Comparison of PHN outcomes for adolescent and adult mothers with and without the Mental health problem

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Background

• Latinos in the US
  – Increasing numbers (17% of population)
  – High birth rates
  – Multiple life stressors
  – High rates of depressive symptoms for Latinas

• PHN family home visiting: unique opportunity to promote health for at risk families
Research Questions

1. What was the prevalence of mental health problems among Latina adolescent and adult mothers?

2. How did discharge ratings of mental health knowledge, behavior, and status differ between Latina adolescent and adult mothers with a mental health problem and matched comparison groups?
Methods

Setting:
• Midwest metropolitan public health agency (2007-2010)

Design:
• Retrospective cohort analysis of de-identified home visiting records
• Nested-block by age of client and mental health problem.
• General linear mixed models adjusted for number of problems, length of service and the number of visits.
• Outcomes were expressed as a change in Knowledge, Behavior and Status scores
Inclusion criteria & sample

- Women of Latina ethnicity
- Received Family Home Visiting services

N=680

<table>
<thead>
<tr>
<th>Mental health status</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 14-17 yrs</td>
<td>N=30</td>
<td>N=100</td>
<td>N=130</td>
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<tr>
<td>Age 18-52 yrs</td>
<td>N=128</td>
<td>N=422</td>
<td>N=550</td>
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<tr>
<td>Total</td>
<td>N=158</td>
<td>N=522</td>
<td>N=680</td>
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<tr>
<td>Percentage</td>
<td>23</td>
<td>77</td>
<td></td>
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</tbody>
</table>
Findings: mental health problem

Definition: “development and use of mental/emotional abilities to adjust to life situations, interact with others, and engage in activities”.

- Improved knowledge for all mothers
- Improved behavior for adult mothers ($p=0.013$)
- Improved status for adolescent mothers ($p=0.012$)
- Improved status for adolescents was positively related to number of home visits
Findings: knowledge

Knowledge improved equally for all groups.

![Graph showing knowledge improvement over baseline and final stages for different groups.](image-url)
Findings: behavior

Behavior improved most for adult clients with mental health problems (p = 0.013).

![Graph showing behavior improvement over time for different groups: No MH Teen, No MH Adult, MH Teen, MH Adult. The graph illustrates a trend where MH Adult and MH Teen have a greater improvement compared to No MH Teen and No MH Adult.](chart)
Findings: status

- Status showed the greatest statistical improvement for adolescents with mental health problems ($p = 0.012$).

![Graph showing status improvement over baseline and final periods for different groups: No MH Teen, No MH Adult, MH Teen, MH Adult.]
Conclusions

• Omaha system supported analysis of:
  – Specific client health outcomes
  – Comparison of health knowledge, behavior and status between groups
  – Identification of high risk populations
  – Identification of populations who may benefit most from PHN services.

• Mothers with mental health problems had greatest improvement

• Further study is needed to identify characteristics of nursing interventions associated with client improvement