

Scope of Problem

- Oral disease contributes to poor perinatal outcomes
- Approximately 50% of all pregnant women do not receive adequate dental care
- Limited evidence exists to support interventions to improve oral care in pregnant women

Evidence-Based Initiative

- Nursing education based on *Smiles for Life* curriculum, a free, national oral health curriculum for primary care providers
- 2 question *Maternal Oral Screening (MOS)* tool – developed and validated in Australia

Maternal Oral Screening (MOS) tool:

Item 1. Do you have bleeding gums, swelling, sensitive teeth, loose teeth, holes in your teeth, broken teeth, toothache or any other problems in your mouth?

Yes (1)
No (0)

Item 2. Have you seen a dentist in the last 6 months?

Yes (0)
No (1)

Items 1 and 2 are scored either 0 or 1. Participants with a total score ≥ 1 are referred for a dental check-up

- Monthly SMS/e-mail reminders developed and reviewed by dental, medical, and nursing professionals

Theory:

Oral Health Delivery Framework



Donabedian's Quality Framework



Purpose

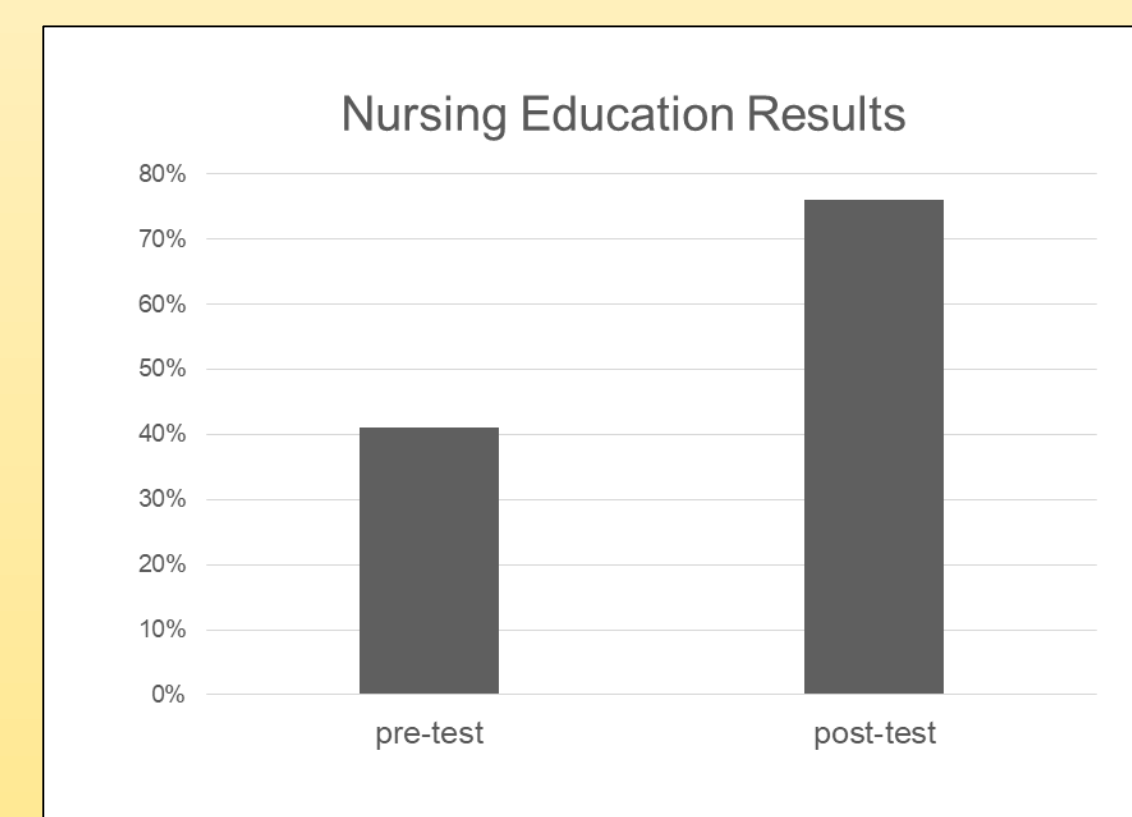
Implement and evaluate an evidence-based intervention aimed at identifying women at high risk for oral disease as well as increase dental visits among pregnant women at a Federally Qualified Health Center.

Project implementation: January – May 2019

IRB exempt

Results

- Dental referrals
 - Increased referrals in intervention clinics over comparison clinics (Fisher Exact Test, $p < 0.0005$, $\phi = -0.492$).
 - Increased referrals in intervention clinic in 2019 vs 2018 (Fisher Exact Test, $p < 0.0005$, $\phi = -0.464$).
- Dental visits
 - Clinically significant increase in dental visits in intervention clinics over comparison ($\chi^2 = 2.083$, $p = 0.149$).
 - Scheduled reminders had little impact on dental visits during implementation period
- Nursing staff education
 - Test score improvement from 40% on pre-test to 80% on post-test ($p < 0.0005$)
 - Percentage of staff who felt confident discussing oral health with patients increased from 82% to 98%



	2018		2019	
	Intervention	Comparison	Intervention	Comparison
Initial OB Visit	186	441	142	412
Dental Referrals	3%	0%	40%	3%
Dental Visits	10%	16%	20%	15%

Evaluation & Practice Implications

- Practice Implications:
 - Nursing education session effective in increasing knowledge
 - MOS tool simple, efficient way to identify at risk pregnant women
 - Provider participation varied
 - Low cost intervention to increase identification of oral disease and dental care in pregnant women
- Project evaluation:
 - Strong support from nursing staff
 - Continued need for provider engagement in referral ordering
- Sustainability:
 - MOS tool integrated into initial OB intake in EMR
 - Support from upper management for system-wide implementation
- Recommendations:
 - Allow nursing staff to enter generic dental referral for pregnant patients at risk for oral disease
 - Evaluate use of MOS tool in other high risk populations
- Limitations:
 - Short implementation period
 - Lack of participation of some providers

Bibliography

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