Covid-19 is the disease caused by the novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). While many patients experience only mild symptoms, some develop respiratory problems that can lead to hospitalisation. In very serious cases, patients develop acute respiratory distress syndrome (ARDS), which can be fatal. Covid-19 is a new disease and we are still learning how to treat it. It does, however, have specific symptoms that can lead to a patient’s reduced appetite (Box 1), and ability to eat and drink independently. This article highlights what nutrition support is available and how nurses can ensure patients with Covid-19 receive the best possible care.

Oral nutrition
Some groups are at increased risk of severe illness if they develop Covid-19; these include older people and those with underlying conditions such as diabetes, cardiovascular disease, cancer and chronic respiratory disease (National Centre for Immunization and Respiratory Diseases, 2020). These people are already at risk of malnutrition (Stratton et al, 2018) so it is important that the risk is recognised and addressed early. Nutrition screening should ideally take place in the first 24 hours of hospital admission (National Institute for Health and Care Excellence, 2017). However, this may not be appropriate in some patients who are acutely ill as their respiratory problems may take priority. Once it is safe to do so, a validated screening tool such as the Malnutrition Universal Screening Tool (MUST) (BAPEN, 2011) should be used.

MUST suggests using subjective criteria – outlined in Box 2 – when it is not possible to obtain a patient’s weight and height any other way (Elia, 2003). MUST should also be used to inform the correct nutritional care plan for the patient.

Many patients – be they in hospital or the community – need enteral tube feeding, usually through a nasogastric tube, which must be inserted by a competent professional. Mouth care is also important to ensure patient comfort and wellbeing.
Community nurses can use the information what services are available to help them. Shopping for them and may not realise they do not have friends or family nearby to deliver. Meet patients who are socially isolated, do carers to ascertain their loved one’s likes even more important to talk to family and eat and drink. In these circumstances, it is even more important to talk to family and carers to ascertain their loved one’s likes and dislikes. Nurses in the community will meet patients who are socially isolated, do not have friends or family nearby to deliver shopping for them and may not realise what services are available to help them. Community nurses can use the information from Malnutrition Pathway (2020) for Covid-19 patients; this is also a valuable resource for people who are at risk of malnutrition in the community.

Some patients may already have problems swallowing due to a pre-existing condition – for example, Parkinson’s disease – or if they have been in intensive care and on a ventilator recently, which can cause temporary swallowing issues (Marvin et al, 2019). If there are concerns about a patient’s ability to swallow, referral to a speech and language therapist for assessment should be considered.

Enteral nutrition

Some patients with Covid-19 develop pneumonia and, consequently, may need invasive or non-invasive ventilation to support their breathing. These patients are likely to need additional nutrition support through enteral tube feeding – predominantly nasogastric (NG) feeding tubes (Australasian Society of Parenteral and Enteral Nutrition, 2020). While those receiving non-invasive ventilation, such as continuous positive airways pressure, may be able to take some oral nutrition and hydration, they are unlikely to be able to meet their full requirements and so will need artificial nutrition support (British Dietetic Association, 2020).

Is passing an NG tube an aerosol-generating procedure?
The latest guidance on aerosol-generating procedures (AGPs) states that procedures that produce or stimulate sputum generate an aerosol (Public Health England, 2020). As such, it recommends health professionals undertaking such procedures should wear enhanced personal protective equipment (PPE), namely:

- A long-sleeved gown;
- An FFP3 mask;
- A visor or goggles;
- Gloves.

PHE considers that passing an NG tube on a patient with suspected Covid-19 does not warrant wearing enhanced PPE. However BAPEN, along with a number of other national bodies such as the British Dietetic Association, the Royal College of Surgeons and the Royal College of Nursing, suggest this does warrant wearing enhanced PPE. They suggest that when an NG tube is passed, the procedure causes patients to cough, which could induce sputum. These organisations, therefore, recommend that enhanced PPE should be worn in patients with either confirmed or suspected Covid-19; this guidance refers to both acute and community patients (BAPEN, 2020a).

When passing an NG feeding tube, nurses must follow standards for checking NG position (Box 3).

