

# Local Coping Strategies Adopted by People with Insomnia – A Pilot study

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**Objective:** To study the relationship between subjective sleep quality, desire and choice of medical treatment and/or self-coping means for sleep improvement.

**Method:** A cross sectional questionnaire survey in Hong Kong was performed online. The subjective sleep score of respondents were recorded as well as their expectation and history of seeking assistance in sleep improvement. They also ranked the priority they would place on various coping strategies in insomnia.

**Results:** Of the 172 respondents, a mean subjective score of 3.34 out of 5 was recorded for sleep quality. 19.8% of respondents had markedly unsatisfactory sleep. 52.9% would like to improve their sleep but only but only 31.9% of this subgroup attempted to do so. Of those who did, the majority tried self-coping measures and only 19.7% opted for medical treatment. Regardless of previous attempts, medical means (mainly long term hypnotics) ranked relatively low as the choice of treatment.

**Conclusion:** From the public's point of view, medical treatment was perceived as unsatisfactory. Further research is needed to improve this deficiency, including a gap analysis between the factors of sleep quality expectation and management as well as the identification of a tool that the public can use to prompt treatment when needed. (**Sleep and Hypnosis 2009;11(1):5-8**)

**Key words:** Insomnia, coping strategies, treatment choice

## INTRODUCTION

Insomnia, depending on the definition, has a prevalence of 19-42.5% in various countries (1-4) and at least 11.9-20.4% locally (5-7). It has a proven impact on morbidity (8-12) and mortality (13,14), quality of life (15,16), direct healthcare cost (17-19) and indirect economic costs (14,14,20). The majority of studies had

concentrated on these aspects but there is a paucity of literature on patients' expectation in sleep quality and treatment, and their behaviour in response to sleeping poorly.

In particular, the issue of people with insomnia not seeking help and not taking treatment has been raised before (21) but little research has been undertaken in this area. The authors of the current study have a clinical impression that this issue is particularly relevant in Hong Kong. This may be because of the local availability of herbal supplements and complementary therapies that substitute for medical treatment. An alternative possibility is that insomniacs do not realize the need to seek treatment.

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The aim of this study is to perform a preliminary analysis of the improvement habits, medical or otherwise, of adults with poor sleep quality in Hong Kong. Their expectation in sleep improvement and the means to do so were also explored. Data was sought to guide further studies.

**METHOD**

During the period from January 2008 to May 2008, people were invited to complete a self-administered online questionnaire via e-mail propagation. Insomnia was defined by as unsatisfactory sleep as felt by the respondents. Sleep quality was measured by a subjective sleep score (SSS), rating how well they feel they were sleeping (from 1

**RESULTS**

During the study period there were 172 completed questionnaires. Of these, 52.3% were women. The mean age of the studied population was 37 (range 23 to 62). Their mean SSS was 3.34 and 91 respondents (52.9%) had a score below this, while 12 (7.0%) had insomnia between six episodes a month to five episodes a week. Details of the sleep quality of the respondents and the corresponding proportion who indicated a desire for sleep improvement are shown in Table 1. Their frequency of insomnia is categorized in Table 2.

Only 5.0% of those with insomnia in the previous year had sought medically related treatment comparing to 20.4% who had used

**Table 1. Distribution of Sleep Rating Amongst Respondents**

|                         | Subjective Sleep Score |               |               |               |              |
|-------------------------|------------------------|---------------|---------------|---------------|--------------|
|                         | 1                      | 2             | 3             | 4             | 5            |
| No. of respondents      | 5<br>(2.9%)            | 29<br>(16.9%) | 57<br>(33.1%) | 65<br>(37.8%) | 16<br>(9.3%) |
| No. wishing improvement | 4<br>(2.3%)            | 23<br>(13.4%) | 42<br>(24.4%) | 21<br>(12.2%) | 1<br>(0.6%)  |

