Reviewer's report

Title: Coverage of skin cancer and recreational tanning in North American magazines before and after the landmark 2006 International Agency for Research on Cancer report

Version: 2 Date: 29 December 2014

Reviewer: Kim Walsh-Childers

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Major compulsory revisions -- I did not identify any problems that would rise to this level of concern.

Minor essential revisions --

1. I would have liked to see more specific description of the coding of “information about the presence of tanned beauty ideals.” Table 2 says only that this applies to content that “promotes tanned ideal or having a tanned look,” but it doesn’t give any information about what kind of content would be considered to promote a tanned ideal. Similarly, how did the researchers distinguish images of “a person with tanned skin” from an image of an individual with a naturally darker complexion? One would expect North American magazines during this time frame to have included more Hispanic-Latino models and individuals of mixed racial background, who are likely to have naturally darker complexions. So it’s important to explain whether a non-black model with darker skin, dark hair and brown eyes would be considered to illustrate “a person with tanned skin.”

2. I also would have liked to see a bit more discussion of the meaning of “resolution informed coding.”

Discretionary revisions --

1. One obvious analysis that does not appear to have been done would have compared coverage between the different types of magazines, especially women’s and men’s magazines, given that these accounted for the vast majority of magazines analyzed. In particular, it would be of interest to know whether men’s and women’s magazines changed equally in their portrayal of the tanned beauty ideal and in their promotion of sunscreen use, self-tanners, etc.

2. The literature review makes the link between exposure to media coverage and beliefs and attitudes about skin cancer/tanning, but it does not make the link between either media coverage or attitudes and skin cancer prevention behavior. This is important to note because there is evidence that people continue to engage in tanning even though they understand the link between UV exposure and skin cancer. This makes the analysis of media inclusion of tanned beauty ideals that much more important.

3. The authors make an excellent point about the link between increased coverage of sunscreen use and high-SPF sunscreens and the fact that these are
commercial products. Advertising ties also may explain the failure of magazines to include the links between tanning bed use and skin cancer. There also may be an indirect tie here with the decrease in coverage of the risks of outdoor tanning, in that sunscreen manufacturers generally promote the idea that unlimited sun exposure is fine and even desirable so long as one uses sunscreen. In fact, there is evidence that individuals who use sunscreen actually spend significantly more time in the sun than those who do not, such that the increased exposure time may well outweigh the benefits of sunscreen use. Thus, ironically, promotion of sunscreen use – in the absence of promotion of sun avoidance/shade-seeking – could lead to an INCREASE in skin cancer risk behavior.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.