Methods of administering feed

Feeding pumps have become the most common method of administering enteral feed in intensive care units (ICUs) in the UK. However, they are also now widely used in other areas, including the community. With the increased workload in all pre-existing ICUs and in the new ICUs that have been purpose built for patients with Covid-19, the use of feeding pumps has increased. As a result, many community and non-ICU areas have had to use other methods of administering feed because of a shortage of pumps – this, in itself, has proved challenging (Mitchell, 2020).

There are two alternative methods of administering feed without a pump:

- Bolus feeding;
- Gravity feeding.

Bolus feeding is the administration of a predetermined volume of feed at specified intervals over a short period of time. It is usually by syringe – with or without the plunger (Hubbard et al, 2019). However, bolus feeding can be time consuming; in a busy ward environment – particularly with the need to don and doff PPE – it may not be the most appropriate method, so gravity feeding should be considered.

Gravity or drip feeding (Fig 1) was historically the primary method of enteral tube feeding – and still is in many parts of Europe (Hubbard et al, 2019). It involves attaching the feed container to a giving set.
“Providing good nutritional care is a vital aspect of treatment for Covid-19”

with a roller clamp on it, which can be adjusted to control the flow. However, gravity feeding can be challenging, as there is less control over the flow rate than with a pump and it can either increase or decrease when a patient is turned or moved. This can result in feed being given too quickly – which could lead to gastrointestinal disturbances for the patient, such as stomach bloating or diarrhoea (Blumenstein et al, 2014) – or too slowly.

Nurses who are undertaking one of these two feeding methods must be competent to carry out the procedure following their organisation’s guidance. The National Nurses Nutrition Group has produced a simple guide on how to administer both bolus and gravity feeds (Bit.ly/NNNGCov19 – simple guide on how to administer both bolus and gravity feeds). Check with your nutrition support team or nutrition nurse specialist if you are asked to do this in your area.

**Mouth care**

Mouth care is essential to patient comfort and wellbeing. Poor oral hygiene can:
- Cause communication difficulties;
- Affect nutritional status and/or sense of taste;
- Cause pain or infection;
- Lead to dehydration;

Many patients are already unable to perform their own oral hygiene effectively or may have pre-existing oral problems such as gum disease or tooth decay caused by plaque. Dental plaque contains many types of bacteria, some of which have been associated with the development of pneumonia. Patients who lie supine in a hospital bed and older patients with reduced consciousness are more likely to aspirate oral secretions and, thus, develop aspiration pneumonia (Doshi, 2016).

In patients with a dry mouth, saliva production is reduced. As protection is a key function of saliva, a dry mouth is a real risk to oral health as it will lead to the formation of plaque (Salamone et al, 2013).

Performing mouth care in patients with Covid-19 may provoke anxiety in nurses. Although it has not been identified as a high AGP, in response to health professionals’ concerns, PHE has produced guidance on performing mouth care for these patients (Bit.ly/PHECovid-Mouth). Box 4 summarises the principles of mouth care for patients who are not on a ventilator.

**Conclusion**

Scientists’ and health professionals’ understanding of Covid-19 and its treatment is evolving rapidly, and new guidance is being published frequently. However, nurses need to make sure that essential care for patients is maintained and they remain safe. Providing good nutritional care is a vital aspect of treatment for Covid-19 and should not be forgotten in the race to prevent further spread of the virus or to find a cure.

**References**


BAPEN (2020b) Nasogastric Tube (NGT) Placement Checks Before First Use in Critical Care Settings During the Covid-19 Response. Redditch: BAPEN.


**Box 4. Good mouth care for patients with Covid-19**

- If the patient is receiving oxygen via a face mask, check with the nurse in charge before removing this to carry out mouth care.
- Assess the patient and consider if they can brush their own teeth, or if they need help to keep their mouth moist and clean.
- Do not use an electric toothbrush as this may cause droplets and splash.
- If possible, sit the patient upright.
- If the patient has a dry mouth, encourage sips of fluid (unless nil by mouth), hydrate with a toothbrush dipped in water or apply an available dry-mouth product to the tongue, the inside of the cheeks and the roof of the mouth.
- Ensure the patient’s lips are kept moist (with products available), particularly before cleaning their mouth.
- If the patient can brush their own teeth, give them a soft, small-headed toothbrush with a smear of toothpaste – use non-foaming toothpaste if available.
- If the patient can spit, give them a disposable bowl to spit into; if the patient is unable to spit and bedside suction is available and you are trained to use it, use gentle oral suctioning to remove excess saliva and toothpaste.