Effect of TeenSTAR, an abstinence-only sexual education program on adolescent sexual behaviour.

Pilar Vigil, MD., PhD. 1, Rosa Riquelme1, Rosario Rivadeneira, MD1, Hanna Klaus, MD2

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NASPAG's 19th Annual Clinical Meeting
May 19-21 NEW ORLEANS
Pontifical Catholic University of Chile, “Casa Central”, Santiago, Chile.
ACTUAL PROBLEMS

- Decreasing natality rates for adult women, but increased for the 15 to 19 years old group.

- 16.6% of Chilean newborns belong to adolescent mothers.

- One third to one fourth of STI occur in adolescents.
The TeenSTAR program is a value based educational program which uses the biological and physiological aspects of fertility to integrate the emotional, intellectual and social aspects of the personality. It delivers special training in fertility awareness, together with the psychological and personal aspects of sexuality.
TeenSTAR Chile

Youngsters/year
16,000

Monitors
1024

Institutions
600
Overall Cumulative Pregnancy Rate Over 4-Year Follow-Up

1997 and 1998 cohorts

Cabezón C, Vigil P, Rojas I, Leiva M y Riquelme R. 
Adolescent pregnancy prevention: an abstinence-centered randomized controlled intervention in a Chilean public high school. 
In Chile more than one third of youngsters expect to have premarital sex. Initiation of sexual activity is at 12 years for males and 12.83 years for females. The present study was designed as a prospective randomized study to evaluate the impact of TeenSTAR program on the:

- Rate of sexual activity.
- Rate of discontinuation of sexual activity among sexually active teenagers.
- Attitude towards abstinence in a group of 740 Chilean teenagers regularly attending school.
Effect of TeenSTAR, and abstinence-only sexual education program on adolescent sexual behaviour.

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**Methods:**

- Twelve TeenSTAR teachers were trained in a forty hour program.
- Seven hundred forty (740) students between 12 and 18 years of age from 10 different schools participated in the study.
- Youngsters were randomly divided into two groups:
  - **The program group** (n = 398, 251 boys and 147 girls) received weekly TeenSTAR training sessions during one academic year.
  - **The control group** (n = 342, 195 boys and 147 girls) who continued their regular school education.
- Program and control groups had the same socio-cultural and age characteristics.
Materials and Methods

• Teachers (TeenSTAR monitors) training in a 5 days workshop.
• Student training during 14 sessions.
• One personal interview.
• Parents Meeting.
• Pre and post course evaluation.
The TeenStar program: 14 units

1. Initial session and introduction to the program
2. Differences between genders
3. Identification of prejudices on male and female’s characteristics
4. Anatomy and physiology of human reproductive organs
5. Puberty, fertility in women and fertility in men
6. Fertility awareness, registration of fertility records (classes distributed along the course)
TeenSTAR Program

7. Knowing emotions and controlling behavior
8. The manipulation of sexuality in media
9. Self assurance and maintaining decisions
10. Marriage and family
11. Beginning of life, value of human life
12. Family Planning Methods, contraception
13. Pregnancy, delivery, breast feeding
14. Final session
Results
Results
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![Graph showing resumption of intercourse](image)

- **n=740**
- **P= <0.04**

<table>
<thead>
<tr>
<th>TeenSTAR Program Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>
Results:

<table>
<thead>
<tr>
<th></th>
<th>Study subjects</th>
<th>Controls</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N males</td>
<td>251</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>N females</td>
<td>147</td>
<td>147</td>
<td></td>
</tr>
<tr>
<td>% transitions virgin - nonvirgin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>8.8</td>
<td>17.6</td>
<td>$p = &lt;0.004$</td>
</tr>
<tr>
<td>Females</td>
<td>3.4</td>
<td>12.4</td>
<td>$p = &lt;0.001$</td>
</tr>
<tr>
<td>Discontinuation of intercourse * Rate increase</td>
<td>20%</td>
<td>9%</td>
<td>$p = &lt;0.003$</td>
</tr>
<tr>
<td>Resumption of intercourse</td>
<td>0</td>
<td>11%</td>
<td>$p = &lt;0.004$</td>
</tr>
</tbody>
</table>

*No intercourse within the last three months of the program. Program adolescents exhibited a significant increase in the number of reasons for being abstenent, increasing from one at program start to three by the end of the year.
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Conclusions:

- The TeenSTAR program was effective in delaying sexual activity in teenagers (primary abstinence) and in increasing discontinuation of sexual activity (secondary abstinence) among sexually active youth.

- It also generated a positive attitude towards abstinence.
Thank You !!!

Teen STAR
Programa de Educación en Sexualidad y Afectividad

NASPAG
Tipos de Programa de Educación Sexual

1ra Generación: Entregar conocimiento acerca de las relaciones sexuales, riesgos y consecuencias del embarazo adolescente.

2da Generación: Formación en valores y desarrollo de técnicas de comunicación y toma de decisiones.

3ra Generación: Promoción de la Abstinencia Sexual y exclusión de información de ACO.

4ta Generación: Enfátiza prevención de ETS Fuerte mensaje pro abstinencia, técnicas de comunicación y negociación. Tratan los ACO.

Pregnancy Rates - 1996 cohort
Non Intervention Group

Cabezón C, Vigil P, Rojas I, Leiva M y Riquelme R.
Adolescent pregnancy prevention: an abstinence-centered randomized controlled intervention in a Chilean public high school.
Comparative Graf between TeenSTAR Program and Control Group
Pregnancy Rates - 1997 Cohort

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Pregnancy Rates - 1998 Cohort

Cabezón C, Vigil P, Rojas I, Leiva M y Riquelme R.
Adolescent pregnancy prevention: an abstinence-centered randomized controlled intervention in a Chilean public high school.
Reconocimiento de las señales del cuerpo.
Retraso en la iniciación de la actividad sexual.
Mayor capacidad de abstinencia sexual.
Disminución de tasa de embarazo en adolescentes.
Saber decidir por sí mismos en que momento estarán preparados para entregarse al otro.
El 50% de los jóvenes sexualmente activos deja de tener relaciones sexuales al aplicar el Programa TeenSTAR.