

# An exploration of dietetic students' perceptions on hydration at the commencement of enteral feeding

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## Background

The negative consequences of dehydration in acute-care are well established and they are more pronounced in the enterally-fed (Holmes, 2003). Despite this, studies suggest patients are often dehydrated at commencement of enteral tube feeding (ETF) (Best, 2015).

To date, there has been limited investigation on the involvement of other healthcare professions (Jansson *et al*, 2013) or barriers to guideline implementation surrounding hydration in ETF (Harrison *et al*, 2010). A Cochrane review by Zwarenstein *et al* (2009) stresses the importance of effective inter-professional collaboration in quality healthcare provision, thus further investigation is necessary to enable targeted health improvement efforts.

The aim of this study was thus to compare experiences of dietetic students regarding hydration at the commencement of ETF.

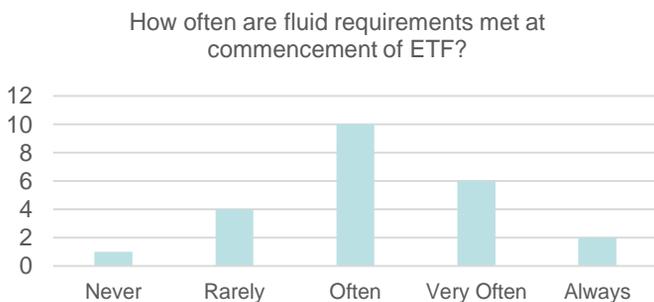
## Methods

A cross-sectional survey exploring student dietitians' perceptions regarding hydration standards & practices in ETF in health boards across Wales. All participants had completed 28-weeks of placement in health boards across Wales to ensure adequate experience of ETF.

## Results

The questionnaire was distributed to 30 undergraduate dietetics students, of which 24 returned their questionnaires (80% response rate).

**Figure 1- Participants perceptions of whether fluid requirements are met at commencement of ETF**



Whilst the vast majority of participants felt fluid requirements were met either often (42%, n=10) or very often (25%, n=6), only 8% (n=2) of participants felt that fluid requirements were always met at commencement of ETF. Additionally, 50% (n=12) of participants felt that dehydration was common at the commencement of enteral feeding. When analysed using Chi Squared, comparison of how often fluid requirements are met and the prevalence of dehydration did not reach statistical significance ( $p=0.512$ ).

**Figure 2- Identified barriers to meeting fluid requirements and HCPs involved**

HCP identified as involved in meeting fluid requirements	# of participants	% of participants
Doctors	22	92%
Nurses	22	92%
SALT	10	42%
Health care assistants	12	50%

Identified Barrier	# of participants	% of participants	Statistical comparison against identified HCP (Chi squared)
Inadequate knowledge of the guidelines by other professions	15	63%	Doctors (P=0.253) Nurses (P= 0.057)
Dietitians' recommendations not followed	17	71%	Doctors= P= 0.498 Nurses (P= 0.498)

Participants most often identified inadequate knowledge of the guidelines by other HCPs (63%, n=15) and dietitians' recommendations not being followed (71%, n=17) as barriers to meeting fluid requirements. 92% (n=22) of participants identified multiple HCPs as involved in meeting fluid requirements- with doctors and nurses being identified by 92% (n=22) of participants. However as seen above, statistical comparison using Chi squared of the HCPs and barriers participants identified did not reach statistical significance.

## Discussion and Conclusion

The above results suggest that fluid requirements are not consistently met for all patients being commenced on enteral feeding, supporting previous conclusions drawn in other research (Best, 2015).

As with other research into guideline implementation, a variety of barriers & HCPs were identified by participants (Harrison *et al*, 2010; Jansson *et al*, 2013). This suggests that student dietitians felt that there are multiple HCPs/barriers involved in meeting fluid requirements. Thus, improvement efforts should incorporate other healthcare professionals to enable effective health improvement and overcome potential barriers (Zwarenstein *et al*, 2009).

In conclusion, this study suggests that there is margin for improvement in hydration standards at commencement of enteral feeding. The results support that dietitians could drive improvement by further integrating efforts with members of the MDT. Further research could assist these efforts by exploring the perceptions of other HCPs and further investigate the specific barriers faced.

## References

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