Correspondence

EDITED BY KIRIAKOS XENITIDIS and COLIN CAMPBELL

Omega-3 fatty acid for recurrent self-harm: unanswered questions

The study by Hallahan *et al* (2007) has clinically important implications but before accepting the findings as valid we wish to raise a few points regarding some of the methodological and analytical aspects.

Of the 392 patients initially assessed for eligibility, only 39 (10%) completed the study, a large number (343) having been excluded for various reasons. Although this rigorous selection procedure might have enhanced the internal validity of the findings, we are concerned that the generalisability of the findings in the real-world clinical situation (i.e. external validity) might have been compromised.

Certain sample characteristics merit attention. Apart from mentioning that participants had had at least one lifetime self-harm episode in addition to the index episode, the report does not provide any data on the number, frequency, severity and recency of self-harm episodes. These data are important to characterise the sample and to ensure that they did not differ between the two groups. For example, the risk profile of a 60-year-old patient with two self-harm episodes 10 years apart would be very different from that of a 20-year-old with the previous episode only 10 days prior to the index episode. Furthermore, in patients with borderline and other personality disorders, suicidality and impulsivity can vary drastically over time, even in a single day. Instruments rated every 4 or 6 weeks might not capture the 'real' picture. Finally, significantly more participants in the placebo group were single or divorced compared with the active drug group. In view of this significant difference, marital status should have been included in the logistic regression and other analyses.

For analysis of suicidality scores the two groups were compared after categorical classification of values (no suicidal ideation *v.* presence of any suicidal ideation) to obtain a statistically significant difference. For all other variables of interest mean scores were compared. When the mean suicidality scores were compared the difference was not statistically significant. Indeed, it is interesting to note that the proportion of self-harm episodes was actually higher during the study period in the patients on active drug (7/22, 38.2%) compared with those in the placebo group (7/27, 25.9%), although the difference was not statistically significant.

Finally, it is not clear what the findings really mean in terms of decrease in 'surrogate markers of suicidal behaviour'. Hallahan *et al* discuss the findings in terms of improved mood and well-being, but the logistic regression analysis showed that depression and other psychological measures did not have any effect on the suicidality score. Other surrogate markers such as impulsivity and aggression scores were not significantly different between the two groups.

Hallahan, B., Hibbeln, J. R., Davis, J. M., *et al* (2007) Omega-3 fatty acid supplementation in patients with recurrent self-harm. Single-centre double-blind randomised controlled trial. *British Journal of Psychiatry*, **190**, 118–122.

D. Basu Postgraduate Institute of Medical Education and Research, Chandigarh, India. Email: db_sm2002@yahoo.com

P. K. Barnwal Postgraduate Institute of Medical Education and Research, Chandigarh, India

doi: 10.1192/bjp.191.3.264

Authors' reply: We thank Basu & Barnwal for their comments. As regards exclusion of so many patients, we stress that easily the biggest reason for exclusion was that the episode of self-harm was the patient's first. We make it clear why we chose recurrent self-harm rather than all patients with self-harm. The other exclusion criteria seem reasonable (regular fish consumption, etc.) and we see no reason why the findings are not applicable to 'real-world' patients. We knew that with such a small population subgroup analysis would be of dubious validity, therefore further defining the groups (e.g. according to recency of other self-harm episodes) was redundant. We certainly could have excluded those patients whose other episode(s) of self-harm were remote from the current one, but we chose not to.

We agree that more measuring points would have been desirable, especially in this capricious sample. This was a resource issue rather than a methodological one. We note the point regarding marital status being different between the two groups but re-analysis of the data controlling for this did not materially affect the results. It was agreed at study outset that in the absence of sufficient power to analyse actual differences in recurrent self-harm we would use the suicidal ideation sub-scale of the OAS–M. One either has suicidal ideation or not (whereas one can have 'some' depressed mood) and it seems appropriate to use a categorical measure here.

We suggest using 'potential marker' for 'surrogate marker' and confess we used the latter word loosely. There was quite good correlation (r=0.5) between measures of depression and the OAS–M suicidality sub-scale score. None the less logistic regression suggested that changes in suicidality were independent of depression scores, which indicates that factors additional to affect drive suicidal ideation. We agree that these findings could be clinically important. However, our findings can be regarded as no more than pilot data, owing to the small sample size. As fish oils are not patentable products, a larger study (with enough power to investigate actual reductions in self-harm) is unlikely to come from industry. Therefore we are continuing to seek funding for such a study.

M. Garland St Ita's Hospital, Portrane, County Dublin, Ireland. Email: mgarland@ireland.com

B. Hallahan Department of Psychiatry, Beaumont Hospital and the Royal College of Surgeons in Ireland

J. R. Hibbeln Laboratory of Membrane Biochemistry and Biophysics, National Institute on Alcohol Abuse and Alcoholism, Rockville, Maryland, USA

J. M. Davis Institute of Psychiatry, University of Illinois at Chicago, Illinois, USA

doi: 10.1192/bjp.191.3.264a