OUTCOME AND PROCESS EVALUATION OF THE CHAMP SOUTH AFRICA (AMAQHAWE) FAMILY-BASED HIV PREVENTION INTERVENTION

Arvin Bhana, PhD
(Child, Youth, Family & Social Development, HSRC)

Inge Petersen, PhD
(School of Psychology, University of KwaZulu-Natal)

US Collaborators: Carl Bell, MD (University of Illinois, USA)
Mary McKay, PhD (Mt Sinai School of Medicine, USA)
AmaQhawe Family Project

- CHAMP developed in Chicago and adapted for the Bronx (N.Y.), Trinidad/Tobago and S.A.

What is it?

- Community collaborative developmentally timed intervention targeting families with pre-adolescents
- Improving parent-child relationships and strengthening the adult protective shield as a protective factor against HIV infection in adolescents
Program Development in South Africa

• Informed by a focused ethnographic study in Kwadedangendalale (target site) a semi rural area 40kms outside Durban which showed that:
  – Parents felt disempowered to adequately protect their children
  – Felt they were less knowledgeable than their children about HIV/AIDS
  – Erosion of traditional norms and social practices associated with protective parenting, which previously served to educate and exert social controls
  – Encouraged reactionary punitive parenting styles which alienated children from their parents
• Lack of trust and investment in community networks central to facilitating social control (cf. Paruk et al., 2005)
Valley of A Thousand Hills
Embo School
What the Program Does

• The AmaQhawe Family Project intervenes with both children and their parents to effect changes in the three TTI streams of influence:

  • **Intrapersonal** – to strengthen key personal influences such as parental self esteem and self-efficacy, communication and active monitoring skills in parents as well as parent HIV knowledge.

  • **Social normative/social bonding** - to strengthen social networks and social support to create a more health enabling family and community context as well as health enhancing parental identities

  • **Culture/Environment** - to facilitate health enhancing attitudes towards parenting as well as HIV positive people.
OPEN-ENDED PARTICIPATORY CARTOON NARRATIVE

• DISCUSSION OF SENSITIVE SUBJECTS
  • Cartoons contain anxiety through providing distance from the issue

• FACILITATES PARTICIPATORY PEDAGOGICAL METHODS TO PROMOTE EMPOWERMENT
  • Participants close narrative through discussion
  • Facilitates the development critical consciousness and health enhancing social practices

FACILITATION

• Parents selected and trained to deliver program

TAKE HOME BOOKLETS

• Assignments facilitate consolidation of material learned during sessions
• Facilitates diffusion of innovation through involvement of non-participating members especially fathers
Example of Cartoon Sessions
A treatment versus no treatment repeated measures with randomized matched controls design was used.
Change scores were assessed using a mixed-effects regression model that adjusted for the nesting of students within schools.
Impact of treatment was estimated adjusting for pretest scores and demographic variables (education, gender and religion).
Bonferroni correction was applied to adjust significance probabilities (P values) for multiple comparisons.
80% power is reached with an effect size of .36 SD units.
## Experimental and Control Families

<table>
<thead>
<tr>
<th>Area</th>
<th>Experimental</th>
<th>Control</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molweni</td>
<td>74</td>
<td>69</td>
<td>143</td>
</tr>
<tr>
<td>KwaNyuswa</td>
<td>94</td>
<td>95</td>
<td>189</td>
</tr>
<tr>
<td>KwaNgcolosi</td>
<td>36</td>
<td>36</td>
<td>82</td>
</tr>
<tr>
<td>Qadi</td>
<td>31</td>
<td>33</td>
<td>64</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>245</strong></td>
<td><strong>233</strong></td>
<td><strong>478</strong></td>
</tr>
<tr>
<td></td>
<td>Male HoH</td>
<td>Female HoH</td>
<td>Overall</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Head of Household</td>
<td>250 52</td>
<td>227 48</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>138 70</td>
<td>59 30</td>
<td>197 41</td>
</tr>
<tr>
<td>Pension/Disability Grant</td>
<td>69 30</td>
<td>164 70</td>
<td>234 49</td>
</tr>
<tr>
<td>Child Support Grant</td>
<td>165 52</td>
<td>152 48</td>
<td>317 67</td>
</tr>
<tr>
<td>Education:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>33 38</td>
<td>53 62</td>
<td>87 19</td>
</tr>
<tr>
<td>Grades 1-5</td>
<td>115 54</td>
<td>100 47</td>
<td>215 47</td>
</tr>
<tr>
<td>Grades 6-12</td>
<td>90 56</td>
<td>70 44</td>
<td>160 35</td>
</tr>
<tr>
<td>Sleep at Home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>12 60</td>
<td>8 40</td>
<td>20 4</td>
</tr>
<tr>
<td>Some nights only</td>
<td>68 28</td>
<td>17 8</td>
<td>85 18</td>
</tr>
<tr>
<td>Every night</td>
<td>166 46</td>
<td>198 89</td>
<td>365 78</td>
</tr>
<tr>
<td>Lived in the Same Area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>64 53</td>
<td>58 48</td>
<td>123 26</td>
</tr>
<tr>
<td>5 years of more</td>
<td>185 74</td>
<td>169 74</td>
<td>354 74</td>
</tr>
</tbody>
</table>
## Measures & Reliabilities

