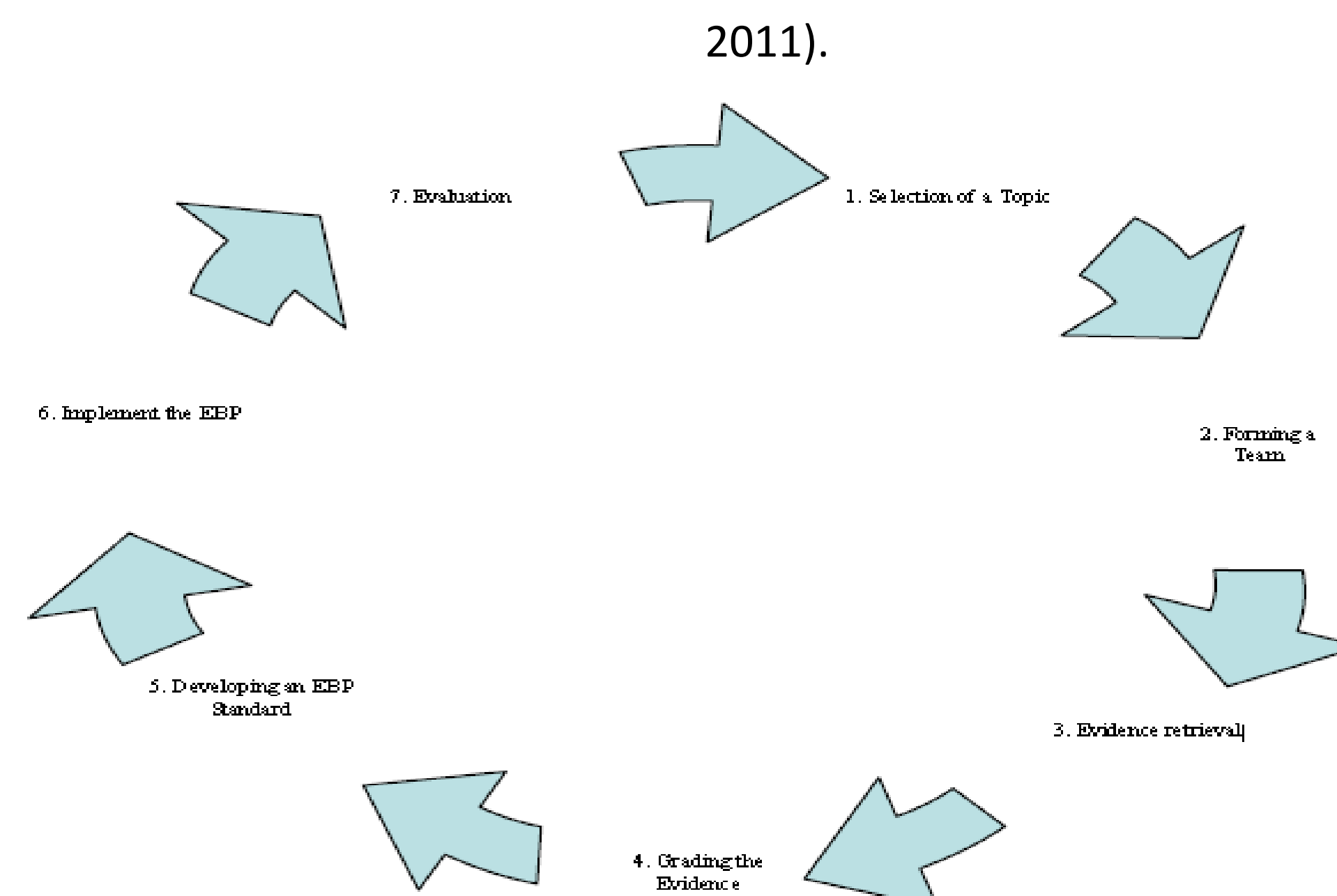
Grobman, Miller, Burke, Hornbogen, Tam, & Costello (2011)

