Maternal Health in Slum Colonies of Kochi, Kerala

Priyanka Idicula & Amy Davies
Birth for Change

Dr Allison Wren
HWDI
City Sanitation Plan, 2011

- Access to toilets
- Drainage network
- Water supply
- Waste water management
- Solid waste management
- Governance issues
- Financial sustainability
Survival Strategies of Women Slum Dwellers in Kerala

Dr Gladis Mary John, 2012-2014 for the Cochin Corporation

Major Conclusions

1. Pop = 603,597, 32% in 280 slum colonies, study involved 4 of these.
2. 50% of women work, no formal education facilities available.
3. 90% poor families lack drainage, some 4hrs water per day.
4. 40% have chronic health problems, no mental health available.
5. Lack of knowledge of health, welfare rights, no continued programmes.
6. Excessive use of alcohol and drugs, 60% victims of come.
# Project Design

**Phased Approach**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Baseline survey, randomised first 100 women, aged 18-60, from 82 households in 2 slum colonies, Udaya and PMT. Answers analysed by: surveygizmo.com COMPLETED.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2</td>
<td>6 Monthly education sessions aspects of maternal health and effects of diet, smoking + drug use. An impart question asked at the beginning and end of each session, use of incentives. COMPLETED.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>2nd door-to-door questionnaire after 2-3 months to test for longer term reflection, behavioral changes, use of contraceptives group. WILL BEGIN SOON.</td>
</tr>
</tbody>
</table>

[Logo: Hardie Wren Development Initiatives]
Phase 1 - baseline survey
Family Background

SNAPSHOT

98% Moved to slum
Family size 1-3 children
28% Illiteracy
84% Some education
83% Had been pregnant
96% Born in hospital (62% - Government 33% - Private)
32% By caesarean section
28% Had a miscarriage

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of responses</th>
<th>% Responses</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing education</td>
<td>9</td>
<td>10.71%</td>
<td></td>
</tr>
<tr>
<td>Not sent to school</td>
<td>2</td>
<td>2.38%</td>
<td></td>
</tr>
<tr>
<td>Not interested in studying</td>
<td>9</td>
<td>10.71%</td>
<td></td>
</tr>
<tr>
<td>Failed Grade/Degree</td>
<td>7</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Parents(s) Alcoholic</td>
<td>3</td>
<td>3.57%</td>
<td></td>
</tr>
<tr>
<td>Death of parent(s)</td>
<td>3</td>
<td>3.57%</td>
<td></td>
</tr>
<tr>
<td>Ill health of parents</td>
<td>4</td>
<td>4.76%</td>
<td></td>
</tr>
<tr>
<td>Personal Illness</td>
<td>2</td>
<td>2.38%</td>
<td></td>
</tr>
<tr>
<td>Financial difficulties</td>
<td>22</td>
<td>26.19%</td>
<td></td>
</tr>
<tr>
<td>Household responsibilities</td>
<td>7</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>3</td>
<td>3.57%</td>
<td></td>
</tr>
<tr>
<td>Pregnancy</td>
<td>1</td>
<td>1.19%</td>
<td></td>
</tr>
<tr>
<td>Started Work</td>
<td>3</td>
<td>3.57%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>10.71%</td>
<td></td>
</tr>
<tr>
<td><strong>Total reasons</strong></td>
<td><strong>84</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total responses question** 67
**Did not answer question** 33
**Total** 100

why did you stop going to school?
Phase 1 - baseline survey
Menstruation - 1

Did your mother tell you anything about menstruation?
No 57.14%  Yes 42.86%

Taught about menstruation by mother

If you have daughters, have you told them anything about menstruation?
No 55.10%  Yes 44.90%

Told daughter(s) about menstruation

If yes, what was it?

Information about menstruation provided by mother

20  Use of tampons and pads
10  Frequency
9   About menstruation
8   Be careful with men
2   Avoid people
1   Avoid temple
1   Diet
1   Do not remember
1   Drink tea with herbs
1   Embarrassed to discuss
1   Stay in room
1   Will not tampon

HARDIE WREN DEVELOPMENT INITIATIVES
Phase 1 - baseline survey
Menstruation - 2

Information provided to daughter(s) about menstruation

Do you think it is?

