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Speaking up in Healthcare: An Exploration of the Allied Health New Graduate Workforce

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Abstract

Introduction: All healthcare workers are responsible for patient safety and quality improvement and need to “speak up” to communicate issues. As healthcare systems strain under the impact of reduced staffing and workloads increase, allied health new graduates are feeling under pressure and unsupported. Understanding their experiences of speaking up as they transition into the workforce will identify what support they require to fulfil their patient safety and quality improvement responsibilities. **Method:** An exploratory study was conducted to investigate how new graduates in allied health speak up. Informed by a realist theoretical position, this study was interested in what contexts and resources support new graduates to speak up or not. Two different focus groups with allied health new graduates were used to collect data. Reflexive thematic analysis was employed to draw out key themes and sub-themes. **Results:** Three main themes were generated –advocacy drives speaking up, scaffolding, and transition impact. Further analysis identified context-mechanism-outcome configurations which were then developed into an initial programme theory. **Conclusion:** Further in-depth exploration of speaking up behaviour with allied health new graduates will inform leaders within education and workplace settings about ways to develop confident and competent professionals who can speak up for patient safety and quality improvement.

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ABSTRACT

Introduction: All healthcare workers are responsible for patient safety and quality improvement and need to “speak up” to communicate issues. As healthcare systems strain under the impact of reduced staffing and workloads increase, allied health new graduates are feeling under pressure and unsupported. Understanding their experiences of speaking up as they transition into the workforce will identify what support they require to fulfil their patient safety and quality improvement responsibilities.

Method: An exploratory study was conducted to investigate how new graduates in allied health speak up. Informed by a realist theoretical position, this study was interested in what contexts and resources support new graduates to speak up or not. Two different focus groups with allied health new graduates were used to collect data. Reflexive thematic analysis was employed to draw out key themes and sub-themes. **Results:** Three main themes were generated –advocacy drives speaking up, scaffolding, and transition impact. Further analysis identified context-mechanism-outcome configurations which were then developed into an initial programme theory. **Conclusion:** Further in-depth exploration of speaking up behaviour with allied health new graduates will inform leaders within education and workplace settings about ways to develop confident and competent professionals who can speak up for patient safety and quality improvement.

Keywords: speaking up, new graduate, allied health, patient safety, quality improvement

INTRODUCTION

New graduates (NG) are expected to enter healthcare capable and confident in voicing issues and ideas.¹ These behaviors are called voice behaviors or speaking up.^{2,3} All healthcare professionals are responsible for speaking up about patient safety and quality improvement. However, when staff feel unsupported or inexperienced and do not voice their concerns, the impact on patient and staff safety can be significant.⁴ Studies looking into speaking up in healthcare highlight how staff often do not feel safe to voice concerns or ideas.⁵⁻¹⁰

Practice Points

1. Speaking up is a critical skill for allied health new graduates, yet there is little published research on this group.
2. Patient safety, self and team advocacy activate speaking up in allied health new graduates.
3. Supervision enables speaking up behavior.

Allied Health New Graduates

This study sought to explore the speaking up experiences of NG, allied health professionals. The term allied health refers to healthcare professions who are not nurses or doctors.¹¹⁻¹³ Allied health professionals may work within intraprofessional and/or interprofessional teams. We define NGs as those in their first one-two years of practice following graduation. So far, there is limited published literature on speaking up in the allied health NG workforce.¹⁴

Voice Behavior and Speaking Up

Voice behavior is defined as voicing ideas or issues with the intention being to improve the functioning of the team, service, and organization and includes written or spoken communication, formal or informal.¹⁵⁻¹⁷ Speaking up is a term that appears more in healthcare literature, while voice behavior is a term that appears more in organizational psychology and human resources literature. In this paper, we will use the term “speaking up.” The act of speaking up, or not speaking up, is complex. Individual and organizational factors that facilitate and prevent someone from speaking up are yet to be fully explored and understood.¹⁸⁻²⁰

Speaking up in Healthcare

In a scoping review,¹⁴ we looked at speaking up in healthcare. Using the Joanna Briggs guidelines, 76 studies published between 2009-19 were reviewed to map the depth and breadth of this topic. The scoping review identified a paucity of studies on speaking up in allied health, particularly for NGs in allied health. While this review indicates a growing interest in this topic based on the recent increase in publications in this area, only five of the 76 studies reviewed included allied health participants, and none of the studies looked at allied health NGs. An understanding of how NGs in allied health speak up, and what supports and hinders this, may provide allied health training programmes and allied health leaders with pragmatic solutions to support speaking up behavior in this group.²¹

METHODS

Research Aims

This study aimed to explore: (1) how NGs in allied health perceive speaking up about patient safety issues and quality improvement, and (2) the influences on speaking up behaviors.

Design

This study used focus groups to explore this topic. Ethics approval (no: 024594) was granted by the University of Auckland Human Participants Ethics Committee. The authors report there are no competing interests to declare.

