

Breastfeeding and Clinician Knowledge: An Assessment among Nurses, WIC Staff, Advanced Practitioners, and Dietitians

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Background

- Clinician knowledge on breastfeeding has been reported as lacking
- Little has been published on comparative breastfeeding knowledge across a wide range of perinatal clinicians

Objectives

- Assess pre-existing breastfeeding knowledge among diverse clinicians at 4 different Massachusetts hospitals

Methods

- Selected 4 Massachusetts hospitals in towns with lowest breastfeeding rates in the state
- Taught 3, 4 hour courses to hospital providers and community partners
- Attendees included MDs, RNs, dietitians, and WIC staff

Methods

- Participants completed a pre-test
- 14/34 questions selected for study by general applicability
- Questions reflected a cross section of clinical/pertinent breastfeeding knowledge

Methods

- Data from pretests analyzed using Chi-Square, by
 - (1) Individual questions
 - (2) Categories of question stratified by profession
- Collapsed questions into 3 mutually exclusive categories
- Individuals classified as answering correctly on $< 65\%$ or $\geq 65\%$ (passing) of questions

Categories and Questions

Category	Question
Recommendations/Guidelines	1. <i>The American Academy of Pediatrics recommends exclusive breastfeeding for how many months?</i>
	2. <i>Healthy People 2010 goals are for what percent of women to initiate breastfeeding?</i>
	3. <i>According to the American Academy of Pediatrics, contraindication(s) to breastfeeding include?</i>
	4. <i>According to the American Academy of Pediatrics, the recommendation for vitamin D supplementation is?</i>
	5. <i>Is breastfeeding contraindicated in the hepatitis C positive mother?</i>
Scientific	6. <i>Pharmokinetic factor(s) that influence a medication's passage into breast milk?</i>
	7. <i>In general, a baby gets less than what percent of a maternal dose of a drug in breast milk?</i>
	8. <i>The type of breast surgery most likely to cause breastfeeding problems at a later date is?</i>
Practical Management	9. <i>Nipple pain in the first few days postpartum is probably related to what?</i>
	10. <i>A mother calls to report nipple pain after 5 months of comfortable breastfeeding. It's probably because of what?</i>
	11. <i>To distinguish between a plugged duct and mastitis, the clinician should check for what?</i>
	12. <i>A healthy term infant usually loses up to what percent of his/her birth weight in the first few days of life?</i>
	13. <i>The best way to manage engorgement is what?</i>
	14. <i>What is evidence of a good latch?</i>

