Author's response to reviews

Title: Effect of 50% ethanolic extract of Syzygium aromaticum (L.) Merr. & Perry. (clove) on Sexual behaviour of normal male rats.

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MS ID : 3430433273709239

Journal : BMC Complementary and Alternative Medicine

The changes have been made in the manuscript in accordance with the suggestions made by Mr. Mohammad Sayyah in his 2nd review report. A point-by-point response to the comments is provided herewith.

Revisions

The responses to the comments 1 and 5 have now been included in the manuscript on page No.3 and 6 respectively.

Response to comment 3:

a) The test drug has been studied for likely adverse effects viz. ulcerogenic effect and neuropharmacological toxicity. The former was included in version-2 while the gross behaviour test for the latter has now been included in the accompanying version of the paper (page no.6)

With regard to the issue of determining therapeutic validity of the extract it is submitted that:

Clove in traditional unani system of medicine is used in crude form. Its therapeutic doses are established and widely practiced without known and record toxicity in unani system of medicine since centuries. However, in the present study we preferred to use extract of clove, instead of clove (crude) in order to minimize the dosage and its convenient use in animal experimentation. Although the doses of the extract used in the study are equivalent to the traditional unani clinical doses of clove reported in standard unani texts. The doses for animal experimentation were calculated according to Freirich (1968), multiplying the unani clinical doses with the conversion factor of 7. The study was aimed to find out the validity of unani claim regarding aphrodisiac affectivity of the clove and was not to determine therapeutic validity of its extract. The extract, as study showed enhanced sexual function. The components responsible for
enhancing sexual function are also present in clove. Thus, this substantiates the claims of unani medicine that the clove possess aphrodisiac effect.

Further, when an extract or active fraction is used it is better to evaluate its therapeutic validity by examining its lethal and toxic doses, and therapeutic index based upon them, should also be determined. The WHO has also mentioned that standard, rigorous pre-clinical toxicity testing of traditional drugs that are in active contemporary use is not necessary. Since clove is used in unani medicine in crude form, not in extract form, therefore, we limited toxicity testing of the extract. So, we thought determination of therapeutic validity is not so much necessary for us.

b) As suggested the preliminary phytochemical analysis for the extract (50% ethanolic) of clove was also performed by the methods described by Jenkins et al. (1967). The analysis of the extract showed that it possesses alkaloids, amino acids, flavonoids, phenol, proteins, sterol, reducing sugar and tannins. It has also been mentioned in introduction section of the manuscript and discussion of the paper also renovated accordingly.

3. Typographical errors as indicated have now been corrected .eg:

Page 10, Ref 6: Jawadi.......corrected as Javadi and Mahzoob as Majzoob

Page 11, Ref 23(now page,12, Ref 27)testosteron ....corrected as testosterone.

Ref 24(now Ref 28): dihydrotesteron.....corrected as dihydrotestosterone. And Behave .....corrected as Behav.

Ref 29(now Ref 18) : vaso relaxant....corrected as vasrelaxant.

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The changes have been made in the manuscript in accordance with the suggestions made by Mr. Srinivas NAMMI in his 2nd review report. A point-by-point response to the comments is provided herewith.

Minor Essential Revisions
1. The reference for the effect of spices on gastric mucosa has now been mentioned in the discussion section of the manuscript.
2. In Table 1 the symbol @ used for indicating the time period has now been deleted. Instead of this time period written in the first column of the corresponding parameters as suggested. The symbols # and ## for results with no significance have also been deleted and instead of these symbols only NS is used.
3. All the titles of the references bolded. And all journal titles italicized as per the format of the journal.
4. Italicization of the first level heading: Materials and methods has been removed.
5. We have thoroughly checked the manuscript again for typographical and grammatical errors and corrections are made wherever required.