Incidence of brachial plexus injuries

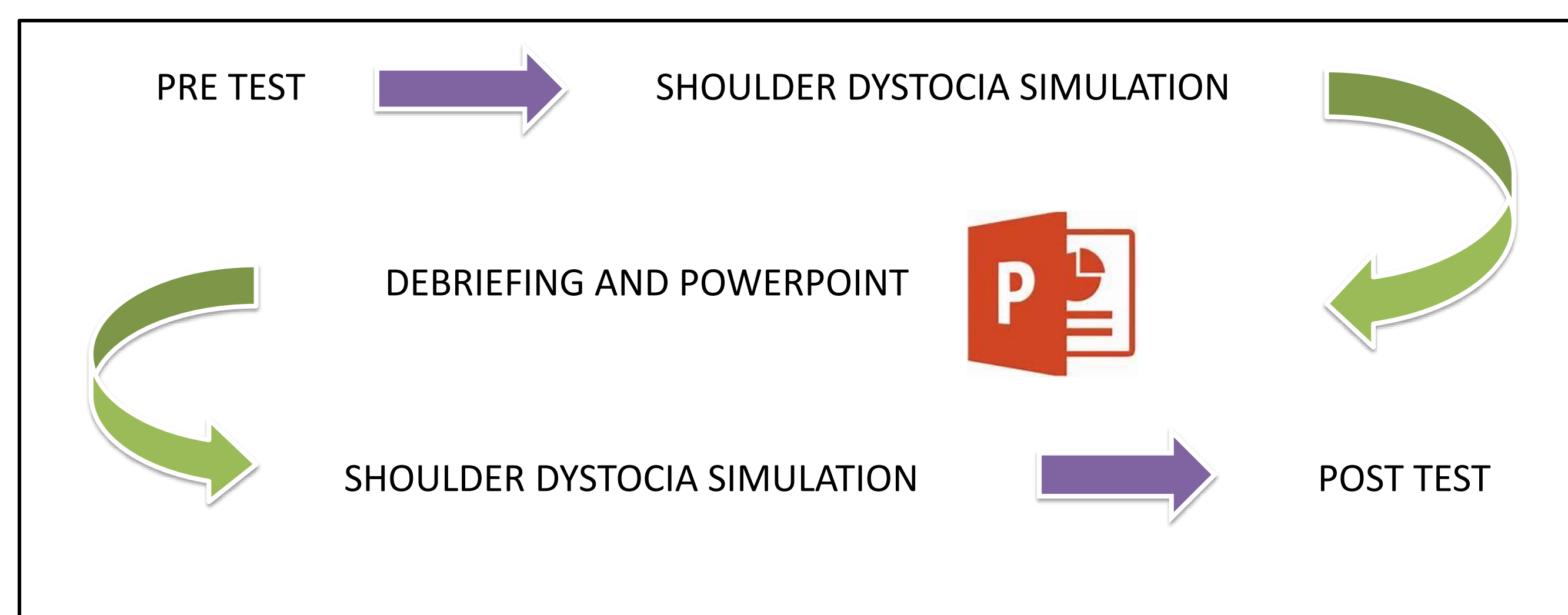
Before simulation	After simulation
10.1%	4.0%

5. EBP Theory

The framework used for the EBP change project was the IOWA Model by Marita G. Titler, PhD, RN, FAAN, Director Nursing Research, Quality and Outcomes Management, Department of Nursing Services and Patient Care, University of Iowa Hospitals and Clinics (Doody & Doody,