Traditions and beliefs about menstruation

1. Oil bath/bath daily
2. No Meat for 7 days
3. No touching religious items (lamps, pictures, books, clothes)
4. No going to temple, mosque, church
5. No touching or separate items (kitchen, plates, glasses, food)
6. Stay outside of the house or in a separate room during period
7. No need to fast during Ramadan
8. Cleanliness and management of periods (burning old cloths etc)
9. Celebration when period started
10. No sex
11. Stay in house during period

HARDIE WREN DEVELOPMENT INITIATIVES
Phase 1 - baseline survey
Contraception + Pregnancy

82.2% were aware of some form of contraception... **BUT** 84% used **NO** contraception.
2.8% reported staying active during pregnancy
28% back for more rest or total rest
48% had some education about diet

**Symptoms of pregnancy**
- Lighter bleeding 0.51%
- Missed period 18.98%
- Vomiting 18.64%
- Breast tenderness 3.39%
- Coughing 2.71%
- Cramping 5.55%
- Food aversions 11.36%
- Nausea 15.93%
- Tiredness 16.44%
- Mood changes 6.44%

**Diet of respondents**
- Rice: 99
- Chapattis: 70
- Vegetables: 84
- Chicken: 66
- Fish: 85
- Red meat: 83
- Dal: 56
- Chips: 56
- Cookies: 41
- Fast food: 41
- Other: 8

**Did you change your diet or lifestyle when you knew you were pregnant?**
- Yes: 35.02%
- No: 60.98%

**Changes to diet/lifestyle during pregnancy**
Phase 1 - baseline survey
Income and Expenditure

SNAPSHOT

51.5% Had a job

55% Reported husband working

Monthly income between $15 - $314 (most $78 - $118)

“Other” expenditure included

50% Utilities

26% Private education

20% Medical bills

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What do you do

<table>
<thead>
<tr>
<th>Type of work</th>
<th>Number</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>House shop</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Maid</td>
<td>13</td>
<td>26.04%</td>
</tr>
<tr>
<td>Lottery ticket vendor</td>
<td>3</td>
<td>8.33%</td>
</tr>
<tr>
<td>Tailor</td>
<td>3</td>
<td>1.04%</td>
</tr>
<tr>
<td>Waste collection</td>
<td>11</td>
<td>2.08%</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

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Expenditure

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Number of responses</th>
<th>% Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>93</td>
<td>26.04%</td>
</tr>
<tr>
<td>Rent</td>
<td>26</td>
<td>8.33%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>24</td>
<td>2.08%</td>
</tr>
<tr>
<td>Smoking</td>
<td>30</td>
<td>0.00%</td>
</tr>
<tr>
<td>Transport</td>
<td>33</td>
<td>1.04%</td>
</tr>
<tr>
<td>Clothing</td>
<td>48</td>
<td>1.04%</td>
</tr>
<tr>
<td>Loans</td>
<td>63</td>
<td>29.17%</td>
</tr>
<tr>
<td>Other</td>
<td>42</td>
<td>32.29%</td>
</tr>
</tbody>
</table>

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Total types of expenditure: 359
Total responses: 96
Did not answer question: 4
Total: 100

What is the item that you spend the greatest amount of your income on?
Phase 1 - baseline survey
Conclusions

Diet
Smoking/Alcohol Use
Private Education
Breast Feeding

Knowledge of Menstruation and Pregnancy
Birth Practices
Divisions between Men and Women
Social Taboos
Income Stagnation
Phase 2 - Health Clinic and 6 Monthly Classes with before/after impact questions

<table>
<thead>
<tr>
<th>CLASSES</th>
<th>ACTIVITIES</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menstruation</td>
<td>Films</td>
<td>Initial enthusiasm</td>
</tr>
<tr>
<td>Diet</td>
<td>Posters</td>
<td>Dwindling attendance and interest</td>
</tr>
<tr>
<td>Alcohol/Smoking</td>
<td>Games</td>
<td>Competition</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Quizzes</td>
<td>Slum”Wars”</td>
</tr>
<tr>
<td>Childcare</td>
<td>Cyclebeads</td>
<td>Analysis of impact questions underway</td>
</tr>
<tr>
<td>Birth Practices</td>
<td>Meals</td>
<td>Adaptations - focus on menstruation/pregnancy</td>
</tr>
<tr>
<td></td>
<td>Fe/Ca supplements</td>
<td>outreach to rural areas</td>
</tr>
<tr>
<td></td>
<td>Trip to beach</td>
<td></td>
</tr>
</tbody>
</table>

HARDIE WREN
DEVELOPMENT INITIATIVES
Phases 1 + 2 - Interim Conclusions

“POOR ECONOMICS”
Abhijit Banerjee and Esther Duflo
2011, Penguin Books

3 is
- Ignorance
- Ideology
- Inertia

Hardie Wren Development Initiatives
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Presentation Design
Bob Luck
(Whitebeard Arts)
**VISION**

This new UK-based NGO seeks to support pilot projects and a world where everyone has a basic science literacy, bringing greater confidence and empowerment to help solve day to day problems, and understand the technical underpinnings of our lives to bring about social change for the better.

**MISSION**

HWDI believes that there must be a fundamental rethinking of how individuals and communities learn. To bring about wider and deeper information landscapes for all it will work across sectors to establish innovative partnerships between traditional and nontraditional players to address the interdependent challenges of combating ignorance.
HWDI are delighted to announce our ISLA 2017 winner

Dr Susan Nasif Obeid of Climaza and her Virology Comics

Please visit our ECIL poster to see examples of the comics and how we might all use them to increase Science Literacy.