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AAC Users and Nursing Staff's Thoughts and Perceptions of Current AAC Training With Content Considerations for Future Training Interventions

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Introduction

As life expectancy increases, more adults are living with conditions affecting their communication, and many of these will reside within care settings such as hospitals or long-term care, cared for by nurses and health care assistants (HCAs).

The current workload and role of a nurse or HCA is complex and busy, and when caring for a patient who is also an Augmentative and Alternative Communication (AAC) user, they need additional skills and knowledge to be an effective communication partner. Nursing staff also need to undertake the various tasks that an AAC facilitator has to assume, such as high-tech AAC system maintenance - updating software, battery charging, cleaning as well as liaising with companies or therapists for help (Beukelman et al., 2008).

Research has identified difficult and distressing experiences of AAC users within hospitals, and nurses have reported feeling frustrated when caring for AAC users due to a lack of knowledge about AAC e.g. Hemsley et al. (2011). Many barriers to implementing AAC, particularly in hospital settings have been identified, including a lack of staff knowledge and skills (Gormley and Light, 2019). The COVID-19 pandemic's impact on communication function has escalated the need for communication aids and subsequently a nurse's need for awareness of alternative and supportive communication tools and strategies (Altschuler, 2021).

Training nursing staff in inpatient settings is complicated by a need to train a large number of healthcare workers on overlapping shift work patterns, 24 hours a day, 7 days a week. Globally, nurses and AAC users are diverse culturally and linguistically, and training needs to ensure these factors are considered.

In terms of opportunities to support nursing staff, recent research by Barnard et al. (2021) found that most interactions between speech and language therapists (SLTs) and nurses were punctuated by interruptions to the conversations in which SLTs seized moments in between nursing tasks to explain communication needs and strategies.

Compounding these factors, we have a limited research-evidence-base for how we train our nursing colleagues. To meet the demands of the healthcare setting, clinicians and researchers are challenged with the task of developing and evaluating innovative, flexible communication supports and communication partner training (Altschuler et al., 2021).

This article explores current research and practice in this area and describes a research study exploring nurses' and AAC users' views about current and future training.

Current practice and research-evidence-base

As part of this research project a systematised review (adheres to the rigor of systematic searches to appraise and synthesise research evidence, but with only one reviewer (Grant and Booth, 2009), was completed to explore the content and effectiveness of AAC training programmes delivered to nursing staff. In total, the review identified 11 studies published between 2001-2021. The majority of training was provided to qualified nurses (7 papers), HCAs also (2), and student nurses (2). Settings were ICU (6), acute hospitals (4) and one nursing home.

Training sessions cited ranged widely from 15 minutes to 6 hours. The format of training also varied and included online, face to face, practical workshops, and demonstrations. There was a distinct lack of reporting of the training content, but most training was in high and low-tech AAC (7). Most studies investigated nurses' views on the training with few exploring the impact on communication interactions between nurses and AAC users. There was unanimously positive feedback from nurses and HCAs about being trained in AAC.

Research study

This research project commenced in 2017 as part of my part-time PhD at Manchester Metropolitan University (MMU).

Primary objective:

To develop a care staff training programme in AAC based on the views of AAC users and nursing staff in a long-term care setting.

Study setting:

The Royal Hospital for Neuro-disability (RHN), is a medical charity with approximately 220 inpatients for both rehabilitation and long-term care, and we have a number of patients with acquired conditions who use high and low tech AAC. The Compass service is the hospital's assistive technology service and a regional specialised hub. Compass uses a range of methods to support and train nursing staff in the set up and use of AAC, but we have never evaluated these:

1. Photo guidelines (Figure.1)
2. Colour-coded labelling of device parts
3. Adaptation of software to be easier to use and understand
4. Video guidelines saved in patient's folders for nursing staff to watch in handover


Clinical Guideline: Eye Gaze with MyGaze camera

Rationale/Aims

- For x to communicate –face to face and remotely, using an eye gaze device.

Key Points

- Charge device overnight
- Remove during transport
- Ensure mount is secured and locked in place



Instructions:

1. Place the mount onto the **left** side of x's wheelchair and **lock** the clamp into place:


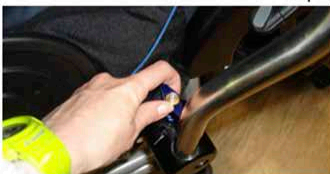



Figure 1. Example of Compass photo guidelines for using AAC

Methodology:

This study uses mixed methods research and is divided into two phases. Phase 1 will be described here.

Ethical approval for this single-site study, based at the RHN, was gained from the UK NHS ethics approval system (IRAS) in 2019. To ensure that the participants had experience of using AAC, purposive sampling was used to recruit 3 AAC users, 9 HCAs and 3 nurses from the rehabilitation and long-term care wards.