Theoretical Influence

This study is informed by a realist philosophical position.²² Realists explore complex social problems in-depth – in this case, speaking up in healthcare. Using a realist lens, we aim to unpack the how and why NGs speak up.^{22,23} Realist methods can provide an understanding of 1) the contexts in which speaking up occurs, including internal factors for the individual such as previous positive experiences of speaking up, or external factors such as supportive supervisors, 2) the mechanisms which activate speaking up or not, and 3) the outcomes resulting from speaking up events.^{24,25} These methods enable the researcher to look at how and why an outcome has occurred, rather than just identifying that it did occur or just describing the event.

Realist researchers use heuristics to explore factors that activate social events, otherwise called mechanisms.²⁶ While this study is not incorporating realist synthesis or realist evaluative methods, the research questions, focus group questions, and search for influences on speaking up in the data are underpinned by realist concepts. Realists frequently understand and illustrate research data through the conceptualisation of context, mechanism, and outcome configurations (CMOCs).^{22,23} This reasoning process helps researchers understand what works, with whom, and in what contexts. The use of CMOCs support researchers to generate theories called initial programme theories (IPTs). This study was interested in exploring the underlying

factors impacting NGs speaking up. A deeper understanding of the contexts and mechanisms generating speaking up behaviour in this workforce will support the development of an initial programme theory which will be tested in future studies.

Participants

New graduates in allied health working within any one of the three tertiary hospitals in a large city in New Zealand were invited to participate in this study. The inclusion criteria required that they were working within the healthcare setting and within their first two years of work since graduation. Table 1 summarises the demographic details of the seven participants. Purposive and snowball sampling were employed during the recruitment phase. Participants were invited via staff email lists and professional networks.

Table 1: Participant Demographics

Criteria	Focus Group 1		Focus Group 2	
Professional discipline	Audiology	1	Audiology	0
	Dietitian	3	Dietitian	0
	Occupational therapy	0	Occupational therapy	0
	Physiotherapy		Physiotherapy	
	Social worker	1	Social worker	0
	Speech-language therapist	0	Speech-language therapist	2
Ethnicity	NZ European	3	NZ European	0
	NZ Māori	0	NZ Māori	1
	Indian	1	Indian	0
	Chinese	0	Chinese	1
	Middle Eastern	1	Middle Eastern	0
Gender	Female	5	Female	2
Country of study	New Zealand	5	New Zealand	2
Year of graduation	2018	4	2018	1
	2019	1	2019	1
Number of years working	Less than 1 year	2	Less than 1 year	1
	1-2 years	3	1-2 years	1

METHODS

Focus groups were used to provide participants with the chance to expand, test and refute their own and each other's thoughts on this topic.^{14,27} Two focus groups were held in 2020 and 2021. Due to COVID-19 restrictions, the focus groups were conducted online using Zoom video conferencing software. Questions were developed following an in-depth exploration of the literature (Appendix 1). Participants were asked to discuss their experiences of speaking up at work. We aimed to explore what triggered the participants to speak up or not, the situations they were in and the outcomes.

Zoom transcription function was used to transcribe the meetings, followed by review and editing. Each focus group was approximately 60-75 mins. To support group cohesion, time was spent on introductions. Each focus group also opened and closed with a karakia (culturally appropriate way to open and close a meeting in New Zealand), ensuring tikanga principles (cultural protocols) were followed.

Analysis

Braun and Clarke's reflexive thematic analysis (TA)²⁸ was employed. Given the realist theoretical approach influencing this study, we wanted to explore the underlying mechanisms activating the events described by participants and start to develop initial theories on speaking up. The theoretical flexibility of reflexive TA allows for this.^{28,29} Each focus group was initially analysed separately as they took place one year apart (FG1 and FG2). The steps taken in this analysis are outlined in Table 2.

Table 2. Analysis Steps

1.	Notes taken by primary researcher throughout focus group discussion on initial ideas.
2.	Notes taken by primary researcher on thoughts after focus group relating to ideas, topics and emerging thoughts on theory development.
3.	Immersion in the data - transcripts read through several times to gain familiarity by primary researcher.
4.	Initial coding keeping close to the words used by participants.
5.	Time away from data to allow for further processing of analysis.
6.	Further round of coding with revisions and editing to group sub-themes.
7.	Grouping of sub-themes into groups and labelled as main themes.
8.	Further time away from analysis to think over themes and sub-themes.
9.	Feedback from three other research team members to ensure main themes and sub-theme labels, descriptions of themes and exemplar quotes are clear for the reader.
10.	Return to analysis for final review and editing of themes and sub-themes. This process was repeated with the second focus group.

Following the development of themes and subthemes, one researcher reviewed the transcripts looking for causal insights, then coded data segments for factors relating to contexts, mechanisms, and outcomes to create CMO configurations (CMOCs). These configurations were compiled into a matrix (Appendix 1); then further analysis led to the generation of an initial programme theory (Figure 1) which was reviewed and supported by one other researcher experienced in realist methodology.

