Module Specification

Assessment and Management of Sleep Breathing Disorders

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Contents

Part 1: Information

Module title: Assessment and Management of Sleep Breathing Disorders

Module code: USSJS6-30-3

Level: Level 6

For implementation from: 2024-25

UWE credit rating: 30

ECTS credit rating: 15

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: Yes

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Assessment of sleep-breathing disorders (sleep apnoea) and their clinical management.

Features: This module will cover aspects of NICE NG202 published in 2020 in relation to the assessment of sleep-breathing disorders using respiratory polygraphy and pulse oximetry and how the patient may be treated with conservative measures, continuous positive airway pressure (CPAP) or Mandibular Advancement Devices (MADs)

Educational aims: This module will use an innovative, blended learning delivery model. This flexible provision will enable trainees to develop, advance and maximise their theoretical and practical knowledge, skills and application in the field of respiratory sleep medicine.

The module is based on, and will deliver, the most current knowledge and evidence in the field. It aims to produce practitioners who are confident in the subject area and who are competent in applying skills with respect to completing practical respiratory sleep medicine examinations and applying clinical knowledge to interpret the data obtained.

Outline syllabus: The overall aim of this module is to ensure that the student has the underpinning knowledge and understanding of the breadth of the application of science in relation to respiration in the awake and sleep states. It will be closely linked to NICE NG202 published in 2020.

The student will develop the underpinning knowledge and skills with respect to a patient-centred care pathway using:
1. Understands the effects of sleep on normal respiration and how this may be altered in patients with sleep-breathing disorders, including obstructive sleep apnoea (OSA) and central sleep apnoea (CSA)
2. Understands the the technological aspects of the equipment used and recording requirements for pulse oximetry and respiratory polygraphy.
3. Applies the measurements of pulse oximetry using overnight recordings in relation to sleep-breathing disorders, and where appropriate as part of respiratory polygraphy.
4. Understands the treatment pathways for sleep-breathing disorders and applies the continuous positive airway pressure (CPAP) to appropriate patients.
5. Interprets the results of pulse oximetry/respiratory polygraphy, based on the understanding of the pathophysiology of sleep-breathing disorders

Part 3: Teaching and learning methods

Teaching and learning methods: Delivery of the underpinning knowledge and practical skills will be -

1. Blended learning with on-campus teaching and practical skills (block weeks), coupled with online lectures/tutorials and webinars provided throughout the academic year on a timetabled basis
2. Practice based learning where the students will learn and develop their skills through clinical practice by interaction with patients and teaching from senior practitioners within their department.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Explain the principles and application of operation of pulse oximetry, and carry out and interpret overnight oximetry recordings in relation to the pathophysiological basis of sleep-breathing disorders, and make decisions as to whether urgent escalation is required.

MO2 Explain the principles and application of respiratory polygraphy, set-up a patient and interpret overnight recordings in relation to the pathophysiological basis of sleep-breathing disorders, and make decisions as to whether urgent escalation is required.

MO3 Evaluate treatment pathways for sleep-breathing disorders, and where appropriate set-up a patient with a continuous positive airway pressure (CPAP) devices, and make decisions as to whether urgent escalation is required.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 200 hours

Face-to-face learning = 100 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ussjs6-30-3.html

Part 4: Assessment

Assessment strategy: Assessment 1: Case Study (1500 words)
Present a case study centred around a sleep-breathing disorder case encountered by them in their workplace.

Assessment 2: Practical Skills Assessment (1 hour)
Undertake a observed practical assessment of setting up a patient with pulse oximetry and respiratory polygraphy and the interpretation of provided results.

Assessment Rationale:

Assessment 1 is included so that the student can provide a detailed history of a real-life patient, the assessment pathway, the interpretation of the results and the treatment pathways chosen for their patient. This is a key element of clinical practice. All patient related data must be anonymised.

Assessment 2 is included as an essential component of clinical practice is the ability to set-up a patient correctly so that quality measurements are obtained, thereby enhancing correct diagnostic outcomes. In addition, results will be provided from studies for interpretation, and may include examples of artefacts likely to be encountered in clinical practice. Students will also need to demonstrate their ability to set-up a patient with Continuous Positive Airway Pressure (CPAP).

Within face-to-face and online learning, interactive mini-quizzes will be included to enhance learning and feedback to all students. These will not be formally assessed.

Assessment tasks:

Case Study (First Sit)
Description: Case study related to practice (1500 words)
Weighting: 50 %
Final assessment: No
Group work: No

Learning outcomes tested: MO1, MO2, MO3

Practical Skills Assessment (First Sit)

Description: Perform and interpret a sleep breathing test (1 hour) and set-up a patient with continuous positive airway pressure (CPAP).

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Case Study (Resit)

Description: Case study related to practice (1500 words)

Weighting: 50 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Practical Skills Assessment (Resit)

Description: Perform and interpret a sleep breathing test (1 hour) and set-up a patient with continuous positive airway pressure (CPAP).

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Respiratory Science [Glenside] GradDip 2024-25