The AAC users used a combination of paper-based and electronic AAC and had acquired neurological conditions. They were interviewed face-to-face, with further questions asked and followed up through email. A Talking Mat™ was used with each individual post-interview to confirm their views.

The nursing staff were divided into four small focus groups, each centred around a large, shared Talking Mat as the visual focus for their debate. Talking Mats has proven effective in exploring the views of individuals with and without communication difficulties and diverse health conditions (Murphy et al., 2005). We already know that nurses benefit from peer support when engaging in research and groups are a recommended method to do this (Roxbrough, 2005). The Talking Mats approach was well received by the nursing staff, generating rich discussion and data (Figure. 2).

The questions asked in using the Talking Mats were:

AAC users:

1. How do you feel about the training the nurses currently receive?
2. How do you feel about future training?

Nursing staff:

1. How do you feel about using these different communication aids?
2. How do you feel about the training you have received in communication aids?
3. How do you feel about future training?

The AAC users’ interviews were video recorded, and the nursing staff focus groups were audio recorded. These were then transcribed verbatim. The transcriptions were analysed using reflexive thematic analysis (Braun and Clarke, 2022). This approach was taken as it became clear that, as the researcher was also the SLT working with both the participants and the nursing staff, critically reflecting on my role as researcher was crucial in that any themes developed from the data would be hugely shaped by my thoughts, feelings and views.

The Talking Mats were analysed using descriptive statistics to summarise data where scores were allocated to each response to provide a total and these were then summarised visually using a bar chart. Themes from all data were then triangulated, using the Farmer et al. (2006) Protocol for Triangulation of Qualitative health research:

Some key points:

Views on current training (Figure. 3)



Figure 2. Completed Talking Mat of one of the focus groups with nursing staff

Agreement on current training

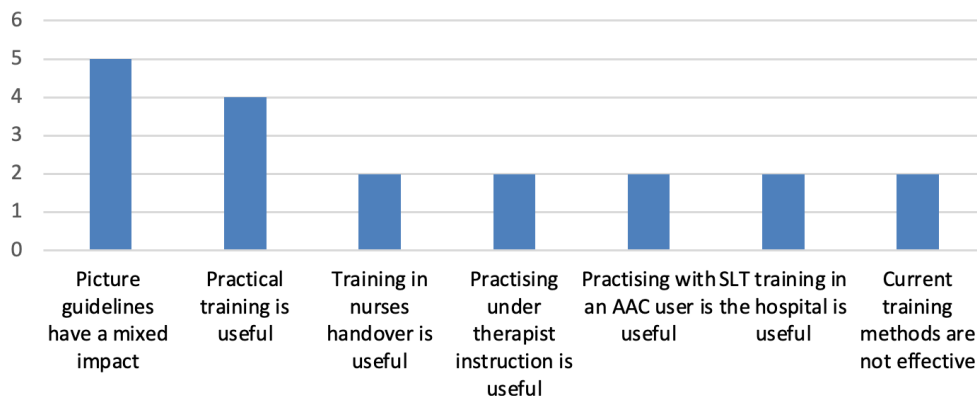


Figure 3. Summary of the triangulated data: Views on current AAC training

- Difficulties with photo guidelines: these are commonly used, but participants reported that health conditions change and guidelines do not always reflect real life. Learning about positioning for AAC from a video is easier.
- Difficulties training during nurses' handover: nursing participants reported this was beneficial as they were all present, but the time pressures in handover meant they could not focus on AAC

Preferences for training: (Figure 4)

