The Sahelian countries belong to the meningitis belt and experience approximately 50% of the meningitis cases occurring worldwide. Beside high mortality, acute bacterial meningitis often leads to neuropsychological sequelae including hearing loss. The aim of the study was to estimate the frequency of the sequelae of acute bacterial meningitis in four regions of Niger. Patients after acute bacterial meningitis were enrolled into a cohort with matched control group. Subjects were followed up for two months. The most common sequelae were three functional symptoms: headaches, asthenia, and vertigo among 31.3, 36.9, and 22.4%. A significant motor impairment affected 12.3% of the patients. Hearing loss was diagnosed in 31.3% of the exposed subjects including 10.4% with serious deafness. This study confirmed that hearing loss and motor impairment are frequent complications of purulent meningitis.

The study is interesting. It was designed and performed correctly. The title describes the article well, although it might be a slightly more informative e.g. “frequent complications” or “significant complications” or “serious complications” etc. The abstract reflects well the content of the article. I suggest the modification of the key words. There is no sense to repeat words already present in the abstract body as searching engines browse together title, abstract body and key words – the main aim of key words is to broaden the search results and they need to be different as elsewhere in the text. The introduction is concise and comprehensive. The methodology section is inclusive and sufficient to reproduce the study. In my opinion follow up period (2-3 months) is too short to detect long-term sequelae e.g. seizures. Why was it selected? Results are presented clearly. The authors should explain relatively high subject loss (15.7% in the study group) that could significantly influence the results e.g. mortality rate. I wonder why the authors presented symptoms associated with meningitis at the inclusion (table 1) as OR (odds ratio) while they could calculate relative risk. The discussion is adequate. I would suggest a modification of conclusions. The present are partially not connected with the results. What about: “severe hearing loss and motor impairment are the most serious, frequent neurological sequelae of purulent meningitis in Niger” or “Purulent meningitis in Niger still frequently causes serious complications …”

A minor suggestion to references. May be it would be worth including up-to-date data from developing European counties?

To sum up, the study is definitely worth publishing after minor corrections.
Major Revisions:
Please explain relatively short follow up
Key words
Conclusions must be drown from the results

Minor Revisions:
Why OR was used instead of relative risk?
The impact of high subjects loss should be explained more thoroughly

Discretionary Revisions:
Title
Bibliography

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

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