RESULTS

Focus group attendance was impacted by COVID-19 related workload pressures with fewer participants being able to join than had originally signed up. However, data analysis identified similar main themes in both groups, giving the research team enough information to develop the Initial Programme Theory and then plan for phase two of this wider study.

The findings from this study have been represented using a thematic framework (Table 3), with CMOCs formulated into a matrix (Appendix 1) and the initial programme theory (Figure 1). This section starts with a summary of the data in table and figure format. Illustrative quotes for the main themes are provided in text and also in Table 3. Three overarching themes were generated through analysis of the transcripts from the two focus groups and a total of 35 subthemes – 16 from FG1 and 19 from FG2 (Table 3). While the main themes constructed from the focus groups were the same – advocacy drives speaking up, scaffolding, transition impact – the subthemes had more variability; for example, cultural inequities appeared only in FG2 and being the best me (both from main theme advocacy drives speaking up) only appeared in FG1.

The theme advocacy drives speaking up encompasses all the factors which drive the NGs to speak up. This includes elements such as patient safety, cultural safety and equity, and speaking up for their teams and themselves shown in these two quotes: “I guess it just came back to patient-centred care and just knowing that I didn't feel like she was I guess ... I can't think of the word like ... safe.” (FG1N5) and “Yeah I guess just being aware that, aware of myself and what my own workload and what I can handle at the moment, making sure that I speak up around that if that's getting too much or if it's too little.” (FG2N6)

The second theme Scaffolding is an umbrella term to describe the positive supports for speaking up in addition to the barriers to speaking up when the scaffolding is not in place. The positive supports include strategies used by the NGs to speak up and factors related to the team culture shown in this quote:

“For me I can see that I do have a voice here. It is encouraged and supported. We have a lot of meetings where there is a place for us to speak about improvements needed, or different ways of you know different resources we need or could work on ... it's more of a collaborative approach as opposed to mainstream to me. I'm quite lucky.” (FG2N7).

Without this scaffolding in place, invisible barriers impacted speaking up. These negative influences included factors such as their perceived low role power as NGs, their concerns about making a mistake and poor team culture. “So it was kind of difficult at times to be like speak out when you felt like I guess everyone was kind of in the same position.” (FG1N1) and “I was definitely a bit unsure of what to do here, whether I should just kind of say she's cleared for discharge or say something about not being ready for discharge or I guess not saying something about it.” (FG1N5)

Also included under this theme are ideas for improving speaking up and self-care as identified by the participants. “I don't know just like having good rapport and having other, other people on the team inviting conversation or opening up that conversation really.” (FG2N6) and “There needs to be more, a bigger focus on self-care. And just self-care for your whānau as well. So not just you but you know what's your routine when you finish work. Don't take work home.” (FG2N7)

The final main theme *Transition Impact* describes the experiences of the NGs as they transitioned from student into their NG role and into the workforce. This includes their stories about feeling overwhelmed, unclear about their roles and feeling at risk of burning out. Both groups spoke about the importance of supervision to support speaking up and identified several pragmatic ideas to support speaking up in NGs shown here – “There wasn’t enough to support you. You really were left to figure it out on your own.” (FG2N7) and “It can be quite daunting and I know for me I’ve seen a lot of either kind of new grads come and go.” (FG2N7)

Table 3. Thematic framework with illustrative quotes

Themes FG1 & FG2		Subthemes	
Themes (3)	Illustrative quotes	FG1 (16)	FG2 (19)
Advocacy Drives Speaking Up	"... this is my dream job - Māori mental health. For me it's more about vulnerability ... I do work with some of the most vulnerable people in our community. Who have you know throughout their lives have been overlooked, they're marginalized, many are institutionalized, misdiagnosed, misunderstood ... So yeah I think that's it for me, just be the voice when they can't." (FG2N7)	Patient advocacy – safety focus Pulling your weight Being the best me SU for self	Patient advocacy Speaking up for team & self Cultural inequities
Scaffolding	"For me I can see that I do have a voice here. It is encouraged and supported. We have a lot of meetings where there is a place for us to speak about improvements needed, or different ways of you know different resources we need or could work on. Things like that. As opposed you know it's more of a collaborative approach as opposed to mainstream to me." (FG2N7)	Different positions Positive team culture Data drives confidence SU communication strategies Being bold Quality supervision	Previous experience Positive team culture Do the mahi ¹ /work SU through action Quality supervision
(a) Supportive contextual factors and different communication strategies			
(b) Barriers with no scaffolding in place.	"It was definitely quite a moment for me of second guessing my case. Like I felt like I couldn't just send her home. But then I think as a new grad or for me anyway there's definitely times where I'm like, 'Well, this is what the medical team want'." (FG1N5)	Low self-efficacy & error anxiety Low role power	Role stereotype Poor team culture Scope of practice divisions NG low self-efficacy No time or process or resources (so no point)
(c) Strengthening resources	"...like a workplace who would be like 'Oh okay let's lessen the load a bit or what can we do to make things easier for you and how can we help you to get more efficient?'" (FG1N4)	Orientation & competency programme Ongoing support & development	Kōrero ² /talk – more opportunities Team manaakitanga ³ /care Improved partnership and orientation NG resilience and self-care

¹ Mahi – a word used in Māori language meaning work.

