

Malnutrition and Nutritional Care of COVID-19 Patients in Hospitals during the first wave of the pandemic

A summary of the BAPEN Hospital COVID-19 Survey of Health Care Professionals

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BAPEN undertook a survey of health care professionals (HCPs) to better understand the nutritional care and challenges of patients with COVID 19 in hospital during the first wave of the virus. The survey was undertaken via SurveyMonkey from 18th June – 3rd July 2020 with 154 HCPs responding from across the UK (England 90%; Scotland 5%; Wales 2.5%; Northern Ireland 2.5%). The majority of respondents were dietitians (68%) and nurses (23%). The survey was administered in 3 sections: 1) General information, 2) Nutritional care in ICU and HDU, 3) Nutritional care on general wards, and respondents only answered those sections that were applicable. Responses relate to HCP's experiences and observations during the first wave of COVID-19 in the UK (April – May 2020).

Key findings

Malnutrition

- The most common estimate of the proportion of patients with COVID-19 at risk of malnutrition on the inpatient wards was up to 50% (chosen by 29% of those surveyed), with 27% estimating up to ~75% and 21% estimating it to be ~25%.

Identifying malnutrition risk

- 'MUST' was the most common tool used to screen for malnutrition risk on the wards (66%).
- Scales were most often used to assess weight (71%), and most HCPs used recalled values for estimating height (57%).

Barriers to delivering good nutritional care on the wards

- The most frequently observed barriers to providing good nutritional care (those rated as 'always' and 'mostly' seen as a barrier) were being 'unable to screen for malnutrition' (30%), 'unable to assess food intake' (23%), and 'patients not being supported to eat or drink' (18%).
- Items that were not seen as barriers to providing good nutritional care ('never' or 'rarely' seen as a barrier), included 'nasogastric tube (NGT) positioning issues' (71%); 'lack of critical care COVID guideline' (70%); 'unable to access appropriate diet' (66%); 'lack of access to PPE' (62%), 'unable to access appropriate nutrition support' (62%).
- The most frequently rated issues ('always' and 'mostly' witnessed by HCPs) as impacting nutritional intake in patients on the wards were 'fatigue' (82%); 'poor appetite' (71%); 'breathlessness' (65%) and 'weakness' (51%).
- Less frequently observed issues impacting nutritional intake in patients on the wards (reported as 'never' or 'rarely' seen) included 'limited access to milk' (100%); dysphagia (43%) and 'limited access to food' (43%).

Nutritional strategies

Enteral and parenteral nutrition:

- Parenteral nutrition (PN) was only used in a small proportion of patients, most respondents reporting none to <10% of patients received PN on an average day in both ITU and on the wards (87% and 87% respectively).
- Enteral nutrition (EN: tube feeding) was used in most patients on ITU, 68% of respondents reporting all or >90% of patients received EN on an average day. On the wards 76% of respondents reported that between none (7%) and up to 25% (39%) received EN. On the wards 70% of respondents estimated <10-25% of patients received EN.
- Most respondents (57%) reported no patients were discharged home on EN, with 34% reporting EN was required at discharge in <10% of patients.
- On ITU; 69% always used nasogastric feeding (55% on the wards), with 48% reporting nasogastric tube positions were routinely checked by x-ray and gastric aspirate, and 93% always used a pump.
- 53% of trusts classified placement of NGT or NJT as an aerosol generating procedure.
- High protein enteral tube feeds were reported to be the most commonly used in ITU and on the wards (62% and 50% respectively).

Oral Nutrition support:

- More than half of respondents (53%) reported that oral nutritional supplements (ONS) were used in >75% of patients on the wards.
- The most commonly used ward-based nutrition support strategies included ONS (97%); help with feeding (83%); snacks (79%); and protected mealtimes (74%).
- Respondents reported that hospital menus were 'usually' (37%) and 'sometimes' (37%) able to meet the nutritional needs of COVID-19 patients.
- ONS most used on the wards were low volume (76%) and high protein, low volume, ready to drink versions (39%).

Discharge:

- Only 11% of HCPs estimated that all patients with COVID 19 were 'discharged from hospital with a clear nutrition plan'.
- Nutritional strategies recommended at discharge included: 'Food fortification' (79%); 'ONS' (79%); 'snacks' (73%); 'referral to a community dietitian' (65%); and 'nutrient dense food'(63%).
- The most common estimates of the proportion of patients with COVID-19 needing ONS at discharge was up to 50% and up to 25% (both chosen by 34% of those surveyed), with 13% estimating up to 75% requiring ONS.
- When ONS were required at discharge they were provided as a TTO in most cases (80%), on average for two weeks, with many (66%) using 'low volume' options.

A full publication will follow that will include the complete results from this survey.

Acknowledgements

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Potential conflict of interest

AL Cawood and RJ Stratton (Danone Specialised Nutrition); ER Walters and TR Smith (No Conflicts)