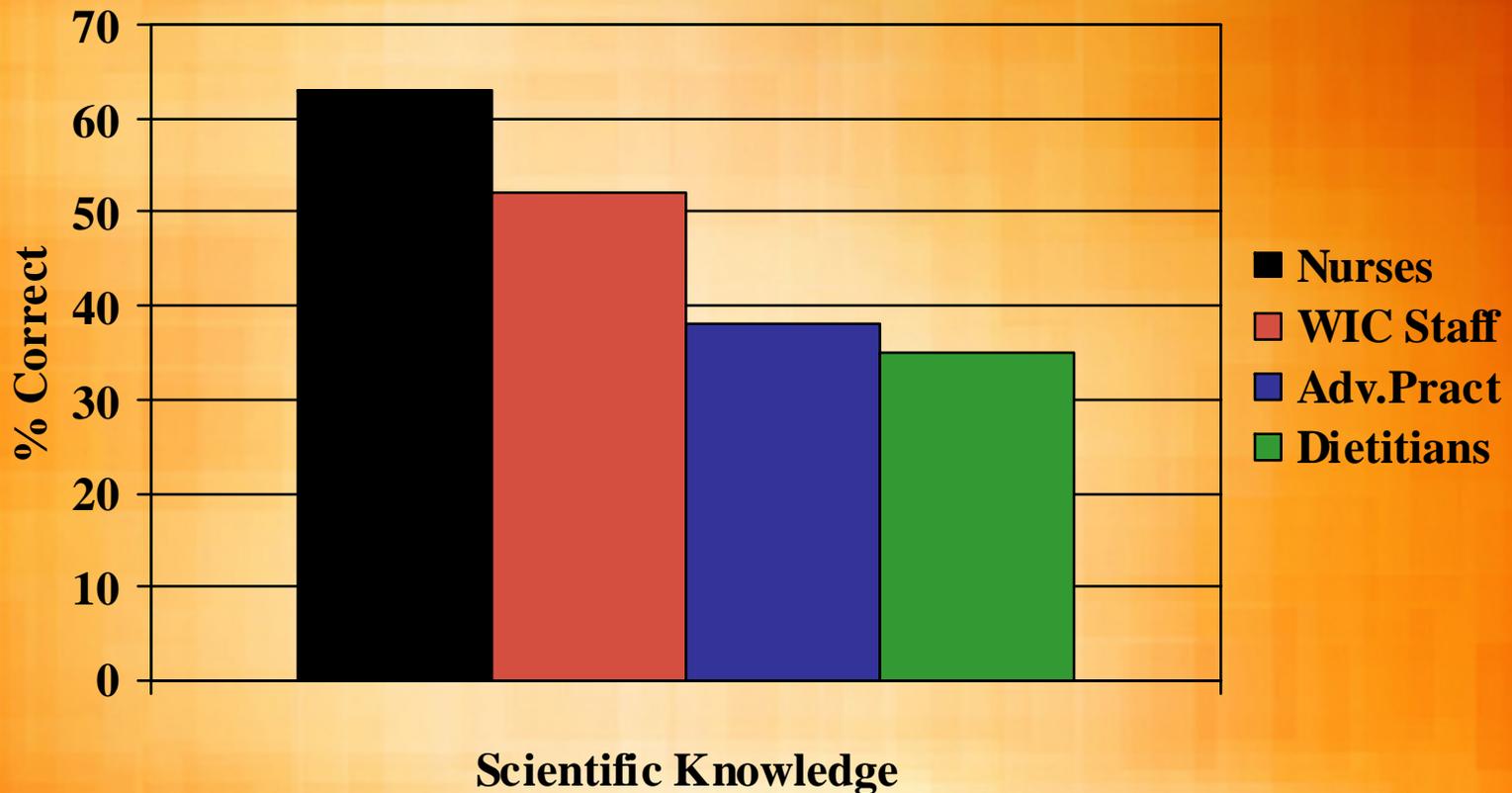
Results

- 359 completed and eligible pretests
 - 287 nurses
 - 31 WIC staff
 - 21 advanced practitioners
 - 20 dietitians
- Overall, 61% of answers correct