² Kōrero – a word in the Māori language meaning to talk.

³ Manaakitanga – a word in the Māori language meaning care and respect.

⁴The indigenous people of Aotearoa, New Zealand.

Transition Impact	“Because I feel like as new grads, we feel like we just need to push push push push and push ourselves to the breaking point. We're not very good at knowing when to stop.” (FG1N3)	Transition reality shock Burn out (COVID impact)	Transition reality shock Leave the job
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Given the influence of a realist theoretical position, this study aimed to explore how NGs' experience speaking up and to start to explore the underlying mechanisms influencing this behaviour. While this study is not a realist evaluation, analysis of the data using a realist lens uncovers possible causal mechanisms which promote and prevent speaking up behaviour and provides information about the context which best supports or prohibits speaking up. From construction of the CMOCs (Appendix 1) an initial programme theory has been created which is a developing theory about how and why speaking up in allied health NGs works or not (Figure 1). This will be tested in a future study.

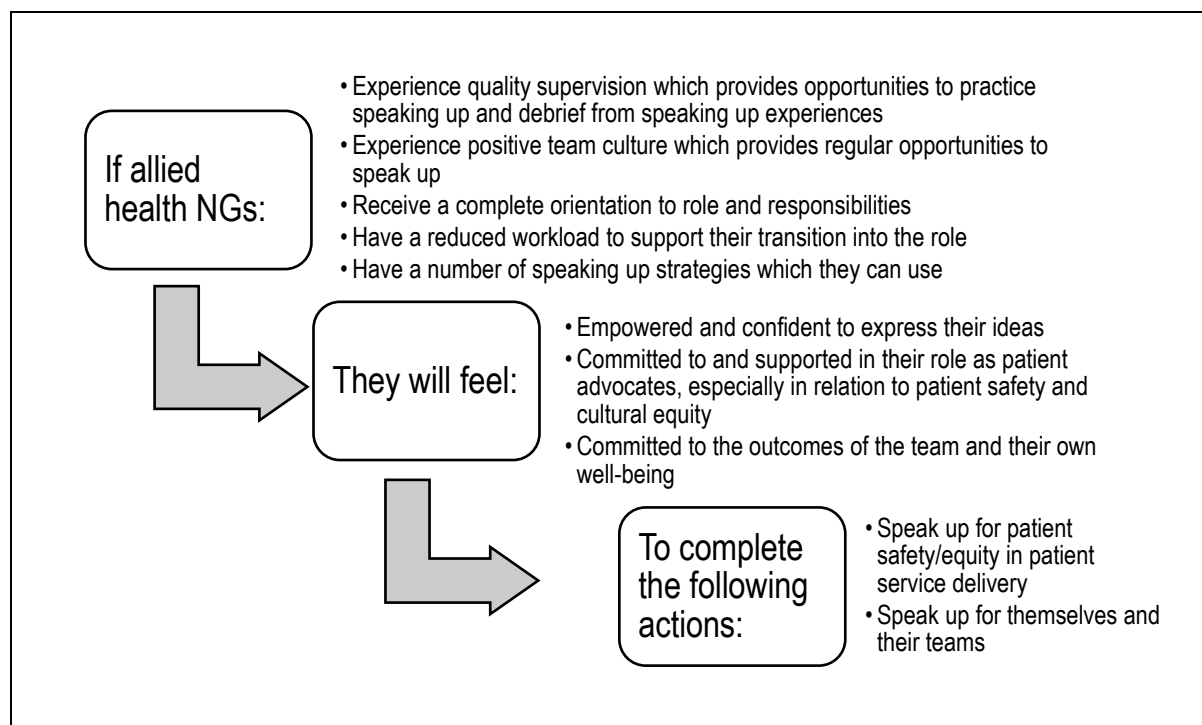


Figure 1. Initial Programme Theory on Speaking Up in Allied Health New Graduates

DISCUSSION

A scoping review on speaking up in healthcare found that few studies included allied health professionals.¹⁴ This study begins to address this gap by providing the perspective of allied health NGs. Some findings from this study are similar to findings in nursing and medical literature around supports and barriers to speaking up, such as power, hierarchy, team culture and risk.¹⁴ What this study adds to the literature is the experience of allied health NGs, what influences them to speak up or choose silence, the strategies they have developed to speak up and ideas they have about how NGs could be more supported. Additionally, we have developed an IPT on speaking up in allied health NGs. The following discussion will expand on the main themes of advocacy, scaffolding, and transition impact.

