Tipperary University Hospital
Ospidéal na hOllscoile Thiobraid Árann
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Assessment of Intern Doctor knowledge regarding Nasogastric Tube Insertions and an Educational Session to Improve Knowledge

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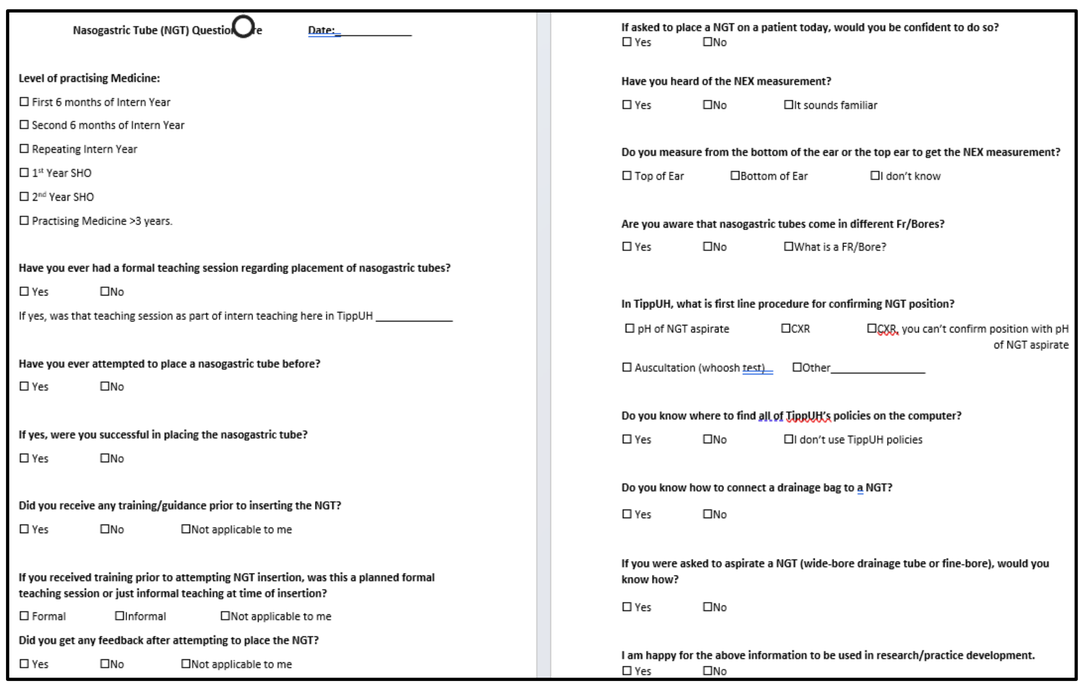
Introduction

Intern doctors in Tipperary University Hospital (TippUH) receive weekly education sessions as part of their training.
Nurses and dietitians are two of the healthcare professionals involved in providing training at these weekly sessions.
From time spent on the wards, and from feedback from interns, it was identified that intern doctors might benefit from formal teaching sessions regarding nasogastric tube (NGT) insertions.
The purpose of this study was to assess knowledge of newly qualified medical doctors (interns) regarding placement of nasogastric tubes (NGTs) and to examine if this knowledge can be improved with the aid of a 1 hour educational session.

Methods

A 1 hour education session was organised within the first month (July) of the doctors starting working in the hospital. A second teaching session was carried out in the last month of their rotation at the end of the year (December).
The education sessions were a mix of theory (using PowerPoint) and practical scenarios (using display models) carried out by a senior dietitian and a practice development nurse.
Content at these sessions included how to insert, and confirm placement, of an NGT according to TippUH policy as well as discussing differences between feeding and drainage tubes.
The surveys were carried out before each teaching session.
The surveys were anonymous and each contained the same questions regarding previous experience of NGT placement and questions around knowledge of how to place NGTs.
For a copy of the survey provided to the intern doctors, please see the image to the right.



Nasogastric Tube (NGT) Questionnaire Date:_____

Level of practising Medicine:
☐ First 6 months of Intern Year
☐ Second 6 months of Intern Year
☐ Repeating Intern Year
☐ 1st Year SHO
☐ 2nd Year SHO
☐ Practising Medicine >3 years.

Have you ever had a formal teaching session regarding placement of nasogastric tubes?
☐ Yes ☐No
If yes, was that teaching session as part of intern teaching here in TippUH _____

Have you ever attempted to place a nasogastric tube before?
☐ Yes ☐No

If yes, were you successful in placing the nasogastric tube?
☐ Yes ☐No

Did you receive any training/guidance prior to inserting the NGT?
☐ Yes ☐No ☐Not applicable to me

If you received training prior to attempting NGT insertion, was this a planned formal teaching session or just informal teaching at time of insertion?
☐ Formal ☐Informal ☐Not applicable to me

Did you get any feedback after attempting to place the NGT?
☐ Yes ☐No ☐Not applicable to me

If asked to place a NGT on a patient today, would you be confident to do so?
☐ Yes ☐No

Have you heard of the NEX measurement?
☐ Yes ☐No ☐It sounds familiar

Do you measure from the bottom of the ear or the top ear to get the NEX measurement?
☐ Top of Ear ☐Bottom of Ear ☐I don't know

Are you aware that nasogastric tubes come in different Fr/Bores?
☐ Yes ☐No ☐What is a FR/Bore?

