Communicating with Deaf Adults: Implementation of a Provider and Staff Focused Educational Program
In a Primary Care Center

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Background

- Deafness transcends all ages, races, cultures, genders, and socioeconomic backgrounds.
- 1.9 million Americans are functionally deaf.
- 38.3 million have hearing difficulty.
- Deaf adults have higher rates of CVD, cancer, obesity, suicide, IPV, sexual health, reduced access to preventive care.
- ADA law requires PCPs to communicate effectively.
- PCPs receive little to no communication training increasing rates of errors.

Purpose and Aims

Purpose: To improve communication between PCPs and deaf adults through a provider and staff-directed communication training program

- Aim 1: Increase staff’s knowledge of deaf culture and available communication resources
- Aim 2: Increase staff’s communication self-efficacy
- Aim 3: Increase patient satisfaction scores

Methods

Design: Pre-/Post-Intervention Design
Setting: Privately-Owned Primary Care Practice
Sample Populations: (1) Providers/Staff (2) Deaf adults
Intervention: 90-minute communication training program
Data Collection: Project duration 12 weeks

Sample Demographics

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Staff (N=28)</th>
<th>Patients (N=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD)</td>
<td>36.1 (9.3)</td>
<td>62.7 (15.4)</td>
</tr>
<tr>
<td>Sex, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0 (0)</td>
<td>10 (45.5)</td>
</tr>
<tr>
<td>Female</td>
<td>28 (100)</td>
<td>12 (54.5)</td>
</tr>
<tr>
<td>Race, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1 (3.4)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Black</td>
<td>0 (0)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8 (27.6)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>White</td>
<td>19 (65.5)</td>
<td>20 (90.9)</td>
</tr>
<tr>
<td>Years Employed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 6 months</td>
<td>3 (10.7)</td>
<td>N/A</td>
</tr>
<tr>
<td>6 months-1 year</td>
<td>4 (14.3)</td>
<td>N/A</td>
</tr>
<tr>
<td>2-5 years</td>
<td>6 (21.4)</td>
<td>N/A</td>
</tr>
<tr>
<td>5-10 years</td>
<td>11 (39.3)</td>
<td>N/A</td>
</tr>
<tr>
<td>10+ years</td>
<td>4 (14.3)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Limitations

- Small sample size
- Lack of diversity in samples
- Practice-based patient satisfaction survey and staff knowledge test utilized do not have validity, reliability data available.
- High baseline staff knowledge scores may reflect true/false format being a less reliable way to evaluate baseline knowledge
- Lack of data collection tools designed specifically for deaf adults

Results

- **Aim 1: Staff Knowledge of Deaf Culture/Resources**
  - Format: True/False Quiz
  - Data Analysis: Wilcoxon Signed-Rank
  - Content Covered:
    - Pathophysiology of hearing loss
    - Locality accessible resources
    - ADA-compliant communication techniques
    - Cultural competence training specific to deaf community
    - Federal/state regulations of disability accommodations

- **Aim 2: Staff Self Efficacy Communicating with Deaf Adults**
  - Format: Practice-based survey
  - Data Analysis: Wilcoxon Signed-Rank
  - Knowledge Median Summary Score:
    - Pre-Intervention: 77.5
    - Post-Intervention: 79.5
    - Rate of Change: 1 point increase (IQR:1.75; p=.019)

- **Aim 3: Patient Satisfaction Scores**
  - Format: SE-12 Questionnaire
  - Data Analysis: Wilcoxon Signed-Rank
  - Staff SE-12 Median Sum Score:
    - Pre-Intervention: 100
    - Post-Intervention: 120
    - Rate of Change: 20 (IQR:2; p=.004)

Conclusions

Deaf adults experience unique challenges when communicating with primary care professionals. By implementing a staff-directed, mixed-method communication training program, this QI project resulted in increased knowledge and self-efficacy among staff and increased deaf patients’ satisfaction.

References