Changing Chronic Illness Trajectories among Native Hawaiians through Moʻokūʻauhau

International Indigenous Health Symposium

He Huliau: A Turning Point
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Calling the Circle

By Christina Baldwin
It has always been scary
To step into the circle of firelight,
To ask for entrance or to offer it. Our hearts race . . .
Will we have the courage to see each other?
Will we have the courage to see the world?
The risks we take in the twenty first century
Are based on risks human beings took
Thousands of years ago.
We are not different from our ancestors,
They are still here, coded inside us.
They are, I believe,
Cheering us on.
Background

- Native Hawaiians are at higher risk for chronic conditions, related to the foods we eat.
- Individualistic Western strategies have limited success.
- Family focused and culturally based interventions effective for indigenous populations.
Study Aim

To explore the usefulness of a genealogy or family history tool (*moʻokūʻauhau*) in helping pregnant women understand health risks in their newborn, their own, their parent, and their grandparent generations.
Design

- A descriptive one-group intervention design occurred in two Native Hawaiian communities
- One part of a larger longitudinal pilot study
Setting

Waianae

Waimanalo
## Journal Session Examples

<table>
<thead>
<tr>
<th>Journal Session</th>
<th>Journal Activity</th>
<th>Health Education Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session 1: Gratitude &amp; Concerns</strong></td>
<td><em>What are you grateful for today? What are your main concerns today?</em></td>
<td>Study protocols, journaling, participant’s role, etc.</td>
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<tr>
<td><strong>Session 2: Introduction &amp; Aloha Circle</strong></td>
<td>`O wai kou inoa? Invite a person who has impacted your life on your pregnancy journey. Write the lesson you learned from them in your journal.</td>
<td>Stress &amp; support</td>
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<tr>
<td><strong>Session 3: Calling the Circle</strong></td>
<td><em>Pick a line of the poem “Calling the Circle” that speaks deeply to you and write 3-4 additional lines.</em></td>
<td>Coping strategies to use in times of stress</td>
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### Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Married/Partner</td>
<td>9</td>
<td>42.8%</td>
</tr>
<tr>
<td>Education – High School</td>
<td>9</td>
<td>42.8%</td>
</tr>
<tr>
<td>Education – At Least 2 Years College</td>
<td>12</td>
<td>67.2%</td>
</tr>
<tr>
<td>Employed</td>
<td>9</td>
<td>42.8%</td>
</tr>
<tr>
<td>WIC Participants</td>
<td>16</td>
<td>76.1%</td>
</tr>
<tr>
<td>Age – Mean</td>
<td>26.8</td>
<td>Range 19-40 years</td>
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Native Hawaiian Expectant Mothers (N = 21)
### Journal Activity: Session 4

**Health Education Topic:** Breastfeeding: Relationship between chronic illness and nutrition

|---------------------|----------------------|------------------------|-----------------------|-----------------------------|
| Ohana               | Pulapula (Offspring) | Makuwahine (Mother)    | Kupuna Wahine (Grandmother)  
                    |                      |                        | Kupuna Kāne (Grandfather) | Kupuna Kuakahi (Great Grandparent) |
|         | Hānau mua (Older siblings) | Hānau hope (Younger siblings) | Kupuna Wahine (Grand-Aunty)  
                    |                      |                        | Kupuna Kāne (Grand-Uncle) | Kupuna Kuakahi (Great Grand-Aunty or Great Grand-Uncle) |

**Presence of Chronic Diseases**
(ex: diabetes, heart disease, high blood pressure, asthma, obesity, etc.)

- **Infant Feeding**
  - Breastfeeding (# months)
  - Formula (when started)
  - First foods (when started & what kind)
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<tbody>
<tr>
<td><strong>Lifestyle Practices</strong> (ex: fishing, hula, gardening/farming, swimming, cooking, etc.)</td>
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<tr>
<td><strong>Eating Practices</strong> (ex: eating meals together or separate; eating meals in front of the TV; eating at grandmother’s house on specific days; etc.)</td>
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<tr>
<td><strong>Natural Elements</strong> (ex: name of the wind, rain, ocean, or mountain known to the family or by place of residence)</td>
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Family Tree
Include family member with year of birth/death
Data Analysis

Frequency distribution of chronic disease patterns

Group iterative process:
• Analysis of categories & process notes
• Triangulation of coded analysis from each data source
• Abstraction into major themes
Results

- Historical information more accessible to participants:
  - From the maternal than paternal line
  - From the parent and grandparent than the great grandparent generation
- Intergenerational patterns of chronic diseases and lifestyle practices
- Family distress related to disconnections within the family
Accessibility of Historical Information

Process notes:

“Discussed absence of her biological father.”

“Need to query parents and grandparents.”

“She will need to ask parents for more information.”

“Participant needed to gather information from her mother and partner.”
“Participant sees a pattern of asthma and diabetes.”

“Participant can see hypertension, diabetes, and obesity patterns.”

“Sees hypertension throughout the generations and asthma…”

“Participant asked if asthma was passed on because of smokers in her family.”
Family Distress Related to Disconnections

Process notes:
“There was a moment of shedding tears.”

“Biological father not in participant’s life, missing because of prison, drug use, raised by her step-father, whom she will raise her child to recognize as her ‘Papa’.”

“Participant not able to get boyfriend’s information.”
Discussion

- *Mo’okū’auhau* can serve as a tool to
  - Identifying chronic diseases across generations,
  - Identifying family chronic disease patterns and its relationship to lifestyle and diet,
  - Create a changeable moment in a person’s life
    - Reconnect families
    - Remember experiences/history and change the trajectory of experiences for the next generation
    - Initiate healthy behavioral change with pregnant women and with their newborn – Mothers as change agents in their families.
  - Link family traditions to health promotion
“In doing my genealogy, it motivated me to change things with myself. It was really helpful.”

“All my aunties and uncles passed away from cancer or had some kind of heart complication, so it makes you really think about these things to be more mindful of it. I don’t have a complete transformation, but it opened up my eyes more.”

“Family history of diabetes and obesity prompted me to want to change what I could for my baby. Never really looked at it, just took it for granted.”
Application

• Support family relationships
  • Connections to extended family and cultural practices are important dimensions of well-being.
  • Support the expectant/postpartum mother recording family history for her newborn.
  • Support the mother-newborn relationship
MAHALO

(L to R): Rachelle Enos, Puanani Burgess, Sandie Morimoto-Ching, Mary Frances Oneha, Joan Dodgson, Cheryl Kintaro-Tagaloa, Ho`oipo DeCambra. Missing: Carol Titcomb.
Consultant: Puanani Burgess, Waianae resident and author of “Building the Beloved Community.”

Community Advisory Group Members: Wai`anae – Ho`oipo DeCambra, Paula Ann Burgess, Kaimi Dung, Verna Landford-Bright, Tesha Malama, Kehaulani Pu`u, Summer Miles; Waimānalo – Kehaulani Padilla, Gwen Kailihiwa, & Leina`ala Bright.