### Partial List of Standard Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pretest Alpha</th>
<th>Posttest Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS Transmission Knowledge</td>
<td>.75</td>
<td>.79</td>
</tr>
<tr>
<td>Stigma</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Parental Monitoring (Family Rules)</td>
<td>.70</td>
<td>.80</td>
</tr>
<tr>
<td>Parental Communication Frequency</td>
<td>.86</td>
<td>.88</td>
</tr>
<tr>
<td>Parental Communication Comfort</td>
<td>.87</td>
<td>.88</td>
</tr>
<tr>
<td>Primary Social Networks</td>
<td>.67</td>
<td>.82</td>
</tr>
</tbody>
</table>
AIDS Transmission Knowledge

Pretest Means  Posttest Means

- Intervention
- Comparison
- \( p < .0084 \)
- Effect size = 0.6306
Stigma

Higher scores indicate a more positive attitudes toward those with HIV/AIDS.
Caregiver monitoring – Family Rules

Pretest Means | Posttest Means

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.5</td>
<td>38</td>
</tr>
<tr>
<td>38</td>
<td>38.5</td>
</tr>
<tr>
<td>38.5</td>
<td>39</td>
</tr>
<tr>
<td>39</td>
<td>39.5</td>
</tr>
<tr>
<td>39.5</td>
<td>40</td>
</tr>
<tr>
<td>40</td>
<td>40.5</td>
</tr>
</tbody>
</table>

Effect size = 0.3074
p = .0729
Hard to Talk-Frequency

Pretest Means vs. Posttest Means

Intervention
Comparison

p = .0412
Effect size = 0.1969
Hard to Talk-Comfort

干预组 vs 对照组

干预组的平均值显著高于对照组的平均值，且效果大小为 0.4067。
Primary Social Networks

Pretest Means  |  Posttest Means

Intervention  |  Comparison

p = .0827

Effect size = 0.2653
Process Evaluation - Method

Fidelity
• Participant observation of trained parent facilitators to ensure fidelity of the programme
• Checklists of material covered by three groups of facilitators compared.

Processes involved in behaviour change
• Ten focus group interviews of participants in the pilot intervention about each session
• Nine in-depth qualitative interviews 2 years post the intervention with participants in one of the tribal areas (Embo) where it was delivered.
Findings - Fidelity

• Participant observations & checklists demonstrated consistency in the delivery of the program across facilitator groups
Parental Empowerment

- CHAMP coming in the area was very helpful. In fact it was a relief to us; we as parents were then powerless; we couldn’t talk to our children the way we wanted, since we used to get these comments from the children when you were instructing the child or smacking the child for something that she/he had done wrong, the child would tell you that she/he is going to take you to court. Whatever you did, the child would threaten you by saying that she/he is going to take you to court. Well then it made us feel like we were useless and not a parent. You wouldn’t feel like a parent to the child, but felt that the child was more powerful than you. So CHAMP was able to solve that problem by teaching us parents how far children’s rights go and how far parents’ rights go. So in that sense we were able to have a proper discussion with our children and there was good communication, and we felt like real parents, and the child was able to realize that she/he is still a child and this is a parent. (Interview 6)
Process Findings – Intrapersonal level

Increased **parental empowerment** a result of:

- **Increased HIV knowledge**
  
  *But we have enough information, as I can now tell my child from the start to the end how HIV/AIDS is acquired, what happens from the first up to the end. The child also adds information if she/he attended the programme, and you have a discussion.*
  
  (Interview 5)

- **Improved communication skills**
  
  *CHAMP gave us ways of proper communication within the family. That was the key in most issues. Now we find it easier to talk about anything, and it’s also easier for my child to say, “Mom, I’m not clear on this and that”. And so, matters of relationships, including HIV issues, are now easy to talk about since we now talk as friends, you see!* (Interview 4)
Process Findings – Social Situation/Context

• CHAMP primary social networks provided social bonding and support:

