Development and Pilot-Testing of an Internet Based STI and HIV Prevention Intervention (I-STIPI) among Chilean Young Women

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Background

- Chilean young women between 18 and 24 years old are at high risk of contracting STI and HIV.

- There are very few STI prevention interventions that include HIV prevention in Chile and there are not available interventions that target unique cultural characteristics and specific risk factors for this group of women.

- There are many barriers to service delivery that may be addressed through the use of technology to deliver a STI and HIV prevention intervention for young Chilean women.

- Internet interventions have shown favorable behavior change outcomes and have demonstrated success in drawing interest and achieving retention of young adults.
The purpose of this study was to develop and pilot-test an internet based STI and HIV prevention intervention for Chilean women between 18 and 24 years old.
Methods

Stage I. Development of the I-STIPI

I-STIPI based on the adaptation of MM-Mujer intervention
Meetings with Panels of experts for the development of the I-STIPI (n=6)

Stage II. Piloting the I-STIPI

Young Chilean women who Participated in the pilot testing of the I-STIPI (n=40).
Methods
Phase I. Development of the I-STIPI

1. Development of the content of the I-STIPI
   Meetings with panels of experts in order to generate recommended adaptations in the content/activities of the MM-Mujer intervention

2. Development of the technical features of the I-STIPI
   Meetings with experts in technology or distance learning to make the intervention “web-friendly”.

3. Creation of the I-STIPI Website
   Meetings with the Chilean experts in technology in order to oversee the development of the website.

FINAL PRODUCT: the I-STIPI ready for the Pilot Phase
Methods

Phase II. Piloting the I-STIPI

Design: Pre-Post Test

Sample
40 young Chilean women

Inclusion criteria:
• Chilean women from 18 to 24 years old.
• Living in Santiago, Chile.
• Self-identified as an internet user and having access to internet.
• Self-identified as sexually active in the last 6 months.
• Being able to read and write in Spanish.

Baseline Assessment
I-STIPI Intervention
One month Post Baseline Assessment

Recruitment: Fliers with contact information

Setting
Santiago, Chile.
6,318,376 habitants.

Sample size estimation
G Power, using t-test sample estimation.
Methods

Phase II. Piloting of the I-STIPI

Data Collection

- The questionnaires were answered online and created on SurveyMonkey
- Each questionnaire had an expected duration of 30 minutes.
- Study measures:
  - Socio-demographic information.
  - Personal and partner’s risk factors.
  - STI and HIV prevention related outcomes (STI and HIV related information, motivation, behavioral skills and preventive behaviors).
  - Intimate Partner Violence
  - Satisfaction with the intervention.
  - Expectations met at the end of the study
  - Participation in the intervention and retention rates.
Methods

Phase II. Piloting of the I-STIPI

Protection of the Human Subjects

- IRB approval for all research procedures was obtained upon IRB approval by both the University of Miami and Pontificia Universidad Católica de Chile.
- Privacy and security of the online questionnaires and the intervention
  - SurveyMonkey
  - Women’s participation in the I-STIPI was anonymous for other participants.

Statistical Analysis

- PASW version 18.0 was used for data analysis
- Descriptive statistics
- Paired-samples t tests analysis.
Results
Phase I. Development of the I-STIPI

1. Development of the content of the I-STIPI
   Meetings with panels of experts in order to generate recommended adaptations in the content/activities of the MM-Mujer intervention
   - Expanding of the contents to STI.
   - Addition of content about use of substances.
   - Making the intervention more appropriate and interesting for a younger population.

2. Development of the technical features of the I-STIPI
   Meetings with experts in technology or distance learning to make the intervention “web-friendly”.
   - Use of a website to conduct the I-STIPI.
   - Include different features in the website (i.e. FAQs, blogs).

3. Creation of the I-STIPI Website
   Meetings with the Chilean experts in technology in order to oversee the development of the website.
   - Creation of the website using the program WordPress.
Results

The final I-STIPI Product

I - STIPI Modules
- Four modules in Spanish
- Length of 40-50 minutes each
- Each module had the following activities:
  (a) A flash video presentation (10-15 min).
  (b) A quiz with 5 questions (5 min).
  (c) A video clip (5-10 min).
  (d) A blog (20-30 min).

Organization of the I-STIPI
- The only group activity in the intervention was the blog activity.
- Young Chilean women were nested in groups of 10 participants (total of 4 groups).
- Two activities were monitored in each module.

General Characteristics
- The facilitator monitored the I-STIPI activities and interacted with the participants.
- Referral information was provided.

Animation that represented a Chilean young woman. She (“Fran”) introduced the intervention content to the participants.
I-STIPI Website

Bienvenida a I-STIPI: Una Inter Transmisión Sexa

Protegido: MÓDULO #1

Vea el siguiente video, para contestar las preguntas de continuación (espere unos segundos y aparecerá el video)

