Non-Invasive Ventilation & Respiratory Failure

MSc

Level 7 Module - 30 credits
Module Code: 7FHH1089
Optional Module - MSc Respiratory Practice

Module Aim:

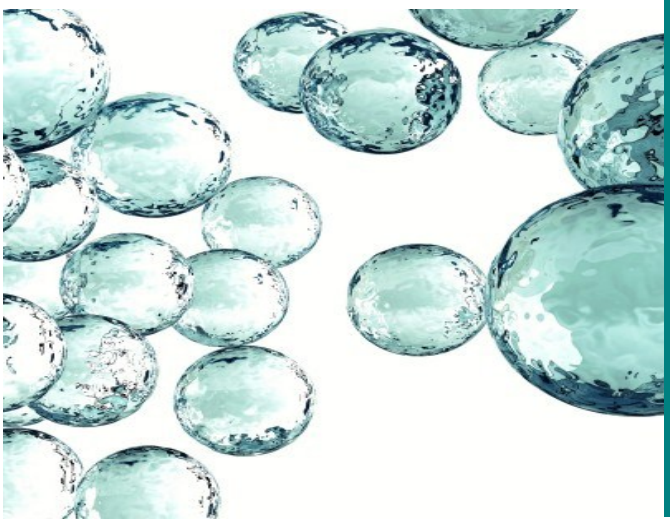
The aim of this module is to enable students to critically examine the pathophysiological changes that can lead to respiratory failure and articulate when non-invasive ventilation should be used as a treatment modality. Additionally, students should critically analyse the complexities involved in non-invasive ventilation and focus on one aspect of this intervention.

Intended Learning Outcomes:

Knowledge and Understanding:

Successful students will typically be able to:

1. Critically explore the differing pathophysiological processes leading to respiratory failure and consider one in-depth. This will include non-respiratory causes such as neuromuscular disease and obesity.
2. Critically evaluate methods of non-invasive respiratory support and management and apply this to promote appropriate and justified, individualised patient care.
3. Demonstrate a critical understanding and appraisal of how research and enquiry are used to inform evidence-based practice within their area of practice.



Skills and attributes:

Successful students will typically be able to:

1. Evaluate existing practice with systematically appraised evidence in order to demonstrate advanced decision-making in the assessment, support and provision of non-invasive ventilation to manage respiratory failure.
2. Work autonomously at an advanced level and identify need for support, guidance, knowledge and skill development.
3. Critically evaluate research findings to identify, access, transfer and apply research evidence to their own practice setting as it relates to multi-professional practice.

Module content:

This module will build on existing knowledge and experience of non-invasive ventilation.

During this module students will be given the opportunity to recognise different pathways to respiratory failure and distinguish between the modes of non-invasive support. Additionally, students will critically evaluate how outcomes can be improved and apply this to their practice.

The complex nature of respiratory failure and management will be explored by the use of selected clinical scenarios which will include end of life and symptom control. The growing evidence-base for application of non-invasive ventilation outside of the critical care area will be considered in terms of ventilator design and functionality, patient safety and staff education and training.

In this module the students will further develop knowledge and understanding of the management of respiratory failure and where non-invasive fits in the resolution of both symptoms and acidosis.

Students will be required to bring some clinical case histories to the classroom for discussion and deliberation by the group. In addition, selected complex clinical scenarios will be provided which will include underlying physiology, patient assessment, blood gases, oxygen administration and the need for respiratory support. The importance of correct patient set up and initial management will be considered in detail. This will cover ventilator settings such as rise time, IE ratio, titration of pressure and patient responses.

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Module Assessment:

5,000 word Essay

Coursework: 100% Weighting: 100%

A 5,000 word assignment in which the student will identify a disease-specific cause of respiratory insufficiency and detail the pathway to failure in that instance. This can relate to either acute or acute-on-chronic respiratory failure and should relate to those who require non-invasive respiratory support.

The student should then critically justify one element of non-invasive ventilation. For example the availability of a wide selection of interfaces, titration of pressures to either blood gases or clinical status, the use of protocols, the utilisation of functions such as rise time and ramp, response of pH to treatment etc.

Attendance requirements:

There are four study days timetabled into this 30 week module.

The module is run on a flexible learning basis supported by comprehensive course materials (including course packs and e-learning modes). Four structured study days will facilitate classroom-based workshops, lectures and discussions. In addition, student participation, interaction and peer support will be facilitated through the use of an electronic platform.

These approaches will enable students to reflect upon existing knowledge and skills, evaluate evidence, develop problem-solving skills and thus develop personal knowledge in this area of respiratory care.

MSc Respiratory Practice Structure:

The programme is offered in part-time modes and leads to the award of MSc Respiratory Practice. Students have up to six years to complete the full MSc award.

Applicants would normally have, at a minimum, a lower 2nd class honours degree in health or social care related subject. Students without an honours degree who wish to access pathways/awards must demonstrate knowledge and skills at a level to that of degree study prior to commencement.

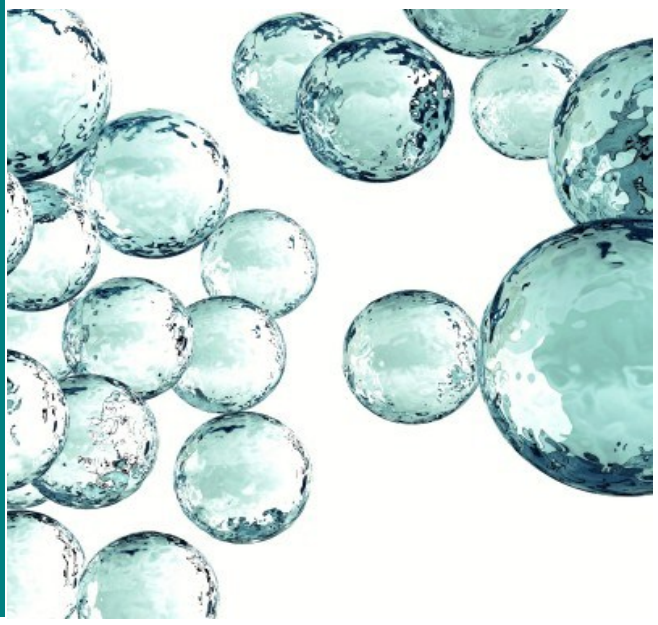
Students should have access to a computer and would need to be working in a clinical area with access to an appropriate client group

This module may be studied on a stand-alone basis.

MSc Programme Lead: Mr Dave Burns

For more information on this module, please contact Gill Butler on 0151 529 6254, e-mail gill.butler@respiratoryeduk.com.

For information on REUK's academic pathways, please contact 0151 529 2598, e-mail help@respiratoryeduk.com



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