Adolescent Health Literacy in a Special Population: Juvenile Corrections

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**PURPOSE**
- Measure health literacy of adolescents in grade 6 through completion of the 12th grade in a special population: juvenile corrections.
- Detect the average reading grade level of adolescents in juvenile detention facilities.
- Determine if reading grade levels of participants are below their grade level.
- Identify if this population has a potential for health risk behavior based on low literacy.
- Enable the tailoring of health information that is provided to youths in correctional facilities to increase effectiveness of communication.
- Potentially empower youth in correctional facilities to make health care decisions.

**BACKGROUND**
- Historically, health literacy has been assessed in the adult population.
- Recently, health literacy of adolescents was addressed through the development and validation of a screening tool, REALM-TEEN or Rapid Estimate of Adult Literacy-Teen, which was based on the REALM, or Rapid Estimate of Adult Literacy.
- Among recommendations for further study of adolescent health literacy beyond the development of the REALM-TEEN is to account for cultural, societal, technological, and systemic differences by focusing on special populations.
- During the development of the REALM-TEEN tool, Davis et al (2006) found that there are racial and gender differences in adolescent health literacy which emphasize a need to study specific groups of adolescents in an effort to account for health disparities.

**METHODS**

- **Sample**: Convenience sample: 101 adolescent residents in juvenile correctional facilities in 6th grade to completion of the 12th grade.
- **Exclusion of non-English speaking residents**
- **Non-exclusion due to age, gender, ethnicity**

- **Study Procedure**
  - Screening tool: REALM-TEEN-sixty six health related words
  - Demographic survey-age, ethnicity, gender, last completed grade level
  - Trained investigators administer REALM-TEEN: participating residents pronounce words contained in this questionnaire
  - Dictionary pronunciation is scoring standard
  - Raw score of completed questionnaires correlated to a reading-grade estimate

- **Analysis**
  - Descriptive analysis of scores from each facility and demographic survey
  - Model that predicted the current dataset the best was the one that included age, last grade completed, and ethnicity
  - Statistical significance set at p<0.05

**RESULTS - PRELIMINARY**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Average Reading Level</th>
<th>% Below Own Grade Level</th>
<th># Total in Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>GYC</td>
<td>8.74</td>
<td>17.65</td>
<td>3</td>
</tr>
<tr>
<td>WYC</td>
<td>8.63</td>
<td>25.00</td>
<td>2</td>
</tr>
<tr>
<td>O&amp;A</td>
<td>8.70</td>
<td>13.33</td>
<td>2</td>
</tr>
<tr>
<td>DYLC</td>
<td>8.00</td>
<td>41.18</td>
<td>7</td>
</tr>
<tr>
<td>SL VDT</td>
<td>8.74</td>
<td>20.45</td>
<td>9</td>
</tr>
<tr>
<td>Overall</td>
<td>8.60</td>
<td>22.77</td>
<td>23</td>
</tr>
</tbody>
</table>

**CONCLUSIONS / IMPLICATIONS**

- **Conclusions**
  - No differences in literacy level by ethnicity
  - Lower health literacy in males
  - Lower health literacy at detention and long-term corrections facility which may be due to increased numbers of gang-related youth

- **Limitations**
  - Small numbers of females enrolled
  - Inadequate power to compare differences between facilities

- **Future Implementation**
  - Patient/provider communication modifications will be made in both verbal and written format based on final results
  - Target populations for interventions will be determined for each facility

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