Advocacy

Advocacy was reported to be a key driver in moving the NGs to speak up. Analysis of the focus group data indicated that the NGs reported a strong need to advocate for their patients, their teams, and themselves. When asked to describe the reasons for advocating for their patients, they reported patient safety, cultural equity, and quality service delivery. Some studies have illustrated that as the risk to patient safety increased, so too did the drive to speak up;^{30,31} however, these researchers noted that if the risk to interpersonal relationships was high, the individual would choose silence. One study which collected data from four nursing student year groups found that they became less confident to speak up as they gained more clinical experience in the healthcare setting.^{31,32} Our findings highlight that our small sample of NGs spoke up despite recognizing the risk to interpersonal relationships. Data was only collected at one time point; therefore, it is important that speaking up behavior is investigated over time to determine the sustainability of this behavior. The sub-theme "No time or resources or resource, so no point" suggests fatigue or apathy about speaking up which may have developed over time following previous negative speaking up experiences.

It is likely that allied health NGs would speak up less over time if the team culture does not support speaking up, particularly if the team culture is negative or toxic and allows bullying. This type of poor team culture was described by one participant

who identified as Māori.⁴ Bullying in healthcare has been reported in nursing³³, medical literature,³⁴ and in allied health.³⁵ Bullying experienced by nursing students in New Zealand is described in the literature,³⁶ but published literature on bullying in the NG allied health workforce in New Zealand or elsewhere is limited. Given that bullying, emotional exhaustion, and burnout are linked to NGs, this is an area which requires in-depth exploration.³⁷

A positive influence on speaking up discussed by one participant, was speaking up about racial inequities in relation to patient care. This was not highlighted as a driver by other participants, which could reflect their limited experience in their roles, or could be an area for concern given the widely-reported inequities in delivery of healthcare in western healthcare systems in New Zealand.³⁸ There may be a lack of support and training on this topic for NGs and it may be that cultural safety issues are not being raised in supervision meetings despite publications on this topic and accreditation board requirements.³⁹

Scaffolding – Speaking Up

The protective nature of supervision for the NG workforce was evident in this study. Both focus groups identified that supervision supported them to speak up and to learn from speaking up events. Davys and Beddoe⁴⁰ report on the benefits of supervision for healthcare staff and include factors such as employee wellbeing and professional growth. A meta-analysis of studies on supervision identified additional benefits such as quality care for patients and employee job satisfaction.⁴¹ While links have been made between speaking up and perceived organisational support, our study adds to this field of literature by specifically highlighting the beneficial role of supervision. These findings highlight the need for healthcare institutions to continue to invest in supervision skills training for staff and to ensure that all allied health staff are receiving quality supervision.

Scaffolding – Barriers with no Scaffolding to Overcome Them

Without this scaffolding to support speaking up behavior, the NGs reported meeting many barriers. The NGs were aware of the barriers that inhibited them from speaking up, and without specific training on how to work around these, they tried to find their own strategies. Participants in both focus groups discussed their position in the healthcare team hierarchy. As a newcomer to the healthcare system, NGs are described as having low power compared to more experienced clinicians and medical professionals.⁴² In addition to short tenure contributing to their low power position, Freeman et al⁴³ reported that allied health NGs are in a low power role compared to medical professionals due to individual professional philosophies about team roles. Following an exploration of different teamwork philosophies, Freeman et al.⁴³ identified a directive philosophy which was held mostly by members of the medical team compared with an integrative philosophy which was held more by allied health professions. In the current study, the NG comments highlighted the tensions between following a directive given by the medical team versus speaking up on behalf of the patient. The strategies they used included using supervision to brief and debrief, engaging the opinions of other team members, and getting the full story from the patient, which fit with the integrative philosophy of team work by Freeman et al.⁴³

A related study, involving nurses and doctors within surgical settings, found complex hierarchical roles within healthcare resulting in staff feeling reluctant to speak up across professional boundaries in relation to patient safety issues.⁴⁴ Contrary to this finding, some participants in the current study did talk about speaking up across professional boundaries, despite the risk to interpersonal relationships, due to their perceived need to advocate for the patient. However, other participants described situations in which they remained silent for fear of making a mistake or being seen to be incompetent. Coupled with the literature described here, our findings further illustrate how the act of speaking up is complex for allied health NGs and will vary in relation to the content they are speaking up about and the context they are in both externally (e.g., team culture) and internally (e.g., self-efficacy).

Scaffolding – Strengthening Resources

NGs in this study did not receive training at university or in the workplace on how to speak up. When asked for ideas, they highlighted the need for an improved orientation to the role and ongoing professional development. One of the NGs spoke about how their current team culture supported speaking up. They were working within a Māori mental health setting and spoke about the supports and systems which enabled all staff to speak up. In teams where there is a focus on creating a safe learning environment, psychological safety is high and team members feel empowered to risk relationships or impact self-image by speaking up.⁴⁵ Gaining an in-depth understanding of the contexts and mechanisms which support speaking up will provide insights for settings in which this is not occurring.