MODULOS

MODULO #1

MODULO #2

MODULO #3

SIGUIENTE

MODULO #4
# Results

## Phase II. Piloting of the I-STIPI

<table>
<thead>
<tr>
<th>Variables</th>
<th>M ± SD</th>
<th>Minimal and Maximal values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years old)</td>
<td>19.90 ± 1.99</td>
<td>18- 24</td>
</tr>
<tr>
<td>Per Capita Income (Monthly in Chilean Pesos and U.S. dollars)</td>
<td>114,203 ± 112,430 pesos (228.41 ± 224.86 U.S.D.)</td>
<td>12,500-500,000 pesos (25-1,000 U.S.D.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>n (%)</th>
<th>Variables</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship status</td>
<td></td>
<td>Religious Background</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>39 (97.5)</td>
<td>Catholic</td>
<td>17 (42.5)</td>
</tr>
<tr>
<td>Married</td>
<td>1 (2.5)</td>
<td>Other</td>
<td>10 (25)</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td>None</td>
<td>13 (32.5)</td>
</tr>
<tr>
<td>Elementary school</td>
<td>1 (2.5)</td>
<td>Main occupation*</td>
<td></td>
</tr>
<tr>
<td>High school education</td>
<td>18 (45)</td>
<td>Student</td>
<td>33 (82.5)</td>
</tr>
<tr>
<td>Technical Education</td>
<td>3 (7.5)</td>
<td>Employee</td>
<td>13 (32.5)</td>
</tr>
<tr>
<td>University Education</td>
<td>18 (45)</td>
<td>Housewife</td>
<td>5 (12.5)</td>
</tr>
<tr>
<td>Who they live</td>
<td></td>
<td>Health Insurance</td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>28 (70)</td>
<td>No insurance</td>
<td>2 (5.0)</td>
</tr>
<tr>
<td>Spouse or partner</td>
<td>5 (12.5)</td>
<td>FONASA (public insurance)</td>
<td>31 (77.5)</td>
</tr>
<tr>
<td>Other (i.e. relatives, alone)</td>
<td>7 (17.5)</td>
<td>ISAPRE (private insurance)</td>
<td>4 (10.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>3 (7.5)</td>
</tr>
</tbody>
</table>
Results

Phase II. Piloting of the I-STIPI

Feasibility of the Intervention

Retention in the Entire Program:

• All the participants enrolled in the study (n=40) completed the baseline pre intervention questionnaire and 37 (92.5%) participants completed the post intervention questionnaire.

Participation in the I-STIPI modules:

• The I-STIPI had high rates of participation in the modules (between 85% and 70%) and high retention rates (92.5%) at one month post baseline assessment.
Results
Phoece II. Piloting of the I-STIPI

Acceptability of the Intervention

Participant’s satisfaction with the Intervention:

- Participants reported high levels of satisfaction with the different I-STIPI components: accessibility to the website, design of the website, relationship between the facilitator and the participant and the content and activities of the intervention.

Expectations:

- 35 (87.5%) participants mentioned that the intervention met their initial expectations.
- Only 2 (5.4%) participants mentioned that the intervention met their initial expectations partially.
# Results

## Phase II. Piloting of the I-STIPI

Change on STI and HIV related information, motivation, behavioral skills and behaviors (n=37)

<table>
<thead>
<tr>
<th>Construct (based on the IMB Model)</th>
<th>Paired t test analysis</th>
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<tr>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Score ± SD</td>
<td>Score ± SD</td>
</tr>
<tr>
<td><strong>STI and HIV related Information</strong></td>
<td></td>
</tr>
<tr>
<td>STI and HIV related Knowledge</td>
<td>2.51 ± 2.13</td>
</tr>
<tr>
<td><strong>STI and HIV related Motivation</strong></td>
<td></td>
</tr>
<tr>
<td>Attitudes toward the use of condoms</td>
<td>42.53 ± 8.94</td>
</tr>
<tr>
<td>Perceptions of social normative support: Traditional Gender Roles</td>
<td>8.97 ± 3.08</td>
</tr>
<tr>
<td>Perceptions of social Norms: Violence in relationships</td>
<td>8.78 ± 2.94</td>
</tr>
<tr>
<td>Perceptions of social norms: Norms about condom use</td>
<td>12.08 ± 2.26</td>
</tr>
</tbody>
</table>
## Results

**Phase II. Piloting of the I-STIPI**

Change on STI and HIV related information, motivation, behavioral skills and behaviors and Intimate Partner Violence (n=37)

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<td>Score ± SD</td>
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</tbody>
</table>

### STI and HIV related Behavioral Skills

| Perceived Self-efficacy for STI and HIV | 39.85 ± 5.13 | 42.06 ± 5.11 | -4.35 | -.061 | -2.09 | 33 | .044* |
| Sexual communication and negotiation skills | 5.63 ± 2.28 | 5.71 ± 2.73 | -1.09 | .92 | -.173 | 34 | .863 |

### STI and HIV related Preventive behaviors

Sexual Risk Taking with Uncommitted Partners subscale

| Sexual Risk Taking with Uncommitted Partners subscale | 4.66 ± 5.19 | 2.49 ± 2.00 | .551 | 3.79 | 2.72 | 34 | .010* |

Risky sex acts

| Risky sex acts | 8.74 ± 10.97 | 9.91 ± 11.20 | -4.30 | 1.94 | -.767 | 33 | .448 |

Risky anal sex)

| Risky anal sex) | .47 ± 1.9 | .31 ± .79 | -.46 | .79 | .54 | 35 | .591 |

### STI and HIV related Risk Factors

| Intimate Partner Violence | 5.19 ± 2.71 | 4.89 ± 1.58 | -.62 | 1.23 | .671 | 35 | .507 |
Conclusions

• The findings of this study support the belief that online interventions are feasible and are an acceptable form of delivering STI and HIV prevention among young women at high risk.

• This study provides promising evidence for future studies.

• I-STIPI might benefit young women through the reduction of barriers for accessing preventive interventions and increasing interest and the impact of STI and HIV prevention programs.