Sleep Hygiene Use in a Psychiatry Outpatient Setting

J Lyne, L Quinlivan, CA Byrne, K Malone, C Walsh
Department of Psychiatry, St Vincent’s University Hospital, Elm Park, Dublin 4

Abstract
Non-pharmacological measures are recommended prior to use of hypnotics in the latest NICE guidance. This study investigated if non-pharmacological measures are utilised prior to hypnotic prescribing in a general adult psychiatry outpatient setting, and further reviewed patient’s sleep quality following implementation of sleep hygiene education. Interviews were conducted with 85 patients, and poor adherence with NICE guidance was found among the 74 (87%) patients previously prescribed a hypnotic. Just five (6.8%) patients recalled use of non-pharmacological measures prior to hypnotic prescription, 47 (63.5%) indicated non-pharmacological measures had not been discussed, while a further 22 (26.7%) could not remember. Improvement in Pittsburgh Sleep Quality Index scores following implementation of sleep hygiene education was also noted (P = 0.03). These findings suggest that increased awareness of sleep hygiene education for clinicians may be beneficial.

Introduction
Sleep disturbances represent a common clinical challenge in a psychiatric population, particularly among patients suffering with affective disorders. This study was proposed following publication of the National Institute for Clinical Excellence recent review of the ‘Z –hypnotics’ (zaleplon, zolpidem, and zopiclone), in which NICE recommended that all patients be considered for non-pharmacological measures, such as sleep hygiene education, prior to prescribing these hypnotics. Previous research in non-pharmacological interventions for insomnia has predominantly focused on cognitive behavioural interventions, for which an emerging evidence base is accruing. However, the application of cognitive behavioural interventions is limited by the reality of financial constraints in clinical practice. While sleep hygiene education may not be as efficacious as cognitive behavioural interventions, it does provide a cost-effective practical intervention method, with high face validity.

Sleep hygiene involves optimising behavioural and environmental factors which precede sleep and may interfere with sleep, such as frequent exercise, regular sleep/wake cycle, and avoiding stimulants (e.g. caffeine) and alcohol before bedtime. To our knowledge there is limited literature evaluating sleep hygiene interventions in the psychiatry outpatient setting. The first objective was to evaluate implementation of the NICE guideline that 100% of patients being treated for insomnia should be considered for use of non-pharmacological measures prior to hypnotic prescribing. Secondly, we wished to examine the effectiveness of the NICE recommended sleep hygiene education on sleep quality, in a community psychiatric population.

Methods
This study was conducted on all patients attending a general adult community psychiatry outpatient department, covering an urban catchment area, Dublin 2 and Dublin 14, over a one month period. An initial questionnaire established history of hypnotic use, and patient report of previous non-pharmacological measures to help sleep, in order to determine NICE guideline adherence. Sleep quality was ascertained using the Pittsburgh Sleep Quality Index (PSQI), an eighteen point self rating scale. A sleep hygiene education sheet was given to patients by the consulting doctor, and these techniques were informally discussed during the consultation. The PSQI was again administered at outpatients at least 2 weeks later in order to explore the effectiveness of sleep hygiene education in a naturalistic setting. Eighty five patients completed both questionnaires, which represented 72% (85/118) of those eligible.

Results
Fifty five (64.7%) patients were female with a mean age of forty five years. Seventy four (87.1%) patients had currently or previously used a hypnotic to help sleep. Table 1 illustrates the results in relation to adherence with the NICE guideline among these patients. In the initial questionnaire seventy two (84.7%) patients out of the total sample (n = 85) reported a PSQI global score of 5 or higher (indicative of a poor sleeper). Mean PSQI scores before sleep hygiene education was 10.11 (S.D. 4.97), which reduced to 9.47 (S.D. 4.83) after sleep hygiene education. A two tailed paired samples t-test comparing PSQI scores before and after sleep hygiene education was statistically significant (t (84) = 2.14, p = 0.03, 2-tailed C.I.95 = 0.05, 1.2), indicating improved sleep quality following the sleep hygiene education.

Discussion
Sleep Hygiene Use in a Psychiatry Outpatient Setting
In congruence with Benca et al., this study highlights the high rate of sleep difficulties among psychiatry outpatient attenders. Sub-optimal use of sleep hygiene education was also demonstrated, discordant with NICE guidance, suggesting that increased awareness among clinicians in relation to use of sleep hygiene education and other non-pharmacological measures, prior to hypnotic prescribing, is warranted. Consistent with NICE recommendations, overall sleep quality improved following the introduction of sleep hygiene education to the clinic, providing initial support for sleep hygiene education as an intervention in the psychiatry outpatient setting. However, given the methodological limitations, including recall bias, lack of a standardised protocol for discussing the intervention with patients, and the absence of a control group, further research to tease out the benefits of sleep hygiene education is necessary, requiring longer follow-up, and possibly incorporating an in-depth qualitative component. A sleep hygiene education sheet has since been introduced to our psychiatry outpatient department, and availability of this intervention should be considered in other psychiatry and medical settings.

Acknowledgements
The authors would like to thank the following for their contribution: Patrick Codd, Chris Kelly, Margaret Walsh, Dr. Sheila Yasin, Dr. Kenneth Achikeh, Margaret Walsh, Dr. Ian Callanan and Dr. Allys Guerandel.

Correspondence: J Lyne
Department of Psychiatry, St Vincent’s University Hospital, Elm Park, Dublin 4
Email: jelyne@mail.com

References