Author's response to reviews

Title: parents knowledge, attitude and behaviour concerning sunning their babies; a cross-sectional, descriptive study

Authors:

Nihal Aladag (nihal_aladag@yahoo.com)
Muge Filiz (dalim_99@hotmail.com)
Pinar Topsever (topsever@gmail.com)
Suleyman Gorpelioglu (sgorpelioglu@gmail.com)

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Author's response to reviews: see over
TO THE EDITOR AND REVIEWERS

First of all, the authors want to thank both to the editor and the reviewers for their valuable comments and contributions.

The format of the manuscript revised as mentioned in the web sites
“http://www.biomedcentral.com/info/ifora/medicine_journals” and “http://www.biomedcentral.com/bmcpediatr/ifora/#abstract”

Other changes that the authors decided to make themselves are as below;

1. The word “attitude” was added to the title of the manuscript. Because the question “what would you do in case of neonatal jaundice” is evaluating the attitude of participants.
2. Background of abstract section was revised
3. In the results of the abstract section (line 3) the sentence “with high educational level” was changed as “with an educational level of ≥6 years). The percentages (line 4) (86.4%, 5.9%, 12.7%) was written in brackets.
4. The word “doctor” was changed as “physician” in whole text.
5. The conclusion of the abstract section as was revised.
6. Table 1 was taken to the 5th paragraph of the “background” of the manuscript, so the three tables left were renumbered (before revision 2,3,4 and after revision 1,2,3 respectively).
7. The type of the study (cross-sectional, descriptive) was mentioned in the first paragraph line 1 instead of the second paragraph line 1 of methods of manuscript.
8. The last line of the 2nd paragraph of methods of the manuscript was deleted.
9. In the result section of the manuscript, the median of the age of the babies was added to the first line of “general characteristics of the study population”
10. Results section, under the subheading “behaviour about sun exposure” 3rd paragraph line 4 the percentage of four (3.4%) of the sunscreen users was changed as 28.6% realising that valid percent should be given.
11. In the discussion section the 3rd sentence beginning with “The main results….” was changed as first line
12. New findings from new literatures was added to the 3rd paragraph (line 6-9), 4th paragraph (line 4-6), 5th paragraph line (2-4), 7th paragraph line (3-7) of the discussion.
13. The first sentence of conclusion was revised, and the sentence beginning with “therefore it is critical that parents be informed……” in the last paragraph line 4 of background was taken to the conclusion 1st paragraph line 3.
14. the sentence “rickets is more common than melanoma” was added to the second paragraph (line 2) of conclusion part of the manuscript.
15. Reference 19 was dropped, and16 more references was added to the reference list (references 9-11,13,16,24-33,37).
16. For the manuscript the authors had already taken an editorial assistance. The colleague Evin Isgor Tilki mentioned in acknowledge is a medical writer at Omega CRO / Turkey. Her affiliation was added to the acknowledgement.
17. Nida Sen (Smith) is a native english speaker living in United States and the manuscript was sent to her for language revision.
TO THE REVIEWERS

1. REVIEWER (JEAN-FRANÇOIS DOR... last words were not read because the word characters are not compatible)

General comments
The authors mentioned already that the study was conducted in winter in discussion section (4th paragraph last two lines) which might have lead to some response bias in the participants.

Major compulsory revisions
1-We have added the questionnaire as annex to the article.
Neither calcium intake nor type of clothing during sun exposure were not specifically addressed in the questionnaire because the aim of this study was to investigate cultural health beliefs of mothers/care-givers about the effects of sun exposure in general.

2-The authors wanted to investigate mothers’ beliefs about the effect of sunlight on neonatal jaundice, irrespective of an eventual own experience (thus, the age range of the infants/babies is not an obstacle to this aim), as it is known that such cultural health beliefs are acquired through sources as experienced elder family members, neighbours, peers etc.

3-This primary study was designed as a descriptive one, not analytic. Its aim was, as mentioned above, to generally illustrate cultural health beliefs for better understanding of health behaviour, not to analyze causal relations. Furthermore, the sample size is not large enough to allow for reliable results in subgroup analysis.

4-The prevalence of rickets for children between 0-3 years of age in Turkey has been reported as 6% (Hatun S, Bereket A, Calıkoglu AS, Özkan B Cocuk Sagligi ve Hastalıkları Dergisi 2003; 46: 224-241) which was added to the manuscript text (page 4/18, background, last paragraph). From this figures it is evident that in Turkey Rickets is still a health problem.

