

IMPACT OF CONSUMPTION OF KAVA (PIPER METHYSTIAM) IN THE TREATMENT OF STRESS INDUCED INSOMNIA IN ADULTS

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ABSTRACT

Kava is an herbal remedy, claimed to have anxiolytic and sedative properties respectively, without dependence potential or any appreciable side-effects. In this pilot study, adults suffering from stress-induced insomnia were treated with kava 120 mg daily.

There were 25 male and 20 females with a mean age of 50 years (range 30-65). Pregnant women were excluded, only the middle age groups suffering from insomnia were included. The patients were consuming it from past 3 weeks. The daily dose of kava was 120 mg per day. There was no side effect seen in the middle age group consuming kava 2 to 3 times a week. However, for people (20%) consuming it daily faced dryness of mouth. Insomnia was measured in three areas: *time to fall asleep*, *hours slept* and *waking mood*. The normal time to fall asleep is taken to be 20 min or less. The normal number of hours slept is taken as 7+, the maximum severity is no sleep all night. The significant result is found in the psychosomatic behaviour of the patient.

Keywords: stress, insomnia, kava: sedative, anxiolytic properties.

Aim: To study the impact of kava on stressed induced insomnia in adults.

Objective: 1. To conduct a pilot study understanding the side-effects of Kava.
2. To compare the stress level before and after consuming Kava.

INTRODUCTION

Kava is an extract of the roots of the Polynesian plant *Piper methysticum* and is used in the South Pacific for its sedative, aphrodisiac and stimulatory effects, both recreationally and in religious ceremonies. It contains a number of active compounds, amongst which are the kava pyrones: kavain, dihydrokavain, methysticin, dihydromethysticin, yangonin and desmethoxyangostin, but it is not known which may be responsible for any anxiolytic properties that it may possess. Anxiety disorders are among the most common psychiatric disorders that affect all age groups of the general population. Currently, the preferred treatment is with pharmacological drugs that have antidepressant or anti-anxiety properties. However, these agents have

numerous and often serious adverse effects, including sedation, impaired cognition, ataxia, aggression, sexual dysfunction, tolerance and dependence. Withdrawal reactions on termination after long-term administration are also a major limiting factor in the use of these agents. Herbal remedies, including kava (*Piper methysticum*), have been shown to be effective as alternative treatments, at least in mild to moderate cases of anxiety. It is available in the west as an over-the-counter preparation. Its biological effects, due to a mixture of compounds called kavalactones, are reported to include sedative, anxiolytic, antistress, analgesic, local anaesthetic, anticonvulsant and neuroprotective properties. Individuals who are under stress, which may often be prolonged and difficult to cope with, frequently suffer from insomnia. Although benzodiazepines and cyclopyrrolones are often effective for this indication; inherent in their use is the fear of becoming dependent upon them. This has not been reported with either kava or valerian and side-effects are virtually non-existent either. Thus, they might be suitable remedies with which to treat stress-induced insomnia.

METHODOLOGY

An online survey was conducted among the middle age group people suffering from stress and insomnia.

Subjects: The trial was undertaken by 45 outpatients suffering from stress-induced insomnia of varying duration and intensity. There were 25 male and 20 females with a mean age of 50 years (range 30-65). Pregnant women were excluded, only the middle age groups suffering from insomnia were included.

Design: The patients were consuming it from past 3 weeks. The daily dose of kava was 120 mg per day.

These were used to record degree of sleep disturbance, respectively.

Side effects: There was no side effect seen in the middle age group consuming kava 2 to 3 times a week. However, for people (20%) consuming it daily faced dryness of mouth.

Sleep disturbances: The three parameters are: time to fall asleep, hours slept and mood on final waking. The normal time to fall asleep is taken to be 20 min or less. The normal number of hours slept is taken as 7+, the maximum severity is no sleep all night. Waking mood is assessed as "wonderful" to "awful".

Process of data collection: The was collected through an online form that is PSQ (PERCIEVE STRESS QUESTIONNAIRE).

RESULT

The sample size is 45 person (25male and 20 female) all over Maharashtra.80% - 90% people suffering from insomnia and stress were treated with kava, as a result their sleep cycle improved and quality of life improved. The effects of kava include muscle relaxation, sleepiness and feelings of wellbeing. However long-term use of kava it can lead to gastric disturbance, diarrhoea, dizziness and vivid dreams.

CONCLUSION

Both the impact of the adult i.e., stress problem and the severity of the resulting insomnia were rapidly relieved by kava. Kava was undoubtedly effective in this study and would seem to have number of desirable properties for use as a general hypnotic and anxiolytic. Thus, it might be a suitable remedy to treat stress - induced insomnia in adults.

DISCUSSION

Stress problems and severity of the resulting insomnia were rapidly relieved by Kava. This might indicate permanent relief on these two parameters or might suggest that the improvements had achieved by kava. Given the relatively small sample of 45 persons (25male and 20 female) the incidence of the side- effects was low. The very low incidence of daytime drowsiness would suggest that unlike synthetic hypnotics would not constitute any bars to its use for this induction and maintenance of sleep. Kava was undoubtedly effective in this study and would seem to have a number of desirable properties for use of general hypnotic and anxiolytic factors. Kava has a beneficial effect on the sleep indicating that it may well improve the quality of sleep. Thus, it might well be useful in chronic insomnia in the elderly people. However, the whole objective of this pilot study is to point the way to future research of a scientific nature in the most cost-effective way.

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