1 being the poorest to 5 being the best

**Table 2. Distribution of Frequency of Insomnia Amongst Respondents**

|                    | Frequency of Insomnia |             |               |               |               |               |
|--------------------|-----------------------|-------------|---------------|---------------|---------------|---------------|
|                    | Cat 1                 | Cat 2       | Cat 3         | Cat 4         | Cat 5         | Cat 6         |
| No. of respondents | 7<br>(4.1%)           | 5<br>(2.9%) | 23<br>(13.7%) | 36<br>(20.9%) | 79<br>(45.9%) | 22<br>(12.8%) |

Cat 1 1-5 episodes per week  
 Cat 2 6-10 episodes per month  
 Cat 3 1-5 episodes per month  
 Cat 4 1-5 episodes per quarter  
 Cat 5 1-5 episodes per year  
 Cat 6 Never

being the worst to 5 being the best). Their frequency of insomnia was also categorized.

In addition, respondents were asked about their expectation and their history of seeking assistance in sleep improvement. They were also requested to rank the priority they would place on various improvement options.

Those aged below 18 or above 65 and those giving a history of psychiatric illnesses (other than insomnia) were excluded from this study.

various non-prescribed products to improve their sleep. These rates increased with the frequency of insomnia but even for those with insomnia once to five times a week, the medical consultation rate and self-help product utilisation rate are only 14.3% and 42.9% respectively. For those with SSS 18 standard deviation below the mean, whose sleep was the most unsatisfactory, these rates were even lower at 5.7% and 26.5%

respectively.

Of all those who had consulted a doctor, medication were continued in 62.5% for over 3 months and in 57.1% for over 1 year. Despite this the effectiveness was mostly classified as average only. Of those seeking non-prescribed products, pillows and mattresses were the most popular means (39.3%). Other self-coping means included aromatherapy, herbs or traditional Chinese medicine, massage, melatonin and nasal strips in roughly equal proportions. Their perceived effectiveness varied widely.

Ninety-one respondents (52.9%) expressed a wish to improve their sleep, including 27.2% of those scoring above the mean SSS. Paradoxically, only 29 (31.9%) of those wishing for improvement had taken any action, medical or otherwise. Regardless of the desire or the action taken to improve sleep, exercise related means ranked as the most favorite choice (mean priority score of 1.5 with 1 being the highest rank and 5 being the lowest). Non-medical oral substance, traditional Chinese medicine, Western medical related treatment and paramedical therapies were similarly ranked (mean priority score of 3.3-3.9).

## DISCUSSION

Being a pilot, this study has several limitations. It was designed for a rapid collection of data, in a topic with hitherto little public interest, to guide future research. Therefore, we have chosen a non-random sampling that would be subjected to bias. We have also taken a patient oriented and hence an overall subjective approach rather than using multi-question tools. Duration of insomnia was also omitted as recall bias was expected without the use of sleep diaries.

Despite these drawbacks, the prevalence of insomnia in this study was similar to previous population studies and this suggested representation, though it was not evident. In addition, this study provided

useful information to guide clinical practice and future research directions.

Firstly in particular, the use of medical treatment was infrequent, even when insomnia was marked, and was ranked relatively low in priority as a means of improvement. Perceived effectiveness of medical treatment was also not particularly high. A much higher proportion of people rely on self-coping measures, although their effectiveness did not seem to be much better. This seems to refute the notion that medical treatment was substituted by better alternative therapies. Instead, this suggested a deficiency in medical treatment that seemed to centre on the prolonged use of hypnotics to no avail. This failure has a special implication in Asia, where herbal usage is prevalent, as herbs that have not been clinically tested may actually be detrimental to the health of insomniacs.

Secondly, a paradox became apparent in that 27.2% of those who felt they had reasonable sleep quality also felt that their sleep needed improvement. Conversely, 20.6% of those who were dissatisfied with their sleep did not want any improvement. In addition, even though over half of the respondents wish to improve their sleep, only a third of them took any action, medically or otherwise.

These suggested that physicians should provide a better offering to their patients with insomnia and look for means beyond long term medication to treat them. However, further study is needed to identify more applicable and effective interventions that would improve the rate of uptake for sleep improvement for those who so desire. This may include the clinical assessment of herbal treatments. More importantly, patient education is required to teach them how to assess their sleep quality and when to seek help. Therefore, the other direction of research would be in identifying a public tool that correlates with the need for sleep improvement.

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