Minor essential revisions
5- The percentages on page 5 (now page 6/18, line 15) 0.22% was corrected as 22%, and on page 6 (now page 7/18, line 5) 15.8% was corrected as 11.8% as the reviewer requested.

6-It is not appropriate to come to such a conclusion because the authors do not have any evidence on the level of information/knowledge of primary care providers in the region where this study was conducted. Neither did they assess the methodology of counseling of parents in primary care as these data are not essential for the aim of this study. However, in the conclusion part, it was suggested that further research should be done to assess the knowledge and behaviour of health care providers regarding sun exposure.
2. REVIEWER (SIMONE HARRISON)

General comments:
A. 1. UV-radiation: As for the amount of ambient ultraviolet radiation, Turkey’s Marmara region is defined to have a solar index of 8, which has been added to the methods section in the manuscript (page 5/18, first line).

A. 2. Population susceptibility to skin cancer: According to the Turkey health report 2003, cancer is the second cause of death and, among others, skin cancer is one of the frequently reported forms of cancer. However, it is stated in this report, that the cancer reports in Turkey are poor and data is incomplete and of poor quality, thus leading to underreported figures for different types of cancer, including skin cancers (it was added to the background section 3rd paragraph, page 3/18) introduction of manuscript text 4th paragraph).

Also the Fitzpatrick skin type (2-4) has been assessed for our study population by the authors and this information was also added to the manuscript (in the method section, page 5/18, first paragraph, last line).

A. 3. Poor bone health: Although, Turkey in a geographical location with abundant sun light exposure, Vitamin D- deficiency continues to be a major problem. Although, most of the studies are not recent, the yearly incidence rates reported vary from 1.67%-19%, changing according to study, time span and region. (This information was added to background section, page 4/18, 6th paragraph)

A. 4. Sun exposure behaviour: The present study aimed at investigating certain (but not all!) aspects about sun exposure behaviour of parents (i.e.: sunning infant outdoors (Question Nr. 7), sunning infant behind the window (Q. Nr 8), sunning hours and duration (Q. Nr 10), use of sunscreen (Q. Nr. 11), use of appropriate sun protection factor (Q. Nr. 12), correct time span between application of sunscreen and sun exposure (Q. Nr. 13)) as can be seen from the questionnaire, which has been added to the manuscript as additional file 1. According to the parental data of this descriptive study, the authors can only report about above mentioned behavioural patterns concerning sun exposure of infants/children.

B. 1. Health consequences of overexposure to sun: As mentioned above, there is no reliable evidence of the direct risks of overexposure to sunlight in childhood in terms of skin cancer/melanoma incidence in Turkey (Turkey Health Report. MoH, RSHC School of Public Health, Publication No SB-HM-2004/01, page 17). (http://download.bagkur.gov.tr/saglikbakanligi/turkeyhealthreport.pdf) Last accessed on 14.7.2006. It can be argued though, whether the absence of evidence can be interpreted as no evidence. (underreported figures?)

B. 2. Health consequences of underexposure to sun: According to prevalence/incidence rates of Vitamin D-deficiency related disorders, underexposure to sunlight in childhood seems to be an important health issue for maternal/paediatric preventive care in Turkey.

B. 3. Guidelines: Presently there are no evidence based Turkish Guidelines for the appropriate treatment of these conditions.

B. 3. 1. -Vitamin-D defiency related disorders: In the medical literature, it is recommended by Turkish paediatricians though, to instruct/educate mothers to sun their infants at least 20 minutes per day outdoors, stressing that sunning behind the window does not allow the uv-rays stimulating D-vitamin synthesis to pass, and thus, the desired health effect cannot be obtained by doing so
This is intriguingly contradicting other evidence from the American Academy of Paediatrics, that infants below the age of six months should not be exposed to direct sunlight, as sunscreen application is not recommended under this age (American Academy of Pediatrics, Committee on Environmental Health. Ultraviolet light: a hazard to children. Pediatrics 1999; 104: 328-333.).

B. 3. 2. -Neonatal Jaundice

Phototherapy is recommended for neonatal jaundice in infants, there are no reports/recommendations about the benefit of use of direct sunlight for neonatal jaundice in the medical literature (American Academy of Pediatrics, Provisional Committee for Quality Improvement and Subcommittee on Hyperbilirubinemia. Practice Parameter: Management of Hyperbilirubinemia in the Healthy Term Newborn. Pediatrics 1994; 94(4): 558-565.). this was added to both background (page 3/18, 2nd paragraph) and discussion (page 7/18, 3rd paragraph, last line-page 8/18, first line).

