Community-driven research on Helicobacter pylori infection in a Canadian Arctic hamlet: The Old Crow H. pylori Project

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Northern Research Day
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Outline

• Background
• Goals
• Components
• Results
• Coming up
Background

Population ~250
% First Nations ~90
## Background

### Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>July 2008</td>
<td>Presentation given at Biennial Gwitchin Gathering in Old Crow at the request of the local MLA</td>
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<td>August 2008</td>
<td>Resolution passed at Vuntun Gwitchin General Assembly by consensus to bring H. pylori research to Old Crow</td>
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<tr>
<td>August 2009</td>
<td>Presentation given at VG FN GA to update community</td>
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<tr>
<td>September 2009</td>
<td>Local staff hired to update community &amp; collect questions</td>
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<tr>
<td>May &amp; August 2010</td>
<td>Planning workshops held with local committee</td>
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<tr>
<td>September 2010</td>
<td>Presentation by local committee at VG FN GA</td>
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<tr>
<td>November 2010 to February 2011</td>
<td>Project launch &amp; start of field work</td>
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Goals

• Address community concerns
• Better understand impact of H. pylori
• Reduce health risks from H. pylori
• Recommend better approaches to health care providers and officials
Components

- Informed consent
- Community surveys
- Testing for H. pylori
- Treatment
- Knowledge exchange
- Policy development
Components

• Informed consent
• Community surveys
• Testing for H. pylori
• Treatment
• Knowledge exchange
• Policy development
Results

- Enrolled: 177 (~70%)
- Tested for H. pylori: 176
- Completed surveys: 138
Results

Sex

- Male (n=91): 52%
- Female (n=85): 48%

Age

- 0-14 (n=22): 13%
- 15-24 (n=26): 15%
- 25-39 (n=42): 24%
- 40-59 (n=55): 31%
- 60-88 (n=31): 18%
Results

Residents

% of UBT participants

<table>
<thead>
<tr>
<th></th>
<th>Long-term (n=164)</th>
<th>Short-term (n=12)</th>
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<tbody>
<tr>
<td>% Residents</td>
<td>93</td>
<td>7</td>
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<tr>
<td>(n=164)</td>
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<tr>
<td>(n=12)</td>
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Results

- Tested for H. pylori: 176
- Result positive or negative: 156
- # positive: 111
- % positive: 71
Results

**Sex (UBT positive)**

- Male (n=80): 71%
- Female (n=76): 71%

**Age (UBT positive)**

- 0-14 (n=14): 50%
- 15-24 (n=24): 67%
- 25-39 (n=40): 78%
- 40-59 (n=53): 77%
- 60-88 (n=25): 64%
Results

Residents (UBT positive)

<table>
<thead>
<tr>
<th>% positive within ethnicity</th>
<th>Long-term (n=144)</th>
<th>Short-term (n=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>75%</td>
<td>25%</td>
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Long-term (n=144) and Short-term (n=12)
Coming up

April/May

• Community update & feast
• Start planning treatment phase
Coming up

Expanding to 6 more Yukon communities
Acknowledgements

• CANHelp Working Group
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  • Janis Geary
  • Hsiu Ju
  • Amy Colquhoun
  • Ashley Wynne
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    - Nasivvik, Universite Laval
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- ArcticNet National Centre of Excellence
- Social Sciences and Humanities Research Council of Canada
- Indian and Northern Affairs Canada
- Canadian Circumpolar Institute
- Public Health Agency of Canada
Thank you! Questions?