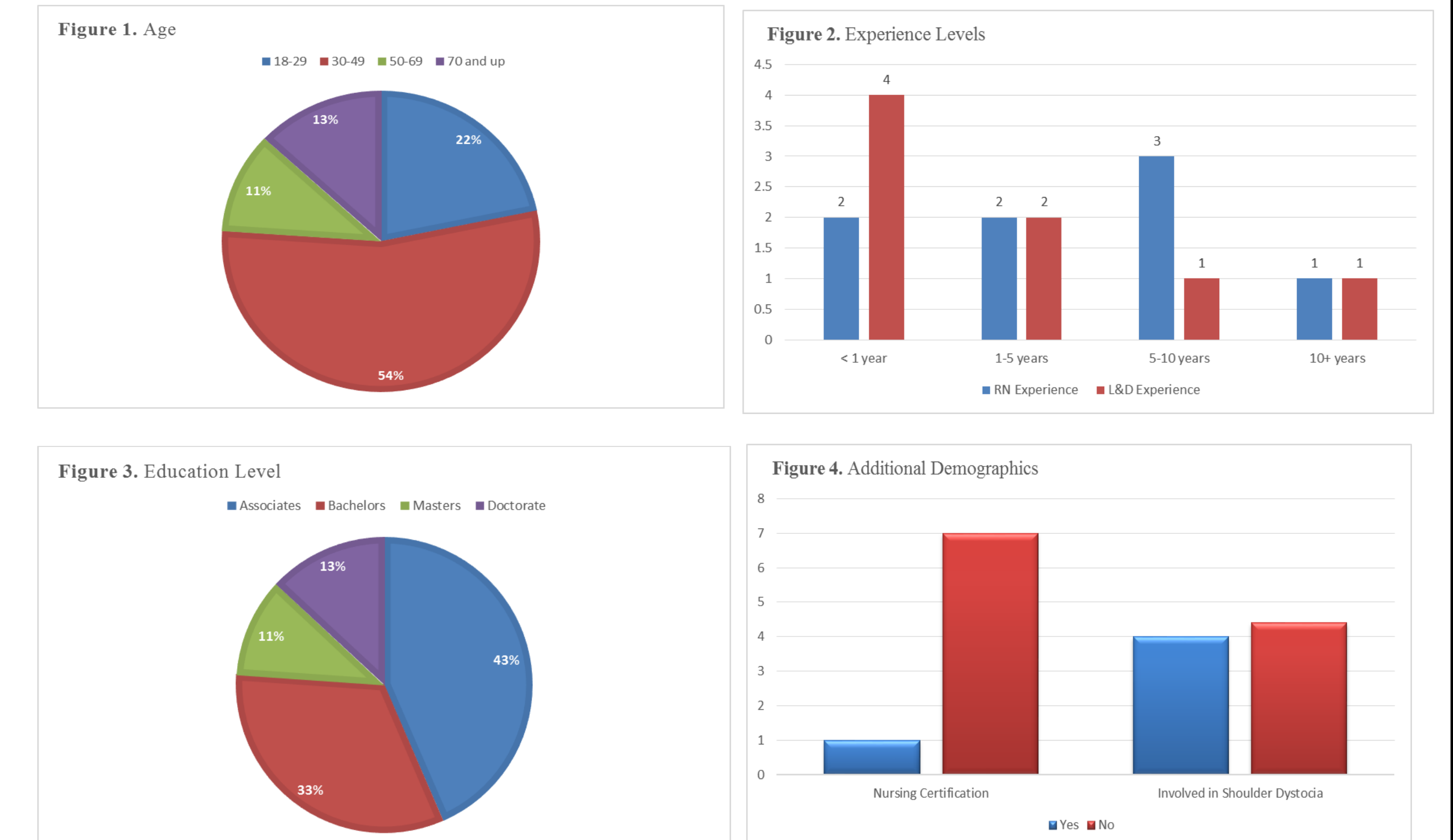


6. Implementation



7. Results

Demographics



Outcomes

Figure 5. Knowledge Pre and Posttest

	Pre-Test	Post-Test
t-Test: Paired Two Sample for Means		
Mean	5.763157895	6.578947368
Variance	5.428876245	2.304409673
Standard Deviation	2.33	1.52
Observations	38	38
df	37	
t Stat	-3.71742883	
P(T<=t) two-tail	0.000663489	

Figure 6. Simulation Pre and Post Evaluation

	Pre	Post
t-Test: Paired Two Sample for Means		
Mean	7.5	12.5
Variance	11.5	8.3
Standard Deviation	3.39	2.88
Observations	6	6
df	5	
t Stat	-3.02429	
P(T<=t) two-tail	0.029272	

Simulation training improved nursing knowledge and competency regarding a shoulder dystocia