B. 3. 3. Nappy rash

In guidelines, there is not any recommendation to sun babies for diaper rash (Association of Women's Health, Obstetric, and Neonatal Nurses - Professional Association. 2001 Jan. 54 pages. NGC:002155) this information was added to the discussion section, page 8/18, 3rd paragraph

Major compulsory revisions:

1) Corresponding information (as discussed under “general comments” above) was added to the text. 1(a) see “general comments” A3 ; 1(b) “general comments” B1.
   Appropriate behaviours was given in background section , page 4/18, first paragraph, last line.

2) A passage on local UV-index was added to the text.
   According to latest census data the population of Degirmendere is 22.086. Kocaeli is located between 29° 22'-30° 21' eastern longitude and 40° 31 '- 41° 13' north latitude. The latitude and the population of Kocaeli is added to the methods' 1st paragraph, page 4/18.

3) Information about ethnicity and skin type (Fitzpatrick) was added to the method section. (see “general comments” A2)

4) The term “risky” at conclusion section, 1st paragraph (page 9/18), was changed into “inappropriate”, as suggested by the reviewer.
   In the context of the manuscript “appropriate behaviour” depicts;
   -sunning infants above the age of 6 months outdoors (Question Nr. 7) – appropriate
   -sunning infant behind the window (Q. Nr 8) –inappropriate
   -sunning hours and duration (Q. Nr 10) –avoid UV exposure between the peak exposure hours of 10 AM and 4 PM - appropriate
   -use of sunscreen (Q. Nr. 11)- appropriate
   -use of appropriate sun protection factor (Q. Nr. 12)- Apply sunscreen with a sun protection factor (SPF) at least 15 - appropriate
   -correct time span between application of sunscreen and sun exposure (Q. Nr. 13)- Apply sunscreen 15 to 20 minutes before going outside, reapply sunscreen every 2 hours or immediately after swimming – appropriate
   The literatures which support these behaviours was given at background section, page 4/18, first paragraph, last line (lit no: 24-27).

5) The questions were asked with the purpose of investigating parents’ health beliefs, their knowledge on the health effects of sunlight exposure for jaundice, bone health and nappy
rash, and their behaviour concerning sunning their infants in general (not for any specific purpose/reason like jaundice, bone health etc.)

The study population consisted of individuals with low socio-economic, socio-cultural background, thus excluding reasons like sunning infants for leisure during beach holidays or even fashionable/aesthetic concerns like giving the infant a sun tan! These results are clearly meant to be interpreted in the context of intentional sun exposure of children for health reasons, as this study was conducted by primary care physicians in a primary care health setting, it was evident for all participants that the questions intended to inquire health beliefs and health behaviour.

6) The questionnaire was added to the manuscript with questions nr. 7. and 8. investigating this issue. In table 3 (page 17/18) the readers can see that while 42 parents were sunning their babies indoors, 97 parents preferred to sun their children outdoors. Thus, 33 parents seem to do both, but still display the appropriate behaviour of sunning their baby outdoors. According to these figures, the ratio of inappropriate behaviour concerning sun exposure venue is 0.43 (42/97).

7) See above under B. 3. Guidelines and major compulsory revisions point 4. Corresponding information was added to the text.

8) In therapeutic institutions allied to the Turkish Ministry of Health, the only available technology/intervention for treating neonatal jaundice is phototherapy and exchange transfusion. Newer technology like biliblankets is not available in standard health settings in Turkey.

8 and 9) Although, phototherapy and exchange transfusion are the state of art therapy for neonatal jaundice, parents still may display cultural health beliefs as sunlight being beneficial for neonatal jaundice, nappy rash etc in specific, or the health of the baby in general. This study aimed at identifying these beliefs and attitudes and some related behavioral patterns. There was no intention whatsoever; to create a impression as to sunning babies through a window might be beneficial.

10) The authors mentioned already that the study was conducted in winter in discussion section (4th paragraph last two lines) which might have lead to some response bias in the participants.

Minor essential revisions:

1-The word “rush” was changed to “rash” and “asses” was changed to “assess” (background of abstract ).

2- the percentages were changed as the reviewer recommended (results section, page 6/18, 3rd paragraph).

3- The subheading of the chapter was altered to: “Parent’s health beliefs about benefits of sunlight and attitudes towards jaundice” (page 6/18)

4) Raw data are always supposed to be included in text and tables to enable readers to re/calculate risks and ratios by themselves, if desired. However, the authors added the valid percents of the results at the table 1,2,3.

5) The reference 19 was replaced with original ones (references 24-27).

6) The authors have consulted two native English speakers, one mentor, as well as an editorial consultancy company for this manuscript and deem it sufficient for English proficiency.