Increasing awareness of sun protection among Australian adolescents: Results of a community-based intervention

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Overview

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Background

- Childhood and adolescence are most vulnerable periods for increasing skin cancer risk.
- 25 year of mass media and programs aimed at sun protective behaviours in Australia, sun protection practices among adolescents continue to decline.
- The adolescent characterised by long periods of exposure to UV radiation, high incidence of sunburns and positive views about sun tanning.

Formative research findings

Six Behavioural Segments were identified:
- Vigilant Defenders (positive attitude and behaviour);
- Forgetful Attempters (positive attitude but moderately positive behaviour);
- Risk Reducers (positive attitude but negative behaviour);
- Consciously Lazy (negative attitude and behaviour);
- Tan Seekers (negative attitude and behaviour); and
- Unaffected (neutral attitude and behaviour).
Forgetful Attempters
(positive attitude but moderately positive behaviour)

Risk Reducers
(positive attitude but negative behaviour)

Forgetful Attempter Profile

“If I get told I’ll do it, but otherwise I’ll forget”

- Most sunburn/overexposure results from forgetfulness, or laziness, rather than an active attempt to obtain a tan.
- Relatively positive attitudes towards sun protection.
- Often engage in activities that cause them to forget about protection.
Risk Reducer Profile

“If you have a lower number (SPF) you get a better suntan”

– They want to get a tan or sun bake, they first apply sunscreen to minimise their chances of burning.

– Aware of the damage the sun can cause to their skin but believe this is a more responsible way to tan.

– They are concerned with appearances.

Objective

We conducted a community intervention in the Illawarra region of New South Wales Australia during January 2010.

The aims were to:
– promote awareness of the need for sun protection at the ‘point of decision’;
– communicate the key campaign messages in a fun and interactive format directed at the 2 segments; and
– engage young people in co-creation of the intervention, and provide ‘cues to action’. 
What is the campaign?

- Community campaign activities included:
  - UV sensitive wristbands (Reminder to sun protect)
  - UV photography at public beaches (Highlight damage to appearance)
  - Posters in teen friendly stores
  - Sun pouch 'giveaway packs'
  - Website
DON'T LET THE SUN GET UNDER YOUR SKIN

WHAT YOU SEE

WHAT YOU CAN'T SEE

UV light shows sun damage that you can't see... yet. The better you look after your skin now, the better you look for life.

DON'T LET THE SUN GET UNDER YOUR SKIN
Methods

10 weeks after the intervention, community intercept surveys were conducted.

Effectiveness assessed through post-test differences between groups in:
• recall of sun protection messages; and
• self-assessed impact of the message on sun protection behaviours.

Results

• A significantly higher proportion in the intervention community recalled seeing, reading or hearing messages about sun damage to the skin.

• 1 in 8 of those in the intervention community who recalled exposure to a sun protection message were able to accurately recall the main campaign message.
### Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Message Recalled</th>
<th>Intervention Community (n=47)</th>
<th>Control Community (n=26)</th>
<th>Z test for proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>What was the main message in the material you saw, read or heard?</td>
<td>Ageing/wrinkling/skin damage</td>
<td>14.9 (7)</td>
<td>0 (0)</td>
<td>1.654*</td>
</tr>
<tr>
<td></td>
<td>Sunscreen use</td>
<td>31.9 (15)</td>
<td>26.9 (7)</td>
<td>0.179</td>
</tr>
<tr>
<td></td>
<td>Multiple ways to sun protect*</td>
<td>8.5 (4)</td>
<td>20 (5)</td>
<td>0.962</td>
</tr>
<tr>
<td></td>
<td>Nothing healthy about a tan*</td>
<td>17 (8)</td>
<td>16 (4)</td>
<td>-0.149</td>
</tr>
<tr>
<td></td>
<td>Slip slip slap*</td>
<td>14.9 (7)</td>
<td>19.2 (5)</td>
<td>0.149</td>
</tr>
<tr>
<td></td>
<td>Skin cells in trauma*</td>
<td>2.1 (1)</td>
<td>3.8 (1)</td>
<td>-0.318</td>
</tr>
<tr>
<td></td>
<td>Skin cancer</td>
<td>8.5 (5)</td>
<td>3.8 (1)</td>
<td>0.271</td>
</tr>
<tr>
<td></td>
<td>Avoid sunburn</td>
<td>0 (0)</td>
<td>8 (2)</td>
<td>1.179</td>
</tr>
</tbody>
</table>

*C campaign specific  
*message from current national mass media campaign  
*message from previous high-profile national mass media campaign

### Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Setting recalled</th>
<th>Intervention Community (n=67)</th>
<th>Control Community (n=34)</th>
<th>Z test for proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where did you see or hear these messages?</td>
<td>Beach</td>
<td>49.3 (33)</td>
<td>32.4 (11)</td>
<td>1.406*</td>
</tr>
<tr>
<td></td>
<td>Pool</td>
<td>17.9 (12)</td>
<td>14.7 (5)</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>Sporting event</td>
<td>20.9 (14)</td>
<td>11.8 (4)</td>
<td>0.859</td>
</tr>
<tr>
<td></td>
<td>Park or playground</td>
<td>17.9 (12)</td>
<td>14.7 (5)</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>Shopping centre/shopping trolleys</td>
<td>34.3 (24)</td>
<td>41.2 (14)</td>
<td>0.308</td>
</tr>
</tbody>
</table>

*significant at confidence level 90
Results

• Individuals who recalled the specific message of the campaign thought the message was relevant to them (85.7%) and made them more likely to protect their skin from the sun.

• Other recalled messages received lower relevance and impact scores, e.g. ‘nothing healthy about a tan’ (75%) and use sunscreen (60%).

Conclusions

• This was a small-scale pilot intervention conducted in a limited geographic area over a short period of time.

• However unprompted recall and high perceived relevance of the message suggest that a community-delivered message that focuses on short-term appearance effects of sun exposure may be an effective intervention for this hard-to-motivate adolescent group.
Implications

- Use of an appearance-based harm minimisation approach for sun protection may allow social marketers to create strategies/messages more relevant to the concerns of adolescents (i.e., current appearance), and provide cues to action that can both promote and facilitate sun protection.

References


- Johnston KM, Jones SC & Iverson D (2009) for the development of social marketing programs for adolescents’ and young adults’ sun protection. Public Health 123 (Suppl 1), e6-10.

