

## Background

Sleep problems are common symptoms in mental disorders and form diagnostic criteria for most mood and anxiety disorders. Sleep quality/duration can be a useful marker of illness severity. Increased severity of depression is associated with increasingly impaired sleep continuity.<sup>1</sup> 93% of depressed in-patients complain of insomnia.<sup>2</sup>

Impaired sleep is a widely recognised independent risk factor for suicide, making it very relevant for inpatient psychiatry.

Traditionally staff assess sleep by observing patient activity; often through a window and/or a darkened environment. Sleep charts completed by nursing staff remain an integral part of the assessment process in psychiatric inpatient units.

## Methods

Over two separate two week periods, patients in two inpatient wards (in different hospitals) completed self report measures of sleep using the Athens Insomnia Scale. Staff completed simultaneous ratings on the same scale.

The Athens Insomnia Scale (AIS) was used to measure sleep.<sup>3</sup> The AIS specifically includes questions about daytime disturbance rather than night time disturbance alone, making it relevant to psychiatric populations. It also allows two different raters to score items 1-5 simultaneously.

On the AIS, higher scores represent higher levels of sleep disturbance.

Staff were asked to complete concurrent (but independent) ratings of sleep quality using the same scale which permits use by clinicians and patients. Higher scores on the scale indicate worse sleep. Scores between the 2 groups were then compared and correlations between patient and staff ratings were reported. Correlation was reported using the R-squared statistic (the square of Pearson's *r*).

## Results

### Description of sample

At the end of two periods of assessment there were 735 ratings from 87 unique patients. Data were complete for 548 patient-staff combinations.

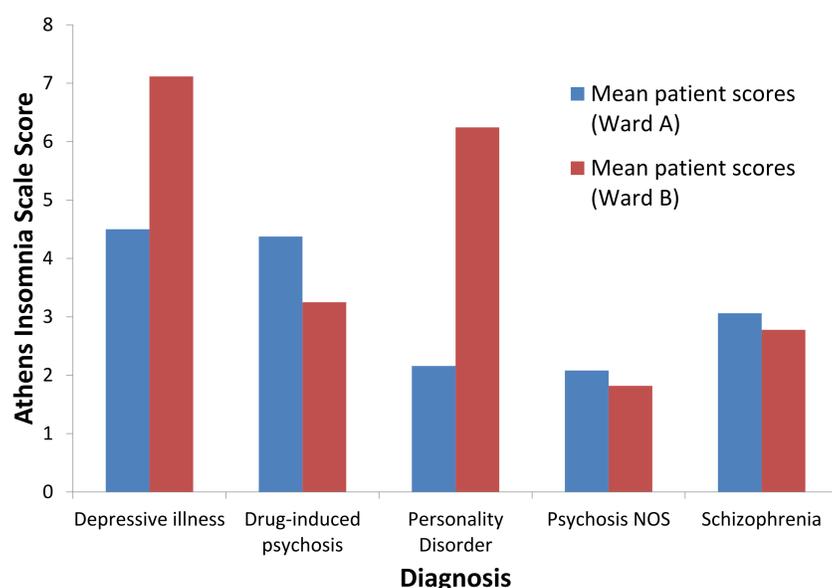
### Diagnosis

The most common diagnoses were: depressive illness (25.3%); schizophrenia (19.5%); personality disorder (8.1%); and drug induced psychoses (6.9%).

### Sleep by diagnosis

Sleep quality varied by diagnoses. Mean scores on the Athens Insomnia Rating Scale (whole sample) were: 5.5 for depression; 4.9 for personality disorder; and 3.0 for schizophrenia.

Sleep quality also varied by ward, particularly for those with depression or personality disorder.

