

**Review Form 1.7**

Journal Name:	<b>Journal of Pharmaceutical Research International</b>
Manuscript Number:	<b>Ms_JPRI_115669</b>
Title of the Manuscript:	<b>MKPURU MMIRI: An Assessment of Crystal Meth Consumption on Cognitive Performance and Brain Histology</b>
Type of the Article	

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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<ol style="list-style-type: none"> <li>The subject has the merit for publication and aimed to investigate the possible adverse effects of methamphetamine on brain function via neuropsychological tools and histopathology assessment as well.</li> <li>It is better to be replaced by <b>"MKPURU MMIRI: The impact of Crystal Meth Consumption on Cognitive Performance and Brain Histology"</b> or <b>"The effects of MKPURU MMIRI Consumption on Cognitive Performance and Brain Histology in an animal study"</b>. The second suggestion is more appropriate.</li> <li>Abbreviations should be defined such as MDA, SOD, GSH, and TAC; no need to explain the statistical software, analytical tests and p-value in abstract; "considerably" is better to replace by "significantly", Neurobehavioral tools and the related significant measurements is better to mentioned in abstract. The last sentence as a conclusion should summarize the study result clearly and cautiously for example: chronic consumption of methamphetamine may deteriorate cognitive function ,.....</li> <li><b>Introduction</b> should supply sufficient background information for the reader to understand and evaluate the experiment you did and also supply a rationale for the study. Likewise it is better to be summarized, more structured and goal directed. Introduction should be comprised of 3 or 4 paragraphs. In the first one the authors are suggested to briefly review the literature on methamphetamine problem (the prevalence of consumption, the cognitive adverse effect and particularly indicate specific cognition domain which are influenced by MA) supported with appropriate references. In the second paragraph is better to focus on the role of hippocampus in cognitive function and the underlying neurotoxic effects of MA on brain tissue particularly review the pervious literature evaluated MA physiopatological effect on various parts of hippocampus ). In the third and fourth paragraph you should raise a research question based on the previous findings and states the methods which are applied to respond the question and explain the aims of your study at the end of introduction. In part  <b>Methods</b>, there is a need to explain more details or at least introduce previous literature for example about the administered dose, the rout of administration (why the researcher chose the oral rout which is not usual methods of MA abuse at least in humans), duration of administration (why two weeks), the reason and the logic for the fifth animal group which received diazepam?, more detail about the neuropsychological measurements and scores achieved by neurobehavioral tools, more detail about the resource of pathological hippocampal samples (which part: CA1?, CA3? Amygdala?...).</li> </ol> <p><b>Result</b> is just composed of figures! Although figures are informative but the study results should be explained in detail and supported by statistical findings and the referred to the related figure. Figures caption also should be more informative and the result of comparison between MA groups and controls (significant pvalue) should be reflected by signs such as * at the top of each bottom and the unit of the measurements should be include.</p> <p><b>Discussion</b>, sentences related to the study findings should be transferred to the previous part results. At the first paragraph you should review the study findings briefly and then compare each on in the following paragraphs with previous literature indicating similarities or explain the differences. Despite the appropriate literature review, it seem the part discussion should be rewrite as well to be more structured and less confusing.</p>	

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	<p>5- At this time, I can't make precise opinion on the validity of the results particularly since the sample size is small and each group is composed of only 5 animal. Likewise the detail of the statistical analysis particularly details of analysis with AVOVA and post-hoc tests are not mentioned in the current version of the manuscript.</p> <p>6- Since, I think the manuscript needs major revision to improve readability, it might be better to omit some irrelevant references and focus on the related and updated ones. In future and after receiving the next revision I could respond more precisely to this question.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	No, The manuscript needs to be revised by a native editor or AI software to be improved in language	
<p><b>Optional/General</b> comments</p>	The final conclusion "The investigation's findings demonstrated that methamphetamine reduced body and brain weight" is in opposite to that mentioned in abstract and part result. Else, It seems the study robust conclusion about the causal relation between MA administration and decrease of hippocampal cells could not be supported by the study design. Although MA administration may correlate with decrease in hippocampal cells, certain conclusion needs studies with higher power with measuring the blood or CSF level of MA and also using regression analysis for adjusting the confounders. Particularly, sequence hippocampal sampling and evaluation of the possible association between MA consumption duration and changes in cells density in future study may aid the investigators to make that conclusion certainly. This limitation of the current study should be mentioned at the last paragraph as well.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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