In TippUH, what is first line procedure for confirming NGT position?
☐ pH of NGT aspirate ☐CXR ☐CXR, you can't confirm position with pH of NGT aspirate
☐ Auscultation (whoosh test) ☐Other_____

Do you know where to find all of TippUH's policies on the computer?
☐ Yes ☐No ☐I don't use TippUH policies

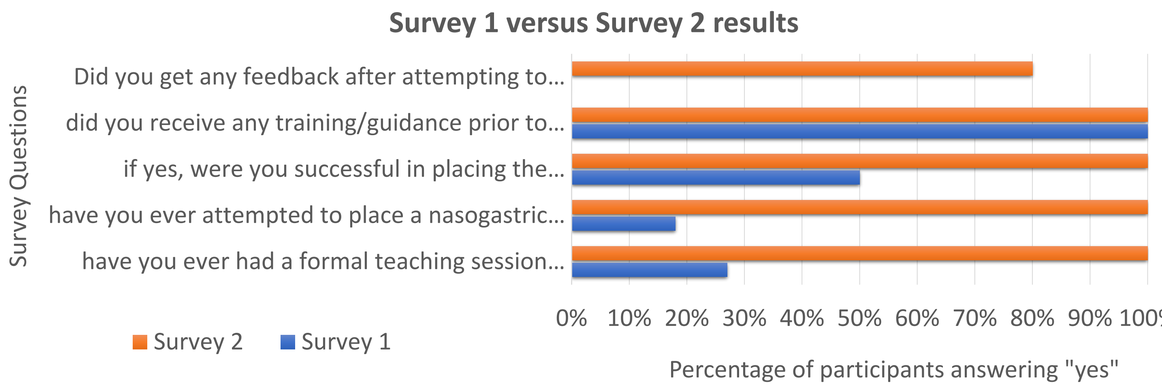
Do you know how to connect a drainage bag to a NGT?
☐ Yes ☐No

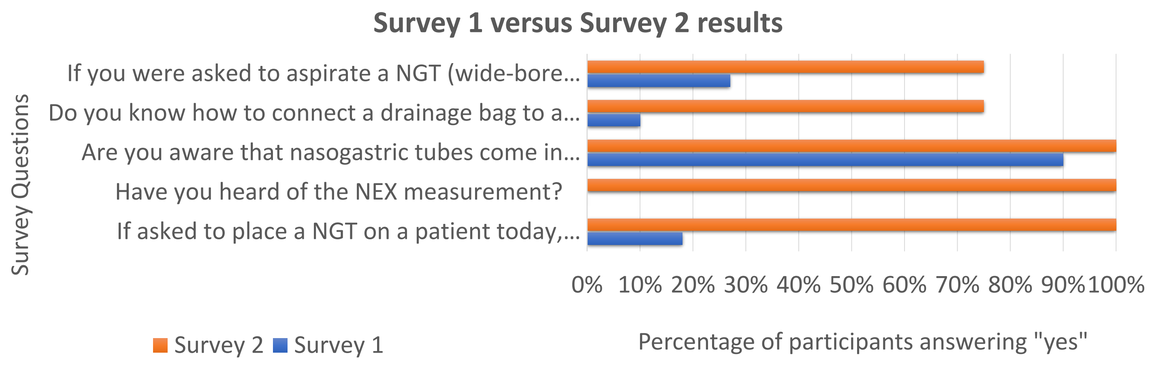
If you were asked to aspirate a NGT (wide-bore drainage tube or fine-bore), would you know how?
☐ Yes ☐No

I am happy for the above information to be used in research/practice development.
☐ Yes ☐No

Results

There were 11 participants in the first survey and 6 participants in the second survey. However, 1 of the 6 participants in the second survey did not consent for use of their survey data and a further participant did not fully complete the survey.
Only 27% of participants had received a formal education session on NGT placement prior to starting work as a doctor.
When surveyed for the second time, all of the participants had received a formal education session. All them had the teaching session in TippUH.
In the first survey 18% (2/11) felt confident of attempting a NGT placement versus 100% (4/4) at the second survey.
In the first survey 0% (0/10) of participants were definitely familiar with the NEX measurement for measuring NGT insertion length but this increased to 100% (4/4) by the second survey while only 27% (3/11) were confident to aspirate a NGT and 10% confident to attach a drainage bag to a NGT in the first survey which increased to 75% confidence (3/4) by survey 2. However, in the first survey more participants reported being aware of where to find TippUH policies on a computer (45% vs 33%).





Conclusion

Intern doctors do not routinely receive training regarding NGTs during their degree programme. This may lead to a lack of practical and theoretical knowledge when starting working.
A practical 1 hour teaching session with Intern doctors proved successful in improving knowledge and confidence surrounding NGT placements as well as improving knowledge around different types of nasogastric tubes.
Unfortunately though, there were only 6 participants at the second teaching session (with 1 of these participants not consenting to having the result of their survey included) compared to 11 participants at the first teaching sessions. This affects the robustness of the data obtained.
This initiative shows the benefit of Multidisciplinary involvement in education sessions for interns.

Acknowledgements
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