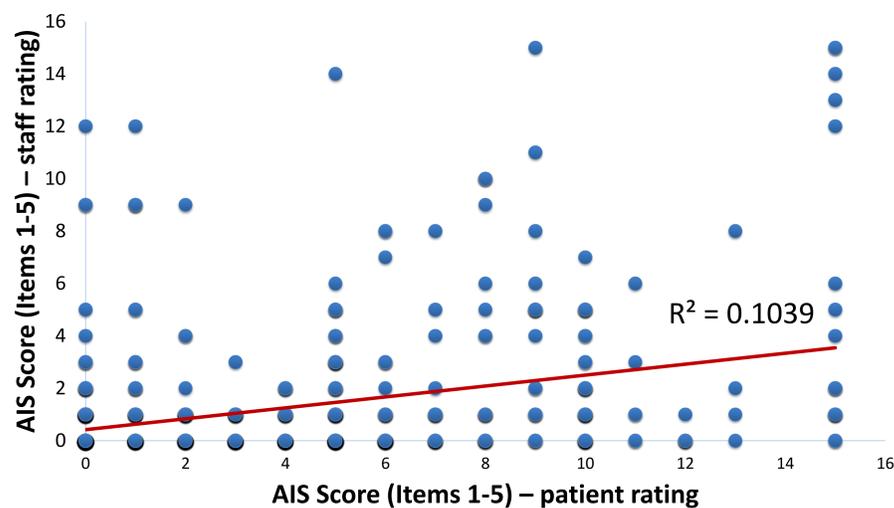


### Medication status

Medication status was available for 68% of patients. Fifty-five (93%) were taking some form of medication: hypnotic (42.4%); antipsychotic (71.2%); antidepressant (54.2%); mood stabiliser (18.6%).

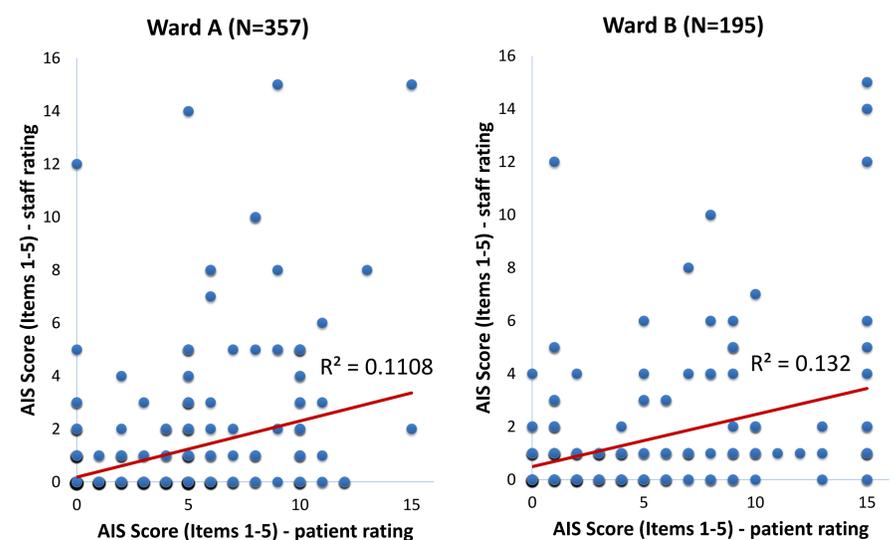
### Correlations between staff and patient self-reports

Correlations between staff and patient self report were poor ( $R^2 = 0.1$ ) with staff consistently reporting better sleep than patients themselves.



### Differences between wards

There were no differences between ratings completed on Ward A versus Ward B.



## Conclusions

The highest rate of self-reported sleep disturbance was seen in depression, followed by personality disorder, and schizophrenia.

Differences between self-report scores for depression and personality disorder by ward may represent differences in symptom severity and/or different approaches towards the management of insomnia.

There was no correlation between self-reports of sleep quality and ratings conducted by staff.

Traditional approaches to assessing sleep quality in inpatients using staff ratings are likely to have low reliability and will almost certainly underestimate sleep disturbances in patients.

## Recommendations

1. We recommend that all assessments of sleep quality and duration in inpatient environments should include information obtained by self-report and should be corroborated with disorder-specific symptom ratings.
2. Judgements about symptom presence/absence should not be based on staff ratings alone.