Transition Impact

Despite scaffolding to support speaking up, the NGs discussed external barriers and internal barriers to speaking up, and some even spoke about their concerns of burning out. They expressed anxiety about making mistakes, given their low role power, and would therefore withhold voice. Others spoke about ways they would mitigate this risk by ensuring that they had

all their data and the whole story before they spoke up. The value that these NGs placed on patient advocacy influenced their speaking up. However, NGs were less empowered to speak up for themselves. They spoke about a need to be seen to be “pulling their weight” to support the team given the pressure their team was under. In the organisational psychology literature, these behaviours are called organizational citizenship behaviours (OCB).⁴⁶ In a recent survey of healthcare workers, Ng et al⁴⁷ found that job satisfaction and work engagement were positively related to OCB. They noted that healthcare institutions require staff to demonstrate OCB in order to provide a safe and high-quality healthcare service.⁴⁷ It is concerning that while NGs in our study described OCBs, they also reported feeling reluctant to speak up to seek help for fear of looking incompetent. Instead, they relied on a more senior team member noticing that they were not coping and offering assistance. While these reports are not new, it is concerning that NGs continue to report these experiences given what the healthcare setting and tertiary providers know about this transition experience.^{11,48} This finding highlights a vulnerability in the healthcare workforce.

Risk of burnout was identified as a sub-theme in FG1 and warrants further discussion. Burnout is an occupational condition caused by workplace stress resulting in severe physical, emotional and cognitive exhaustion.⁴⁹ While NG burnout is reported in medical and nursing literature,⁴⁹⁻⁵² there are few published studies on burnout in the allied health workforce.^{49,53,54} Findings from our focus groups highlight the pressure the NG workforce is experiencing. They reported high anxiety about making mistakes, high pressure to be seen to be doing their share of the work, and they were worried about looking incompetent and reported not feeling fully informed about their roles or supported in knowing how to improve their practice. These findings are in conflict with findings from a study of NG nurses in the UK, who reported initially feeling confident to speak up about patient safety; however, they also reported feeling less confident with more time in their role. These experiences present a barrier to the NGs speaking up, particularly for support when they are not coping.

Limitations

This study is reporting on focus groups with low participant numbers and a narrow range of allied health disciplines, and only one of the participants identified as Māori. While the numbers were low, the discussion provided rich data. Although the full range of allied health professions was not represented, there did not appear to be a discipline-specific differences in the comments made. However, the examples provided by the Pākeha/New Zealand European participants did differ from the examples provided by the New Zealand Māori participant, which could be context specific as she was the only person in a Māori mental health setting. A final limitation is that COVID-19 restrictions resulted in the focus groups being online. While meeting a group online for the first time and helping everyone to feel comfortable is challenging and may impact on what participants choose to disclose, the researcher made efforts to foster a connection with the participants from initial emails to time taken at the start and during the focus group to develop a trusting relationship.

CONCLUSION

With the influence of a realist theoretical position, this paper aimed to answer the following questions: 1) how do NGs in allied health perceive communicating about patient safety and quality improvement, and 2) what are the influences on these behaviors? While the NGs in this study reported similar barriers to speaking up to those in the nursing and medical literature, such as power and team culture, this New Zealand study of allied health NGs brings new knowledge to this topic. There is limited published literature on how allied health NGs experience speaking up. This study provides new insights into what influences this workforce to speak up, some strategies they use to speak up and ideas on how this might be further supported. The study highlights how allied health NGs report different speaking up experiences to other professions such as nursing and medicine, and therefore require further study. A longitudinal exploration of the experience of NGs' speaking up would provide tertiary and healthcare institutions knowledge on what works, how, in what contexts and with whom.

References

1. Morrow KJ, Gustavson AM, Jones J. Speaking up behaviours (safety voices) of healthcare workers: A metasynthesis of qualitative research studies. *Int J Nurs Stud.* 2016;64:42-51.
2. LePine JA, Van Dyne L. Predicting voice behavior in work groups. *J Appl Psychol.* 1998;83(6):853.
3. LePine JA, Van Dyne L. Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with big five personality characteristics and cognitive ability. *J Appl Psychol.* 2001;86(2):326.
4. Schwappach D, Gehring K. 'Saying it without words': A qualitative study of oncology staff's experiences with speaking up about safety concerns. *BMJ open.* 2014;4(5):e004740.
5. Alingh CW, van Wijngaarden J, van dV, Paauwe J, Huijsman R. Speaking up about patient safety concerns: The influence of safety management approaches and climate on nurses' willingness to speak up. *BMJ Quality & Safety.* 2019;28(1):39-48.
6. Attree M. Factors influencing nurses' decisions to raise concerns about care quality. *J Nurs Manag.* 2007;15(4):392-402.