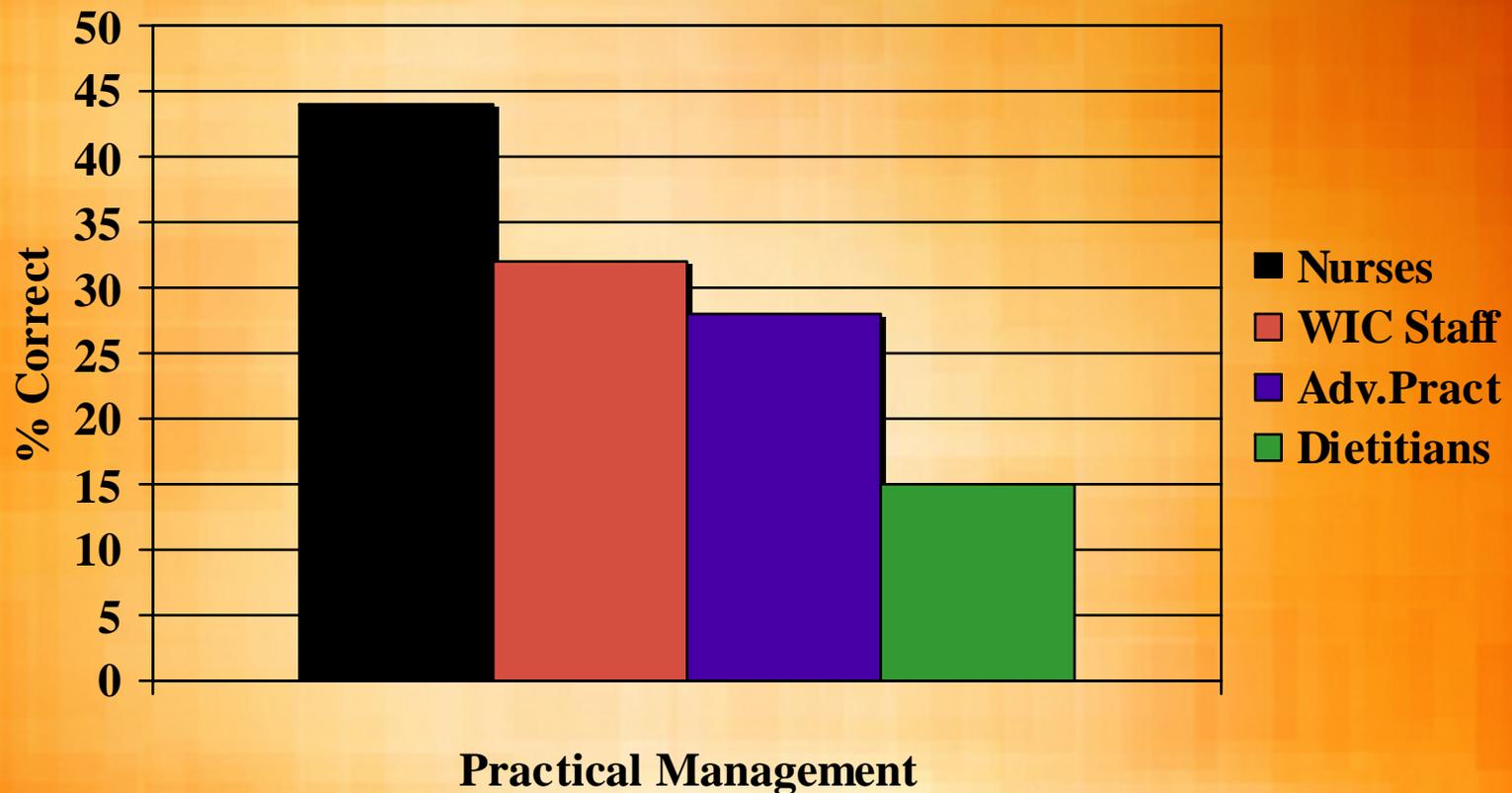
Results by Category

- Statistically significant differences by profession in “Scientific Knowledge” and “Practical Management” categories
- Nurses had more correct answers than other professionals in “Scientific Knowledge” ($p = 0.009$) and “Practical Management” categories ($p = 0.027$)

