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Effective Respiratory Management

For staff in residential care

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IRISH SOCIETY OF CHARTERED PHYSIOTHERAPISTS

Presentation Overview

- Importance of effective respiratory management in context of novel Coronavirus
- Respiratory Management Guidance
- How Physiotherapists can support
- How Occupational Therapists can support
- References

Context

- Coronavirus (COVID-19) is an acute respiratory infection. Respiratory infections are serious infections that affect normal breathing. It is therefore essential that effective respiratory management strategies are utilised to prepare for, prevent and manage any potential cases

- There are some groups of people who may be more at risk of serious illness if they catch coronavirus. Groups identified as being most at risk include
  - Those aged 60 years and over
  - Those with a long-term medical condition

Basic Respiratory Management Strategies

- Positioning
- Hydration
- Swallow Function
- Observation
- Mobilisation
- Inhalers/Nebulisers

Positioning

- Essential for lung expansion, perfusion and secretion clearance
- Position upright in sitting and encourage upright postures when mobile
- Forward lean positions where lung expansion is not impeded can relieve breathlessness
- Discourage lying completely flat as ventilation and secretion clearance is impeded
- Please consult the Physiotherapist on alternate side lying for individuals with unilateral lung presentations

Positioning

Information leaflets on positioning for breathlessness and appropriate exercises available from the Association of Chartered Physiotherapists in Respiratory Care

https://www.acprc.org.uk/publications/patient-information-leaflets/

Hydration

- Air entering lungs should be warm and moist
- Dry and cold air damages the integrity of the airways leading to poor mucociliary clearance, bronchial irritation and risk of harbouring infections
- Persistent cough, consistent oxygen therapy and dry internal air in care settings can exacerbate dehydration of airways

Swallow Function

- Aspiration may lead to respiratory symptoms, infection or pneumonia
- Ensure clinically appropriate levels of thickener are being administered in fluids
- Upright positioning & consider state of consciousness
- Refer to Speech and Language Therapy as required
- For advice on managing dysphagia see https://www.inmo.ie/article/printarticle/3099

Observation

- Monitor signs of respiratory distress
  - Breathlessness, wheeze or irregular breathing pattern
  - Cyanosis (blue tinge)
  - Persistent cough including abnormal secretions
  - Abnormal vital signs (SpO_2, Temp, Resp. Rate)
- Monitor state of consciousness
- Consider positioning for relief of symptoms
- For advice on the administration of Oxygen Therapy see https://irishthoracicsociety.com/wp-content/uploads/2017/12/O2-Guidelines-Final.pdf

Mobilisation

- Walking, sit to stand practice and functional exercise all help to increase the work of breathing and encourage deep breathing thereby reducing atelectasis
- Aids secretion clearance and helps to maintain respiratory muscle function
- Particularly beneficial following mucolytic administration to clear secretions

Inhalers/Nebulisers

- Mucolytic nebulisers for secretions
- Bronchodilators for wheeze/bronchospasm
- Ensure device is being correctly worn, used and tolerated
- Encourage mobility or activity 15 mins following mucolytic administration to stimulate effective cough

How Physiotherapy can support

- Symptom specific Manual Chest Physio to clear retained secretions and expand lung capacity
- Active Cycle of Breathing Technique exercises to maintain and improve airway integrity and respiratory muscle function
- Advice on respiratory adjuncts e.g. incentive spirometers, nebulisers, cough assist devices, humidification
- Aerobic exercise to strengthen respiratory and general muscles
- Provide advice and education to staff on above

How can Occupational Therapy support

- Seating solutions to encourage upright positioning
- Bed positioning aids to facilitate effective secretion clearance and lung expansion
- Promote person centred active lifestyle and independence
- Education sessions with nursing staff on above

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Questions?

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