Health Literacy Assessment: a Strategy to Promote Health Care Compliance and Continuity of Care in Special Populations (Juvenile Corrections)

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Special Populations Need Special Medical Homes

Foster Care Children	**Seniors**	**Physically Disabled**
Refugees	**Mentally Challenged**	**Chronically ill**
Correctional Residents	**Vision Impaired**	**Homeless**

A Special Population Health Literacy Assessment

PURPOSE

- Measure the health literacy of adolescents in the Juvenile Correction System.
- What is their average reading grade level?
- Determine if reading grade level differences among these adolescents are related to age, race, gender, or ethnicity
- Establish average health literacy level as a baseline to promote effective communication now and in the future

BACKGROUND

- Medical clinicians within the Juvenile Justice system need baseline Health literacy levels of this population to ensure effective communication
- The REALM- TEEN, a research tool, was developed to measure adolescent health literacy
- Those who developed the REALM-TEEN called for its application to "special populations of adolescents" to account for cultural, societal, technological, and
- systemic differences.
- During REALM-TEEN developmental study racial and gender differences in health literacy indicated a need for recognition of health disparities

METHODS

Sample

- Convenience sample: 174 adolescent residents in juvenile correctional facilities
- Inclusion Criteria:
  - Resident of juvenile correction facility
  - Completion of the 5th grade through the 12th grade: regardless of age, race, gender
- Exclusion Criteria:
  - No formal education beyond completion of high school

Study Procedure

- Demographic survey-age, ethnicity, gender, last completed grade
- CITI-trained investigators administer REALM-TEEN
- Sixty health-related words pronounced by juvenile residents
- Dictionary pronunciation used as scoring standard
- Raw score of completed questionnaires correlated to a reading-grade estimate

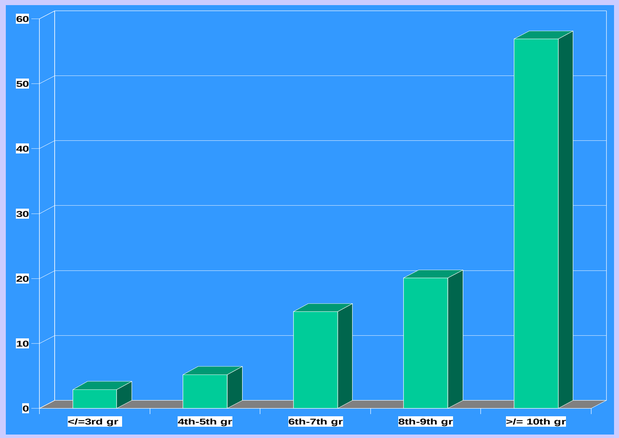
Analysis

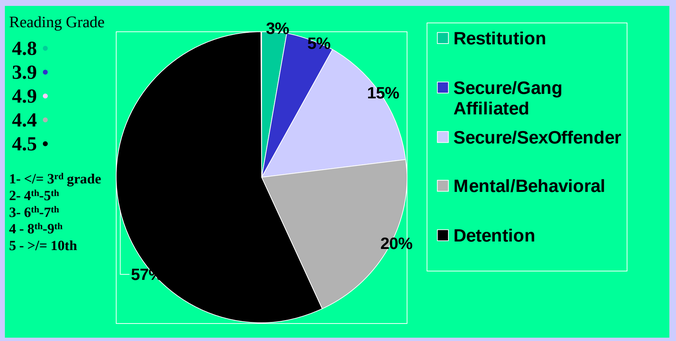
- Scoring of the correctly pronounced words which are then related to a corresponding reading-grade level estimate
- Descriptive statistics to examine reading level by participant characteristics: age, gender, race, ethnicity in addition to each individual juvenile facility type
- Statistical significance set at $p < 0.05$

Gender:			Reading grade level		
Male %	77%	134	At grade-level	67.7%	116
Female %	23%	40	1 grade below	13.5%	23
Age			2 grades below	12.2%	23
2-21 years of age			>/= 3 grades below	5.1%	12

Race/Ethnicity					
Race	**%**	**n**	**Race**	**%**	**n**
White/Non-Hispanic	55%	96	Native American	2%	3
Black	8.8%	13	Asian	2%	3
Pacific Islander	1.4%	2	Hispanic	32.7%	57

Reading Grade Levels- Percentage of total Sample





INCREASE HEALTH PROMOTION, DISEASE PREVENTION,PATIENT COMPLIANCE AND CONTINUITY OF CARE THROUGH HEALTH LITERACY ASSESSMENT, EFFECTIVE C0MMUNICATION AND ACKNOWLEDGEMENT OF DIVERSITY

Interventions

Tailor patient/provider communication for for optimal understanding
Oral: Plain English, Teach Back Method, decreased medical jargon
Written: User friendly materials at appropriate reading level
Shared decision- making
Empowerment of patient to manage health now and into future
Incorporate interventions in an appropriate medical home setting

Conclusions and Implications

Conclusions

- Caucasian health literacy significantly higher than that of non-Caucasians
- Significantly lower health literacy in males
- Significantly lower health literacy at secure care/gang affiliated facility
- 67.6 % participants at their reading grade level
- 13.5% participants one grade level below
- 12.2 % participants two grade levels below
- 6.8% participants three grade levels below

Limitations

- Small numbers of females enrolled
- REALM-TEEN available only in English
- REALM-TEEN does not directly measure actual comprehension but measures it indirectly through reading- grade level as a proxy measurement

Future Implementation

- Tailor patient provider communication for optimal understanding
  - Written: user friendly materials-appropriate reading level
  - Oral: Plain English, decreased medical jargon, teach-back method
  - Shared decision making
- Empowerment of adolescents to manage health care now and in the future as an adult

Specialized Continuity of Care

Juvenile Medical Home Logic Model

RESOURCES	ACTIVITIES	OUTPUTS	SHORT/LONG TERM GOALS	IMPACT
In order to accomplish our set of activities we need the following:	*In order to address our problem or asset we will accomplish the following activities:*	*We expect that once accomplished these activities will produce the following evidence or service delivery:*	*We expect that if accomplished these activities will lead to the following changes In 1-3 then 4-6 years:*	*We expect that if accomplished these activities will lead to the following changes in 7-10 years:*
Endorsement by College of Nursing Dedicated medical provider team from U of U CoN and School of Medicine Network of potential specialized health care providers and allied health professionals, e.g., social work and mental and behavioral health-for referrals Endorsement from a partici-pating community clinic Health Clinics of Utah Job description for team members First year to 18 months of operational Funding Clinic budget	Strategic planning meetings w/ stakeholders Secure the clinic facility Design/implement funding strategy Create evaluation plan Obtain/implement Electronic Medical Records system Clinic staff orientation/ training JJS provider training in Medicaid enrollment Enrollment of eligible youth into Medicaid	Seamless connection between incarceration/community Increased enrollment of youth into Medicaid Continuity of care Healthcare access in the community Promotion of health and health literacy, as well as disease prevention Management of chronic health conditions Empowerment of youth to manage their healthcare	Increased patient compliance/medication adherence Improved continuity in mental health care provision between incarceration and community Cost containment Increased adolescent health literacy	Continued access to health care Decreased recidivism Increased public safety Smoother transition of juvenile offenders back into community Healthier more well-adjusted adolescents

Continuity