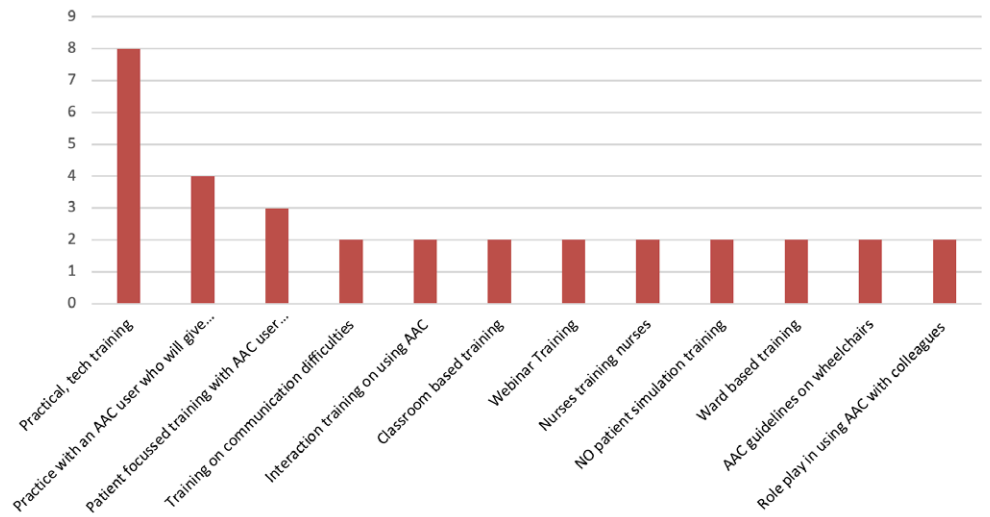


Figure 4: Summary of the triangulated data: Views on future AAC training

- Practical and hands on: participants reported wanting to see and touch devices to understand how they work and how to troubleshoot difficulties.
- Practising with an AAC user who will give feedback: AAC user participants reported wanting to be involved and to provide feedback which the nursing participants also wanted.
- Informative about communication difficulties and the rationale for AAC
- Individual, patient focussed, and not generic.

Examples of quotes from the data:

AAC users-

'Training must be obligatory at induction'

'Checklist order of tasks'

Nursing staff-

'The best way to train the staff if you train certain people..then we can train each other we can show each other'

'the role play with a colleague you see someone doing things you tend to remember'

Communication Matters (CM) presentation attendees feedback

A Mentimeter™ poll was conducted at the 2022 CM conference after this research was presented, to ask attendees what they find works well in training nursing staff in AAC.

Forty-four responses were received, with the following results (Figure. 5):

The results paralleled this research with involving AAC users, videos, and in-person, practical hands-on training cited as the most useful.

Discussion

AAC users and nursing staff are often excluded from research due to difficulties communicating or access to and availability of these groups. Yet they have unique insights into the phenomenon of communication through AAC and how they learn most effectively in training. This research has aimed to break down some of those access barriers to explore the views of these marginalised groups through adapting traditional research methods and providing flexibility in data collection. Through combining the views of AAC users and nursing staff, there is a desire for training that is practical, focussed, with AAC user involvement, including videos, role play and feedback.

The data from Phase 1 are currently being triangulated with the literature review and training intervention literature to feed into the development of a nurse training intervention.

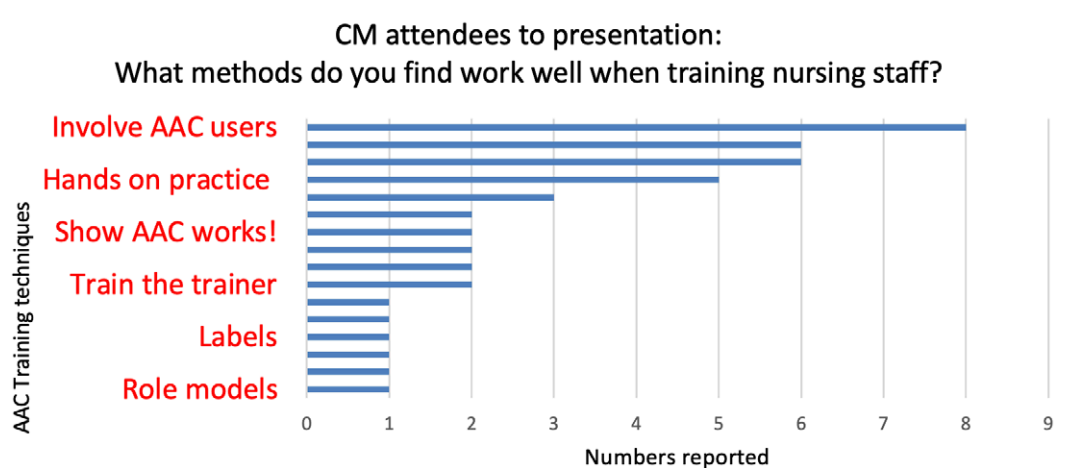


Figure 5: Summary of Mentimeter poll from CM presentation attendees

Limitations

The AAC user participants all had good language and cognitive abilities and not a sample of people with diverse communication needs, and only from individuals with acquired conditions. The nurses and HCAs had volunteered and so likely were more interested in AAC which may have affected their training views and needs.

The Phase 1 data were collected pre-COVID-19 and so results may be different now if we collected data in our post-COVID-19 era which has an increased emphasis on digital learning.

Conclusion

Nursing staff are our colleagues and partners in caring for individuals with communication difficulties and their role is vital in providing and supporting effective AAC.

This small study within a specialised setting does not reflect all settings where nursing staff work. However, the results so far have provided valuable information about what AAC users and care staff feel is useful in AAC training which will now be fed into an intervention of training that could be trialled elsewhere.

Acknowledgement

Thank you to all those who volunteered to be part of this study.

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