I wouldn’t say that it [trust] developed in the community, but I would say that with people that attended the programme, friendship and trust did develop. Since we met, we bonded so much that it came to a point where when you have a problem, you don’t just sit down but you go to your friend that you met when you attended the programme. We are now able to help each other and phone each other as neighbours. But with regard to the community, I feel that this issue of trust is going very slow. (Interview 4)
Process Findings – Social Situation/Context

CHAMP tasks & primary social network facilitated:

- Critical reflection and dialogue leading to empowered renegotiated parental identities

Okay, we realized that our rights were not taken away from us. But the problem was that sometimes when we thought that we were using our rights, maybe we were abusing the authority that we had over our children, or abusing our position as parents to our children. We were aware that it was our right to take care of our children, especially when a child has gone and you don’t know where she/he has gone to, [we believed that] it is your right to shout at your child or to give your child a hiding. But we have learnt that we were abusing our authority over our children. We learnt that the treatment we gave our children sometimes had bad results. (Interview 4)
Process Findings – Social Situation/Context

CHAMP tasks & primary social network facilitated:

• Critical reflection and dialogue leading to renegotiated social representations regarding HIV+ people:

  We learned that death might bring people closer to each other. Like in that case of MaQhawe who used to keep a distance from her neighbour, but after Themba’s mother’s death she became closer. She went to their house to help Themba with the preparations. This was good and we as Champ members have to learn from her actions and help. She was avoiding the neighbour because she had Aids, but she later realised that she had to offer assistance to that family. (Embo, review of session 9)

  “It’s easy now to interact with people since CHAMP…even about caring for those who are sick – I’m no longer scared and its no longer taboo”
Process Findings – Social Situation/Context

• **Improved informal social controls:**

> You find a child [who is not in school] and you send or accompany her/him to school and the child goes to school. And then the mother comes to you and says: “I heard that you sent my child to school. Thank you very much, that was very helpful.” Before, the mother would have said: “What is the matter with you, that was not your business. It is my child and you are not paying the school fees, but I pay it”. Now there is that spirit of togetherness, that I have seen the child doing wrong, and let me correct her/him. (Interview 5)
There was a rumour that the house that was near the school used to sell drugs, but the community met and advised them to stop doing that. They stopped. The level of drug abuse has dropped. Parents are taking responsibility to keep the area clear from all forms of corruption. [Interview 3]

Some of the parents informed the police about the taverns since they were the cause of all this trouble. The people that are selling liquor to them, they are drinking with them, and the child learns to drink liquor and to smoke and learns about everything in the process. We are grateful to the police since they are closing down these taverns so we know our children won’t be able to go there. [Interview 7].
Process Findings – Cultural Environment

• Improved opportunities for women supported renegotiated empowered identities

We now have a deputy president as a woman and we are also noticing it in the community. We have a large number of women holding high positions, ya. Even here in our area, there are women holding positions and working very hard and doing very well. Before, we thought that it was only men that worked hard and could hold positions. Well, everywhere now you find women holding high positions and fitting in perfectly. (Interview 3)

• Through exposure and diffusion of innovation the CHAMP program could impact on improved attitudes towards parenting and HIV positive people
Conclusion

• Collectivist identities in African cultures suggest importance of:
• Individual level change interventions in concert with group level interventions
• Facilitate a shift in social normative behavior to support individual level change
Dissemination of the Program

• The NIMH funding ends August 30, 2007.
• CHAMPSA is currently established as an NPO in South Africa
• We were proactive at obtained $150,000 from a foundation for CHAMPSA to serve 750 families in 2007.
• The program is being delivered using community facilitators selected from participating families.
• Training of facilitators incorporates
  ➢ Providing them with the knowledge and facilitation skills to deliver program content
  ➢ Facilitating capacity development and personal empowerment to employ the participatory pedagogical method
• The CHAMPSA NPO is engaged in raising funds to disseminate the program more widely
• The franchise model of dissemination is also being explored with World Vision
ACKNOWLEDGEMENTS

• NIMH FUNDING: RO1 MH64872-03
• KwaDedangendlele community
• Sithembiso Ndlovu (Community Coordinator)
• Lungie Mkhize (Project Manager)
• Zubeda Paruk M.A. (Doctoral student, University of KwaZulu-Natal)
• Robert Gibbons, PhD (Centre for Health Statistics, Univ. of Illinois, Chicago)
• William Bannon, PhD (Post Doctoral Fellow, Mt Sinai School of Medicine)
• Anup Amatya, M.A. (Centre for Health Statistics, Univ. of Illinois, Chicago)