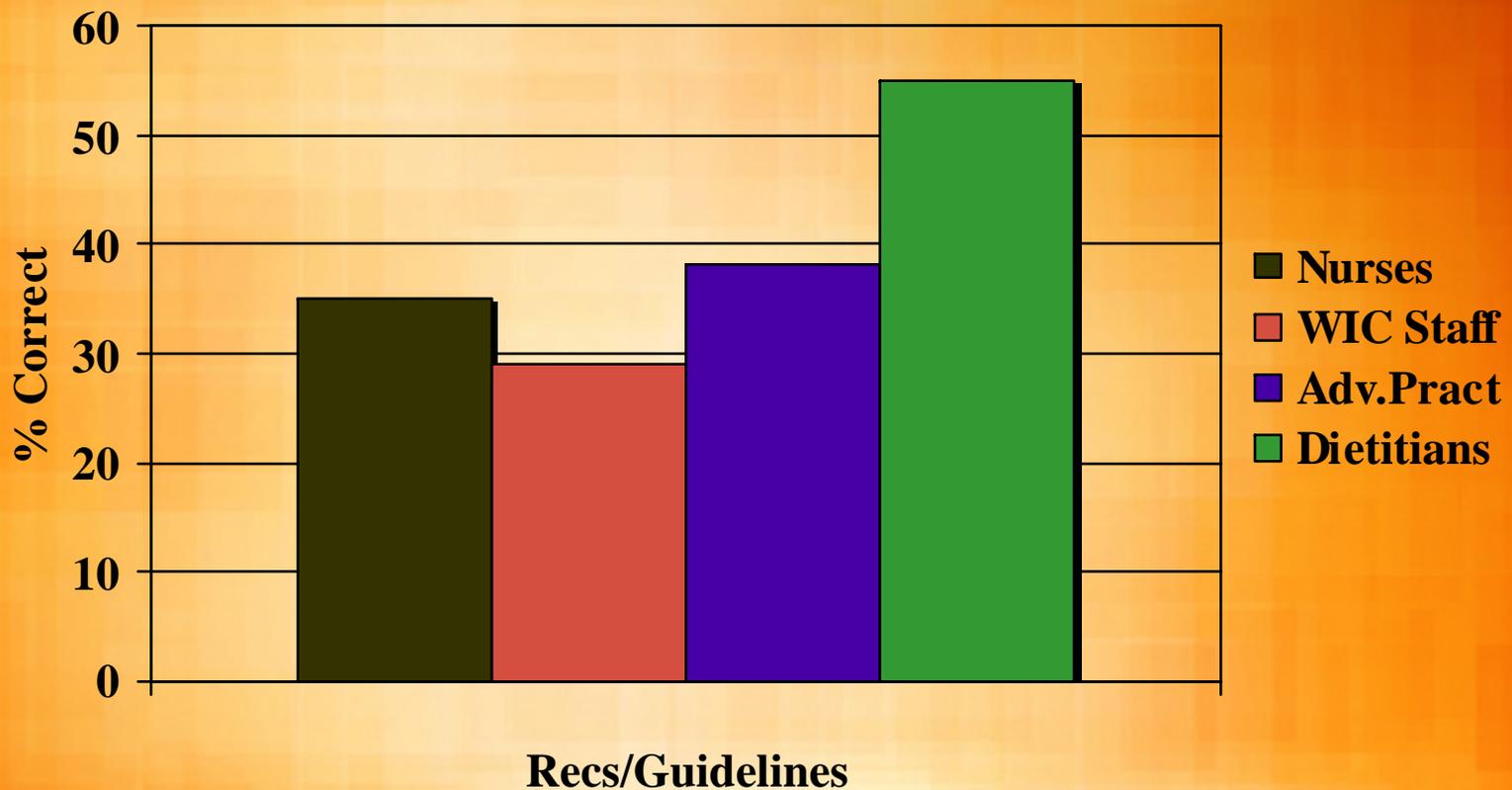
Results: Scientific Knowledge



Results: Practical Management



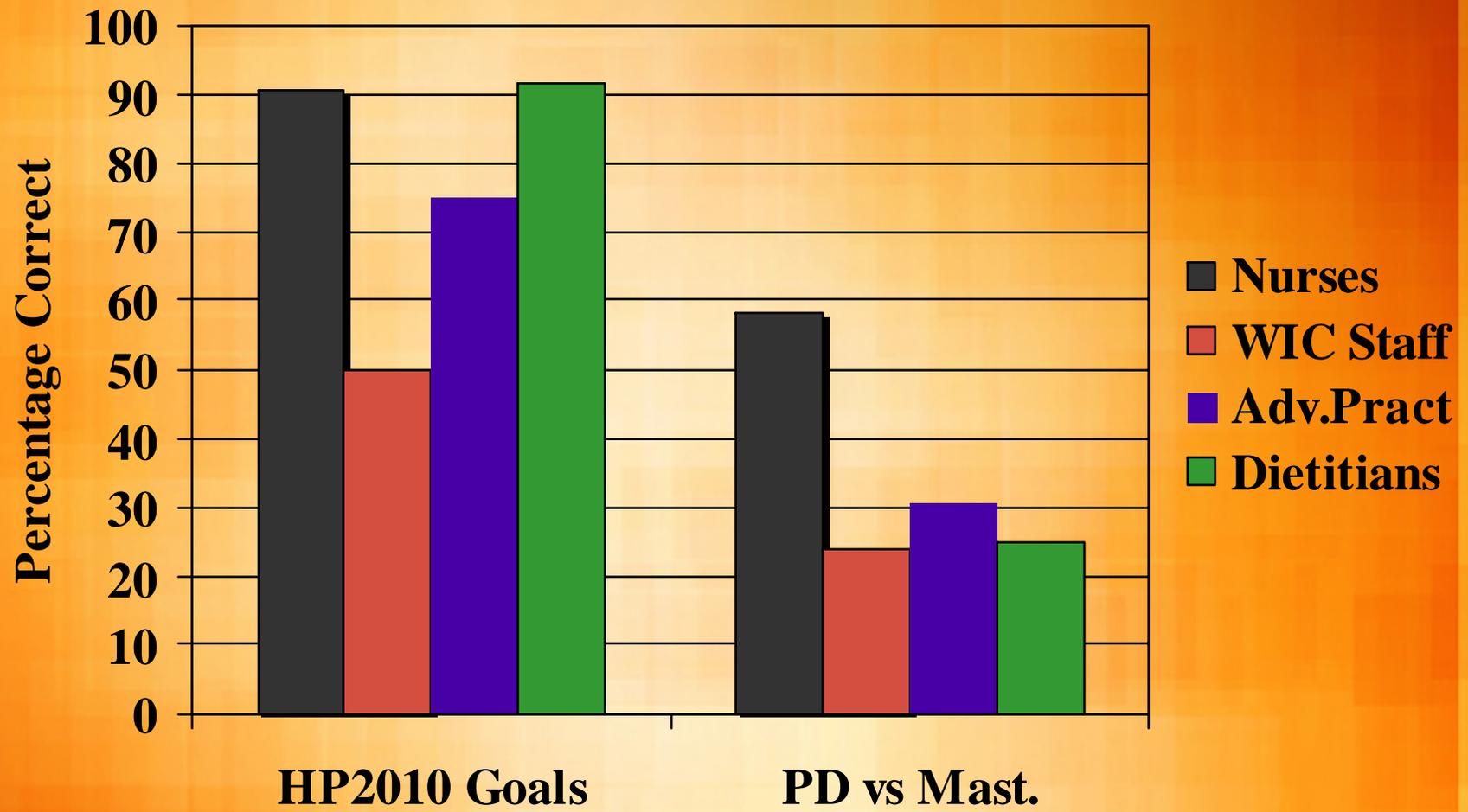
Results: Recs/Guidelines



Results by Question

- Nurses and dietitians are more accurate than other providers regarding Healthy People 2010 goals ($p = 0.003$)
- Nurses significantly more accurate than other providers in differentiating between plugged ducts and mastitis ($p = 0.003$)

Results: Questions Compared



Conclusions

- Overall clinician knowledge was poor
- Nurses had more accurate knowledge than other clinicians
- Need for further breastfeeding education, especially among advanced practitioners