Author's response to reviews

Title: Advances in oral health knowledge of Greek navy recruits and their socioeconomic determinants

Authors:

Prof Athanasios I. Zavras (zavras@hms.harvard.edu)
Theofilos P Vrahopoulos (vrahopoulos@dent.uoa.gr)
Dr Kyriakos Souliotis (souliotis@hol.gr)
Spyros Sylvestros (ssylvestros@dent.uoa.gr)
Ioannis Vrotsos (vrotsos@dent.uoa.gr)

Version: 2 Date: 4 Nov 2002

PDF covering letter
Dear Editor,

Thank you for the opportunity to revise the paper “Advances in oral health knowledge of Greek navy recruits and their socioeconomic determinants”. Both reviews raised important points and overall have helped us improve the quality of the work.

In summary, we did addressed all points raised and have revised the manuscript accordingly.

Following please find our detailed response in each item.

Reviewer: Mary Tavares

We thank the reviewer for pointing out the significance of the paper to public health professionals and private practitioners alike.

In paragraph 2, we clarified the sample size as instructed. The text now reads:

“A total of 1511 Greek subjects aged 20-29 years participated in the first survey (1985), and 1253 participated in the second survey (1996). All were healthy male recruits at the Hellenic Naval Force, undergoing their basic military training at the “Palaskas” Training Center in Elefsis, Greece.”

In paragraph 3, issue on representative sample. We agree with the reviewer that the samples are not representative, although the nature of military drafting and recruitment allocation point to this direction. Thus, we re-phrase the text to eliminate the notion that our samples are representative.
Paragraph 4, differences in interpretation due to SES. We agree that such sources of bias cannot be ruled out and we added a paragraph in the Discussion. The text now reads (page 11):

“The participants were asked to answer simple questions, the content of which remained unknown prior to its completion. Illiterate subjects were read the questions. Although it cannot be excluded, the validity of the results is unlikely to have been compromised by bias due to differential comprehension of the questions (due to socioeconomic differences within each educational stratum).”

Paragraph 6, findings are noted but not described. We agree with the reviewer that the findings should be described. We added the descriptions in pages 6 and 7.

Paragraph 7, household expenditure description should be moved to Discussion. Although we agree with the reviewer that the Household Expenditure Surveys were not conducted by our group, we chose not to move this section to the Discussion because our group conducted a major secondary analysis of the Survey data. However, we have referenced the Surveys appropriately to reflect the fact that the data was collected by the Statistical Service of the Greek Republic.

Last paragraph, the authors need to be more definitive about connections between 2 surveys. We have added a paragraph to link the two surveys. The conclusions now read:

“In summary, the present results show that the levels of knowledge and attitudes about oral health among young Greeks have improved significantly during the last decade. The improvements coincide with and reflect relevant improvements in the living standards of the Greek population, including increases in income and disposable income, and the supply of healthcare services.”

Reviewer Anne Nordrehaug Astrom

We thank the reviewer for pointing out that analysis of our reasonable dataset can make some useful observations about secular trends.

Comment on “Except for educational data, there is limited information as to socio-economic and socio-demographic compositions of the 2 cohorts.” We agree with the reviewer that this is one of the limitations of this study and we inform the readers in the Discussion section of the paper (page 13, 3d paragraph). However, we feel that comparability of the 2 cohorts is still possible because of the idiosyncrasy of the recruitment scheme. Army recruitment is a constitutional obligation of all Greek males. Thus, they all have to serve. In addition, allocation to recruitment center is a
random process that does not take into consideration social or economic indicators. Also, the only variable of SES that we had, the educational level, increased the validity of the claim. Both surveys had participants from 3 educational strata; further their percentage in 1985 was comparable with the 1996 survey. Thus, we still feel that we can obtain interesting findings from this analysis.

Stratified analysis comment. We agree with the reviewer that if should we had SES variables or more demographic data we could perform multivariate statistics. We also agree that the effect of education was not appropriately studied. Thus, we conducted additional analysis of the data. We used Chi-square statistics to test if educational stratum is significant predictor of the responses. We did find that education does play a statistically significant ROLE. All comparisons were significant at the 0.05 level in all responses except in Question 10, “Willingness to restore/fix dental problems”. In this particular item there was no statistically significant difference between HES and LES (p=0.12).

We incorporated the above information in the text, Results section (page 8). The text now reads:

“To answer the question if education plays a role in knowledge or attitudes towards dental care, the results were analyzed by educational level. The stratified analysis revealed statistically significant differences (p<0.05) between the three educational strata in all questions, but one. The only question in which education seemed not to play a role was the “willingness to restore teeth and fix dental problems” (p=0.12). In 1985, 44.9% of HES subjects and 54.5% of LES expressed the willingness to restore teeth; in 1996, 78% of HES subjects and 80% of LES expressed the willingness to restore teeth”.

“Representative results” comment. We agree with the reviewer and have revised the text accordingly. See response to previous reviewer.

“Check style for References” comment. We agree with the reviewer that the bibliography style we had used was not appropriate for BMC journals. We changed the references to agree with the journals specifications.