Unit 61: Sleep Diagnostics

Level: 3

Unit type: Optional

Credit value: 10

Guided learning hours: 90

Unit summary

In this unit, you will gain the understanding and skills needed to perform the standard diagnostic tests to investigate sleep and sleep disorders safely and accurately. You will also be expected to retrieve and store the data from individuals and contribute to the analysis and interpretation of data for the technical report. In addition, you will be able to undertake routine maintenance and quality-assurance checks on the equipment used. You will be expected to build and promote patient-centred professional and safe practice in the workplace.

Unit assessment requirements

There are no specific assessment requirements for this unit. Please refer to the assessment strategy in *Annexe B*.

Additional information

AC1.1 includes ICSD-3 classification: insomnia, sleep-related breathing disorders, central disorders of hypersomnolence, circadian rhythm sleep-wake disorders, sleep-related movement disorders.

AC1.2 includes:

- allergies
- respiratory problems
- chronic pain
- stress, anxiety, and clinical depression
- ageing
- hormonal imbalance
- other factors, for example certain types of medication
- other co-morbidities, for example asthma, diabetes, Parkinson's, obesity.

AC1.3 includes:

- physical impact
- psychological impact
- social impact

• occupational impact e.g., loss of driving licence

LO2, LO3 and LO4 include:

- Tests could include:
 - overnight pulse oximetry
 - cardiorespiratory polygraphy (CRP)
 - o peripheral arterial tonometry (PAT)
 - o polysomnography (overnight sleep study).

AC2.3 includes:

- the communicable diseases and microbiological hazards in a respiratory department
- risks and hazards in compliance with health and safety policies
- control of infection risks pre, during and post investigations, including decontamination of equipment
- importance of hand washing
- adherence to appropriate standards of professional practice as defined in Good Scientific Practice.

AC2.4 includes:

• current scientific literature relating to evidence-based practice for sleep diagnostics.

AC3.1 and AC4.1 preparing an individual include:

- greeting the individual and their parent/s or carer/s and checking individual's identification
- communicating with individuals and their carer/s in a way that respects their dignity, rights, privacy, and confidentiality
- introducing self and own role
- reviewing the request form
- explaining the investigation to the individual and their parent/s or carer/s in appropriate language, addressing any investigation-related questions
- providing information on how the individual and their parent/s or their carer/s
 will be informed of the results
- evaluating the risks and benefits of undertaking the investigation
- gaining and documenting informed consent
- explaining the principles, guidance, and law for gaining informed consent, including the limits of consent
- obtaining and reviewing relevant age and ability-specific individual information:
 - history
 - lifestyle
 - o any previous test results
 - medication

- explaining potential special requirements of the tests to the individuals and/or carers
- treating the individual and/or parent/carer with respect, compassion, and dignity
- taking account of any special needs of the individuals and, if necessary, discuss with senior staff and carers, e.g., English as a second language, individuals with hearing impairment and learning disabilities etc.

AC3.3 and AC3.4, include:

- identifying the potential risks of using defective equipment and measures to resolve problems
- the factors influencing the choice of equipment for the investigation
- selecting and issuing the correct equipment:
 - o checking the equipment
 - o preparing the equipment
 - identifying common faults
 - o taking remedial action
 - explaining the impact of non-cooperation on the individual, the investigation, and the results
 - making height, weight, neck circumference and other appropriate measurements in accordance with standardised procedures, adapting them where necessary.
 - o confirming that the individual understands the process of using the equipment.
- AC 3.6, to include how to distinguish between errors as a result of different artefacts or poor-quality recording.

Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet **in own area of work and in accordance with Standard**Operating Procedures (SOPs) to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand disorders of breathing in sleep	1.1	Describe different types of sleep disorders of breathing in sleep			
		1.2	Describe the common causes of disorders of breathing in sleep			
		1.3	Discuss the impact of disorders of breathing in sleep on individuals and their families			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Understand how sleep and sleep disorders are investigated in adults and/or children	2.1	Describe range of methods/types of tests used to investigate sleep and sleep disorders in adults and/or children			
		2.2	Explain the clinical indications and contraindications for standard tests			
		2.3	Explain the Standard Operating Procedures for performing a range of standard tests to investigate sleep and sleep disorders in adults and/or children			
		2.4	Describe the current evidence-based practice for sleep diagnostics in adults and/or children			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Be able to perform a range of standard diagnostic tests to investigate sleep and sleep disorders in adults and/or children	3.1	Prepare the individual for standard diagnostic tests			
		3.2	Adapt communication and information to suit the needs of the individual			
		3.3	Select suitable equipment for a range of standard diagnostic tests performed in clinics, in accordance with the requirements of the test			
		3.4	Select and issue appropriate equipment for a range of overnight sleep diagnostic tests, performed at home			
		3.5	Retrieve and store data from the equipment used for a range of standard diagnostic tests			
		3.6	Contribute to the interpretation of data and analysis of data to support the diagnosis of sleep disorders			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Be able to clean and decontaminate equipment used for a range of standard diagnostic tests	4.1	Explain the protocols for cleaning and decontaminating the range of equipment used for standard diagnostic tests			
		4.2	Demonstrate how to clean and decontaminate a range of equipment used for standard diagnostic tests			
5	Be able to perform routine maintenance and quality assurance procedures on the equipment used for standard diagnostic tests	5.1	Carry out routine maintenance on the range of equipment used for standard diagnostic tests			
		5.2	Explain the quality assurance procedures for equipment maintenance			
		5.3	Demonstrate the quality assurance procedures for equipment maintenance			

Learner name:	Date:
	Date:
	Date:
Internal verifier signature:	Date:
(if sampled)	