Skin cancer and recreational tanning coverage in popular North American magazines (2001-2012): A comparison before and after the IARC report

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Conflict of Interest
None to declare
Learning Objectives:

1) The participant shall be able to identify gaps in the transfer of key information from an international cancer research agency into public mass print media

2) The participant shall be able to identify differences in information (risk factors, attitudes/behavior, screening) between text and images about skin cancer and tanning in popular magazines

Skin Cancer

- Most common cancer
- Melanoma & non-melanoma
- Largely preventable; survival high w/ early detection
- UV exposure: most important risk factor
Mass Media, Skin Cancer, & Tanning

- Mass media is an influential source of skin cancer & tanning information
- Text & images influence knowledge, attitudes, & behaviors about skin cancer & tanning

2006 IARC Report

- Landmark evidence synthesis report
- Evidence linking indoor tanning bed use & skin cancer
- Risk of melanoma ↑ 75% with use of tanning devices before age 30
Objective

Evaluate **volume & nature** of North American magazine coverage of skin cancer and tanning (2001-2012)

*Did media coverage differ before vs. after the 2006 IARC report?*

<table>
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<tr>
<th>Risk Factors</th>
<th>UV Behaviors</th>
<th>Early Detection</th>
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<tbody>
<tr>
<td>UV exposure</td>
<td>Tanned look</td>
<td>Skin self-exam</td>
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<td>Light hair/skin/eyes</td>
<td>Solar UV avoidance</td>
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<td>Moles</td>
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<td>Sunburns</td>
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<td>Personal/family history</td>
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<td></td>
<td>Sunscreen</td>
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</tbody>
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Methods

- Directed content analysis
- 29 popular magazines, 2001-2012
- Codebook based on AAD, ACS, CCS risk factors & guidelines
- 10% sample inter-coder reliability (kappa scores 0.83-1.00)
- SPSS v21, chi-square
Results: Volume of Coverage

761 articles & 1267 images on skin cancer & tanning in 29 magazines (2001-2012)

More articles published after 2006 IARC report
351 \rightarrow 410, \chi^2=4.57, p<.05

Shape Magazine, June 2009

Articles per year (2001-2012)
Context: Smoking & Lung Cancer

2006 IARC report:
coverage ↑ 16%

1964 Surgeon General’s report:
coverage ↑ 107%

Results: Risk Factors

After 2006 IARC report:
↑ susceptible phenotype in images
11% → 15% $\chi^2=4.39$, p<.05

No change:
UV exposure 40%
sunburns
personal/family history < 12%
numerous/abnormal moles
Results: UV Behaviors

After 2006 IARC Report:

**↑ sunscreen use** in articles
57% → 69% $\chi^2=11.55$, $p<.01$

**↓ tanned look** in articles, images
36% → 25% $\chi^2=9.72$, $p<.01$
45% → 37% $\chi^2=9.38$, $p<.01$

**↓ sun avoidance** in articles
19% → 12% $\chi^2=6.82$, $p<.01$

No change: discouraged indoor tanning (17%), promoted shade, hats, protective clothes (<15%)

Results: Screening

After 2006 IARC report:

No change for screening variables (skin self-exam, physician skin exam, ABCD criteria)

< 20% articles, < 2% images

Asymmetry  Border irregularity  Color  Diameter: ¼ inch or 6mm
Why such minimal impact?

• Report source (Surgeon General vs. IARC)
• Press release
• Skin cancer not viewed as serious
• Cultural beauty ideal of suntanned skin

Summary & Conclusions

• Modest ↑ in skin cancer/tanning coverage > 2006 IARC report
• Key report messages not taken up by media
• Some improvements in magazine reporting of UV behaviors
• More effective dissemination of public health skin cancer/tanning messages needed
Jamie wanted a “killer” tan, and that’s what she got. She died when she was just 20.

Teen Vogue, June 2010

People who lie in a tanning bed increase their melanoma risk by 75%.

Self, June 2011

My best friend died of skin cancer. Her life was filled with surgeries, treatments, and tests.

Shape, June 2007

Men get twice the overall number of skin cancers as women do.

M & F, August 2007

The sun is the leading cause of skin cancer; hopefully you’re shielding yourself from its rays.

Shape, June 2009

It’s no secret that the sun causes cancer, as well as wrinkles and brown spots.

Self, June 2011

References


Pierce JP, Gilpin EA (2001). News media coverage of smoking and health is associated with changes in population rates of smoking cessation but not initiation. Tobacco Control, 10, 145-143.
Thank you

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