7. Dendle C, Paul A, Scott C, Gillespie E, Kotsanas D, Stuart RL. Why is it so hard for doctors to speak up when they see an error occurring? *Healthcare Infection*. 2013;18(2):72-75. doi: 10.1071/HI12044.
8. Dixon-Woods M, Campbell A, Martin G, et al. Improving employee voice about transgressive or disruptive behavior: A case study. *Acad Med*. 2019;94(4):579-585.
9. Edrees HH, Ismail MNM, Kelly B, et al. Examining influences on speaking up among critical care healthcare providers in the united arab emirates. *International Journal for Quality in Health Care*. 2017;29(7):948-960.
10. Etchegaray JM, Ottosen MJ, Dancsak T, Thomas EJ. Barriers to speaking up about patient safety concerns. . 2017.
11. Dyess SM, Sherman RO. The first year of practice: New graduate nurses' transition and learning needs. *J Contin Educ Nurs*. 2009;40(9):403. doi: 10.3928/00220124-20090824-03.
12. Theisen JL, Sandau KE. Competency of new graduate nurses: A review of their weaknesses and strategies for success. *J Contin Educ Nurs*. 2013;44(9):406. doi: 10.3928/00220124-20130617-38.
13. Gilmour ASM, Jones RJ, Cowpe JG, Bullock AD. Communication and professionalism skills of a new graduate: The expectations and experiences of dental foundation trainers. *European Journal of Dental Education*. 2014;18(4):195-202.
14. Friary P, Purdy SC, McAllister L, Barrow M. Voice behavior in healthcare: A scoping review of the study of voice behavior in healthcare workers. *J Allied Health*. 2021;50(3):242-260.
15. Van Dyne L, LePine JA. Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal*. 1998;41(1):108-119.
16. Mowbray PK, Wilkinson A, Tse HH. An integrative review of employee voice: Identifying a common conceptualization and research agenda. *International Journal of Management Reviews*. 2015;17(3):382-400.
17. Morrison EW, Wheeler-Smith SL, Kamdar D. Speaking up in groups: A cross-level study of group voice climate and voice. *J Appl Psychol*. 2011;96(1):183.
18. Landau J. To speak or not to speak: Predictors of voice propensity.(report). *Journal of Organizational Culture, Communications and Conflict*. 2009;13(1):35.
19. Bashshur MR, Oc B. When voice matters: A multilevel review of the impact of voice in organizations. *Journal of Management*. 2015;41(5):1530-1554.
20. Van Dyne L, LePine JA. Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal*. 1998;41(1):108-119.
21. Fletcher AJ. Applying critical realism in qualitative research: Methodology meets method. *International Journal of Social Research Methodology*. 2017;20(2):181-194.
22. Pawson R, Tilley N. An introduction to scientific realist evaluation. *Evaluation for the 21st century: A handbook*. 1997;1997:405-418.
23. Pawson R. Nothing as practical as a good theory. *Evaluation*. 2003;9(4):471-490.
24. Westhorp G, Prins E, Kusters C, Hultink M, Guijt IM, Brouwers J. Realist evaluation: An overview. . 2011.
25. Jagosh J, Bush PL, Salsberg J, et al. A realist evaluation of community-based participatory research: Partnership synergy, trust building and related ripple effects. *BMC Public Health*. 2015;15(1):1-11.
26. Jagosh J. Retroductive theorizing in pawson and tilley's applied scientific realism. *Journal of Critical Realism*. 2020;19(2):121-130.
27. Krueger RA. *Focus groups: A practical guide for applied research*. Sage publications; 2014.
28. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*. 2019;11(4):589-597.
29. Clarke V, Braun V, Hayfield N. Thematic analysis. *Qualitative psychology: A practical guide to research methods*. 2015:222-248.
30. Salazar MJB, Minkoff H, Bayya J, et al. Influence of surgeon behavior on trainee willingness to speak up: A randomized controlled trial. *J Am Coll Surg*. 2014;219(5):1001-1007.
31. Law BY, Chan EA. The experience of learning to speak up: A narrative inquiry on newly graduated registered nurses. *J Clin Nurs*. 2015;24(13-14):1837-1848.
32. Lukewich J, Edge DS, Tranmer J, et al. Undergraduate baccalaureate nursing students' self-reported confidence in learning about patient safety in the classroom and clinical settings: An annual cross-sectional study (2010–2013). *Int J Nurs Stud*. 2015;52(5):930-938.
33. Dumont C, Meisinger S, Whitacre MJ, Corbin G. Nursing2012 horizontal violence survey report. *Nursing2020*. 2012;42(1):44-49.
34. Chambers CN, Frampton CM, McKee M, Barclay M. 'It feels like being trapped in an abusive relationship': Bullying prevalence and consequences in the new zealand senior medical workforce: A cross-sectional study. *BMJ open*. 2018;8(3):e020158.
35. Demir D, Rodwell J, Flower R. Workplace bullying among allied health professionals: Prevalence, causes and consequences. *Asia Pacific Journal of Human Resources*. 2013;51(4):392-405.
36. Minton C, Birks M. "You can't escape it": Bullying experiences of new zealand nursing students on clinical placement. *Nurse Educ Today*. 2019;77:12-17

