Reviewer's report

Title: Treating cutaneous leishmaniasis patients in Kabul, Afghanistan: cost-effectiveness of an operational program in a complex emergency setting.

Version: 1  Date: 28 September 2006

Reviewer: Theo Vos

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The paper does not stipulate clearly what the research questions is and what the comparator in the economic evaluation is; note that these are key questions on Drummond's checklist. From the write-up of the study I presume the intention is to compare the cost-effectiveness of HNI's 'reference treatment' (SSG intralesionally in most and i.m. in some) against a 'no treatment' option (i.e. the research question is should we be treating CL at all based on CEA considerations?). Not making this transparent leads to further ambiguities in other parts of the methods. For instance, the measures of effectiveness derived from the literature all compare SSG against another treatment and not against 'no treatment'. Only if there is prior knowledge of the untreated course of disease (from historical records, text books?) could one make an assumption about the difference in course of disorder between treatment and no treatment. The authors do not make this explicit if indeed that was their intention.

2. I infer from table 2 that an assumption is made of a triangular distribution for duration of 'untreated' disease with a low of 0.1, a mid of 0.91 and a maximum of 8 years. Note that the reference is wrong and should not be 8 but 2! In that reference I found that these estimates were the reported duration of lesion in a cross-sectional survey and refer to duration until time of survey. First, there is a minor error in assuming 0.1 and 9.1 months translate into 0.1 and 0.91 years. Second, and more importantly, the duration of the 'natural history' of a disease cannot be derived from a cross-sectional study. The estimates from the author's Kabul study would underestimate true duration as it does not take into account duration of disease past the survey date.

3. Next, given the heterogeneity of the few studies with info on effectiveness, I don’t have too much of a problem with the approach to use triangular distributions between most and least effective study outcomes. However, some errors seem to have crept in. Ref 20 reports a probability of cure of 89.5% and not 50% for cryotherapy & intralesional SSG (the estimate of 50% was for cryotherapy & meglumine. Also, the 36% effect from ref 22 was for meglumine and not SSG.

4. The authors infer from their results that their SSG regimen is not ‘cost-effective’ based on a norm of US$150 per DALY mentioned in the 1996 WHO Ad Hoc Cttee on Health Research report. More recently, WHO-CHOICE and the Commission on Macroeconomics and Health have advocated a threshold based on 1* GDP per capita for very cost-effective interventions and a threshold of 3 * GDP per capita to identify cost-effective interventions. This approach has the advantage of being country specific. Later on in the paper reference is twice made to UNDP criteria for what is cost-effective without spelling this out.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

P2, methods section: the term ‘reference treatment’ is ambiguous; it refers to a standard treatment approach adopted by HNI which is being evaluated; in CEA it tends to denote the comparator treatment ? I would avoid the term

P2, conclusions: be more specific, the cost-effectiveness ratio … is … very high (but see comment 4 above about thresholds for determining what is and what is not ‘cost-effective!’

P6, line 4/5: see comments above; clarify estimate of duration of disease. If indeed this is the untreated duration it needs to find other data as reference 2 does not adequately estimate the true duration.

P9, lines 10/11: if you want to conclude that “treatment for CL is not cost-effective, especially when using systemically-administered drugs” your methods should reflect that, i.e. you must make an explicit comparison of CE for i.m. SSG vs no treatment; intralesional vs. no treatment; and preferably also for
intralesional vs. i.m.
P9 last sentence: from where the estimate of 16 years?
P10 three lines from bottom: I doubt ref 7 says anything about interventions in complex emergencies
P11 last bit before conclusion: again unlikely ref 7 says anything about pitlatrines

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
'I declare that I have no competing interests'