ORAL HEALTH CARE IN PREGNANCY:
A GAP ANALYSIS IN A SYSTEM OF COMMUNITY HEALTH CENTERS

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Oral health care is recommended in pregnancy. Hormonal changes increase risk for worsening oral health. Periodontal disease is associated with PTB & LBW. 76% of pregnant women in the US have poor oral health. 43% pregnant women do not see a dentist regularly. Risk for vertical transmission of caries-causing bacteria to infant.

(American Academy of Pediatric Dentistry [AAPD], 2016; American College of Obstetricians and Gynecologists [ACOG], 2013; Cigna, 2015; Ida & Papapanou, 2013; Sgolastra et al., 2013; Teshome & Yitayeh, 2016)
Significance

Women at community health centers have greater risk

No dental insurance = 2x as likely to forgo dental appointments

Perinatal care providers should promote oral health

Providers not routinely screening, educating, and referring

(AADP, 2016; ACOG, 2013; Cigna, 2015; George et al. 2016b; Golkari, Khosropanah, and Saadati, 2013; Hartnett et al., 2016; Rainchuso, 2013; Vamos et al. 2015)
Evidence Synthesis

Oral health care is safe in pregnancy

↑oral health status
↓inflammation

Treatment of PD may or may not ↓risk for PTB & LBW

OB provider role for screening, educating, referring patients

(Deshpande et al., 2015; Fiorini et al., 2013; Geisinger et al., 2014; George et al., 2016c; Iheozor-Ejiofor, Middleton, Esposito, & Glenny, 2017; Khairnar, Pawar, Marawar, & Khairnar, 2015; Lopez, Uribe, & Martinez, 2015; Mohebhi et al., 2014; Penova-Veselinovic et al., 2015; Schwendicke, Karimbux, Allegeddy, & Gluud, 2015)
Internal Evidence from Arizona Alliance for Community Health Centers

- Assumes AZ aligns national data
- No dental coverage under Medicaid
- No collaboration policy
- There is no record of referrals
- Barriers? Facilitators?
- Ineffective attempt at implementing intervention
Gap Analysis

Determine current perinatal provider practices & processes

Facilitators, barriers to oral health care access for pregnant women

Evidence-based recommendations to overcoming barriers
Methods

Participation

- Perinatal care providers from FQHCs & FQHC look-alikes
- 60 providers invited
- Voluntary & Anonymous

Survey

- *Oral Health Knowledge, Perceptions, and Practices in Health Professionals*
- 90-item validated survey
- 4 major themes
- One-time online survey via Survey Monkey

Data Analysis

- Descriptive and frequency data, Pearson’s R correlations, crosstab analyses
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of patients you ask about oral health per week?</strong></td>
<td>40(100%)</td>
</tr>
<tr>
<td>None</td>
<td>6(15.4%)</td>
</tr>
<tr>
<td>1-5</td>
<td>21(53.8%)</td>
</tr>
<tr>
<td>&gt;5</td>
<td>12(30.8%)</td>
</tr>
<tr>
<td><strong>Number of dental referrals you give per week?</strong></td>
<td></td>
</tr>
<tr>
<td>None or &lt;1</td>
<td>17(43.5%)</td>
</tr>
<tr>
<td>1-5</td>
<td>17(43.6%)</td>
</tr>
<tr>
<td>&gt;5</td>
<td>5(12.8%)</td>
</tr>
<tr>
<td><strong>Do you know if your patients go to a dental provider?</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14(35.9%)</td>
</tr>
<tr>
<td>No</td>
<td>25(64.1%)</td>
</tr>
<tr>
<td><strong>Any information on oral health and pregnancy in office?</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5(12.8%)</td>
</tr>
<tr>
<td>No</td>
<td>34(87.2%)</td>
</tr>
<tr>
<td><strong>Received formal education on oral health and pregnancy?</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5(12.8%)</td>
</tr>
<tr>
<td>No</td>
<td>34(87.2%)</td>
</tr>
<tr>
<td>Behaviors/ Practices</td>
<td>Always</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>I discuss oral health with pregnant women</td>
<td>7 (17.5%)</td>
</tr>
<tr>
<td>I advise to visit dentists during early pregnancy</td>
<td>13 (32.5%)</td>
</tr>
<tr>
<td>I counsel regarding PD &amp; birth outcomes</td>
<td>5 (12.5%)</td>
</tr>
<tr>
<td>I ask pregnant women about oral health</td>
<td>7 (17.5%)</td>
</tr>
<tr>
<td>I conduct an oral examination of pregnant women</td>
<td>4 (15%)</td>
</tr>
<tr>
<td>I initiate referrals to dentists</td>
<td>21 (52.5%)</td>
</tr>
</tbody>
</table>
Outcomes: Oral Health Promoting Behaviors

Perinatal care providers are not consistently providing oral health screening, education, or dental referrals to pregnant patients.

Significant Correlations

- Positive attitudes & oral health promoting behaviors ($r = -0.507, p < 0.01$)
- Formal training & oral health promoting behaviors ($r = 0.363, p = 0.023$)
- Positive attitudes & higher number of referrals ($r = -0.364; p = 0.023$)
- Knowledge score & higher number of referrals ($r = 0.342; p = 0.033$)
Outcomes: Barriers & Facilitators

**Barriers to Oral Health Care**

- Lack of training/ formal education
- Patient lack of knowledge, concerns about safety
- Lack of time
- Cost of dental care
- Unclear role delineation between perinatal providers and dentists related to understanding scope of practice

**Facilitators of Oral Health Care**

- Positive attitudes to addressing oral health
- Receptiveness to education
- Comfort with referrals
- Oral health promotion sometimes occurring
Project Impact and Sustainability

Preliminary Recommendations

• Continuing education for perinatal providers
• Patient education from providers
• Two-item screening tool
• Support for dental coverage under Medicaid
• Ongoing project: Gap analysis among dental providers for interdisciplinary approach

(Adams et al., 2017; Deshpande et al., 2015; George et al., 2016a; George et al., 2016c; George et al., 2018; Marchi et al., 2019; Mohebbi et al., 2014)
Conclusions

Oral health care in pregnancy is **safe & recommended**

Dental services **under utilized** due to various **barriers**

Perinatal provider **promotion** of oral health + **cost** + interdisciplinary **collaboration**

**Increase** access to care & **improve** oral health status
Questions?
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References


