Interprofessional Dental Outreach and Nursing Case Management for Adults with Serious Mental Illness

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Disclosures

• Funding
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• UCSF Institutional Review Board approval
Overview

Serious Mental Illness

Nursing

Dentistry

Behav. Health
Background: Oral Health of Persons with Serious Mental Illness

- **Decreased** saliva, oral hygiene, oral health knowledge, access to care
- **Increased** sugar, tobacco, recreational drugs, dental fear

Interprofessional Collaboration

- 1969 Progress Foundation established
- 1994 UCSF School of Nursing partnership
  - 2013 HRSA-funded Interprofessional Primary Care Outreach for Persons with Mental Illness (IPCOM)
  - 2015 UCSF School of Dentistry collaboration
 Specific Aims

• Evaluate the oral health, dental treatment needs, and oral health-related quality of life of a convenience sample of persons with severe mental illness who participate in the IPCOM transitional residential treatment program.

• Pilot nursing case management strategies to assist IPCOM clients in initiating and completing dental treatment.
Methods: Behavioral Health

• Evening information sessions
• Dental champions: appointments and reminders, transportation, dental fear/anxiety
Dentistry

- Clinical: WHO examination and Intervention Urgency, Decayed Missing Filled Teeth Index, Root Caries Index, Simplified Oral Hygiene Index
- Questionnaire: demographic/health, Periodontitis Self-Report, Oral Health Impact Profile
Nursing

- Case management *strategies*: discuss goals, assess confidence, motivational interviewing strategies for perceived barriers, photo ID and Medicaid card, schedule appointment

- Case management *tracking form*: appointment reminders, dental center communication, group visits to discuss treatment status
Results

80 IPCOM clients

69 orientation

51 appointed

43 participated

49% Male
70% Non-white
81% High School-plus
67% Smoker
26% Poor-fair health
18-70 years old
## Oral Health (N = 43)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence (Median, Range)</th>
<th>National Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Visit Past Year</td>
<td>21%</td>
<td>62%&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Dental Problem</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Decayed Teeth</td>
<td>59% (3; 1-12)</td>
<td>27%&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Missing Teeth</td>
<td>63% (5; 1-28)</td>
<td>52%&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Filled Teeth</td>
<td>82% (6; 1-18)</td>
<td>92%&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Periodontal Disease</td>
<td>33%</td>
<td>47%&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>OHRQoL High Impact</td>
<td>63% (3; 1-11)</td>
<td></td>
</tr>
<tr>
<td>Prompt-Urgent Treatment Indicated</td>
<td>65%</td>
<td></td>
</tr>
</tbody>
</table>

1 = NHIS 2013
2 = NHANES 2011-12
3 = NHANES 2009-10
<table>
<thead>
<tr>
<th>Decayed Teeth (N = 39)</th>
<th>$X^2$ (df)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Problem Present 77%</td>
<td>4.327 (1)</td>
<td>0.0409</td>
</tr>
<tr>
<td>Self-rated Oral Health Fair-Poor 62%</td>
<td>7.726 (1)</td>
<td>0.0060</td>
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<tr>
<td>Treatment Urgency Prompt-Urgent 67%</td>
<td>13.565 (1)</td>
<td>0.0001</td>
</tr>
<tr>
<td>OHRQoL (N = 43)</td>
<td>$X^2$ (df)</td>
<td>P-value</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>Dental Problem Present 77%</td>
<td>7.866 (1)</td>
<td>0.0058</td>
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<tr>
<td>Self-rated Oral Health Fair-Poor 58%</td>
<td>8.777 (1)</td>
<td>0.0035</td>
</tr>
<tr>
<td>Treatment Urgency Prompt-Urgent 65%</td>
<td>4.532 (1)</td>
<td>0.0343</td>
</tr>
<tr>
<td>Decayed Teeth $\geq 1$ Tooth 59%</td>
<td>6.199 (2)</td>
<td>0.0451</td>
</tr>
<tr>
<td>Missing Teeth $\geq 1$ Tooth 63%</td>
<td>6.285 (2)</td>
<td>0.0432</td>
</tr>
<tr>
<td>Periodontal Disease Moderate-Severe 33%</td>
<td>7.345 (1)</td>
<td>0.0079</td>
</tr>
</tbody>
</table>
Case Management

- Participants: 43
- Scheduled Appointment: 10
- Case Management: 26
- Contacts: 7
- Total: 155
- Median: 6
- Range: 1-11
Conclusions

- Poor oral health, urgent treatment needs, and compromised oral health-related quality of life were prevalent in this population.
- Case management was an innovative approach to community-based, coordinated, interprofessional collaboration between nursing, behavioral health, and dentistry.
- Dental Health Resource Manual was developed, including dental referral mechanism and case management strategies and tracking form.
Limitations

- Study participants: small sample size, convenience sample, transitional length of residence
- Access to dental care: Medicaid coverage for adult dental services eliminated 2009-14, restored 2014 with less coverage, 2 million additional qualified recipients due to ACA, low reimbursement rates, limited number of new Medicaid patients accepted per month
- Sustainability: high turn-over of behavioral health staff, cessation of grant funding
Next Steps

• Focus groups for feedback and improvements

• Interprofessional train-the-trainers program of oral health education, screening, triage, and referral to dentists and clinics

• Add dental health goal for all IPCOM clients
Thank-you!

Questions?