37. Laschinger HKS, Grau AL, Finegan J, Wilk P. New graduate nurses' experiences of bullying and burnout in hospital settings. *J Adv Nurs*. 2010;66(12):2732-2742.
38. Abraham SG, Tauranga M, Moore D. Adult māori patients' healthcare experiences of the emergency department in a district health facility in new zealand. *International Journal of Indigenous Health*. 2018;13(1):87-103.
39. Curtis E, Jones R, Tipene-Leach D, et al. Why cultural safety rather than cultural competency is required to achieve health equity: A literature review and recommended definition. *International Journal for Equity in Health*. 2019;18(1):1-17.
40. Davys A, Beddoe L. *Best practice in professional supervision: A guide for the helping professions*. Jessica Kingsley Publishers; 2020.
41. Mor Barak ME, Travis DJ, Pyun H, Xie B. The impact of supervision on worker outcomes: A meta-analysis. *Soc Serv Rev*. 2009;83(1):3-32.
42. Bushell P. New graduate nurses' structural empowerment and their experience of co-worker incivility and burnout. . 2013.
43. Freeman, Carolyn Miller, Nick Ross, Marnie. The impact of individual philosophies of teamwork on multi-professional practice and the implications for education. *Journal of interprofessional care*. 2000;14(3):237-247.
44. Tarrant C, Leslie M, Bion J, Dixon-Woods M. A qualitative study of speaking out about patient safety concerns in intensive care units. *Soc Sci Med*. 2017;193:8-15. doi: 10.1016/j.socscimed.2017.09.036.
45. Edmondson AC. *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. John Wiley & Sons; 2018.
46. Roche M, Haar JM. A metamodel approach towards self-determination theory: A study of New Zealand managers' organisational citizenship behaviours. *The International Journal of Human Resource Management*. 2013;24(18):3397-3417.
47. Ng L, Choong Y, Kuar L, Tan C, Teoh S. Job satisfaction and organizational citizenship behaviour amongst health professionals: The mediating role of work engagement. *International Journal of Healthcare Management*. 2021;14(3):797-804.
48. Murray M, Sundin D, Cope V. Benner's model and duchscher's theory: Providing the framework for understanding new graduate nurses' transition to practice. *Nurse Education in Practice; Nurse Education in Practice*. 2018;34. doi: 10.1016/j.nepr.2018.12.003.
49. Rubin B, Goldfarb R, Satele D, Graham L. Burnout and distress among allied health care professionals in a cardiovascular centre of a quaternary hospital network: A cross-sectional survey. *CMAJ open*. 2021;9(1):E29.
50. Laschinger HKS, Finegan J, Wilk P. New graduate burnout: The impact of professional practice environment, workplace civility, and empowerment. *Nursing Economics*. 2009;27(6):377.
51. Laschinger HKS, Wong CA, Grau AL. Authentic leadership, empowerment and burnout: A comparison in new graduates and experienced nurses. *J Nurs Manag*. 2013;21(3):541-552.
52. Rudman A, Gustavsson JP. Early-career burnout among new graduate nurses: A prospective observational study of intra-individual change trajectories. *Int J Nurs Stud*. 2011;48(3):292-306.
53. Teo YH, Xu JTK, Ho C, et al. Factors associated with self-reported burnout level in allied healthcare professionals in a tertiary hospital in singapore. *Plos one*. 2021;16(1):e0244338.
54. Balogun JA, Titiloye V, Balogun A, Oyeyemi A, Katz J. Prevalence and determinants of burnout among physical and occupational therapists. *J Allied Health*. 2002;31(3):131-139.

Appendix 1. Context-mechanism-outcome Configurations Following Focus Group Analysis

Context	Mechanism	Outcome
Previous positive experience in speaking up Quality supervision Positive team culture Quality orientation to role and responsibilities Reduced workload to enable transition	Increased self-efficacy Increased confidence Commitment and advocacy for their patients Commitment to their team Fear of breach in patient safety, cultural safety and equity of service delivery for patient Adopt speaking up strategies they have learnt on the job	Called a meeting/sent an email/discussed case with medical team – resulting in: <ol style="list-style-type: none"> (1) revision in patient diagnosis (2) delayed discharge so that patient has all information needed (Quality patient centred care)
Previous positive experience in speaking up Quality supervision Positive team culture Quality orientation to role and responsibilities Reduced workload to enable transition	Increased self-efficacy Increased confidence Commitment to their team Fear of risk of burn out for self and team and associated impact on patient quality service and safety	Spoke up about needs of self and team resulting in: <ol style="list-style-type: none"> (1) review of workload (2) additional resources provided to support team
Low self-efficacy Unsupportive team culture Previous negative experiences in speaking up Hierarchical medical system Patriarchal system Western medical system	Fear of being wrong Fear of looking incompetent Fear of not pulling weight in team	Withholding of voice Risk to patient safety Burn out risk Left role
Previous negative experience in speaking up Quality supervision Tikanga Māori principles applied in team setting Te Ao Māori health service model	Experience of bullying by team member Experience of racism exhibited by team member towards NG Fear for patient's wellbeing Fear for breach in equity of service delivery for patient	Spoke up in team meeting about patient care resulting in: <ol style="list-style-type: none"> (1) review of patient diagnosis (2) appropriate service provision to patient