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ORIGINAL RESEARCH

Staff perceptions of the effectiveness of managerial communication during the COVID-19 pandemic: A cross-sectional study

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Abstract

Aims: This work aims to explore staff perceptions of (1) the effectiveness of organizational communication during the COVID-19 pandemic and (2) the impact of organizational communication on staff well-being and ability to progress their work and patient care.

Background: Effective coordination and communication are essential in a pandemic management response. However, the effectiveness of communication strategies used during the COVID-19 pandemic is not well understood.

Design: An exploratory cross-sectional research design was used. A 33-item survey tool was created for the study.

Methods: The study was conducted at a tertiary teaching hospital in Western Australia. Convenience sampling was used to recruit participants from nursing, medical, allied health services, administrative and clerical, and personal support services ($N = 325$). Data were collected between December 2020 and May 2021.

Results: Overall, all occupational groups found working during the COVID-19 pandemic stressful, and all groups wanted accessible and accurate communication from management and new policies, procedures, and protocols for future outbreaks.

Conclusions: The use of occupational group-relevant strategies and COVID-19 protocols, as well as the on-going use of email, face-to-face meetings with debrief sessions, are needed to improve communication and support staff to fulfil their roles.

KEYWORDS

communication, COVID-19, health care, nurses, pandemic, well-being

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Summary statement

What is already known about the topic?

- Effective coordination and communication that is timely and two-way in nature, is an essential part of a pandemic management response.

What this paper adds?

- All occupational groups found working during the COVID-19 pandemic stressful; all groups wanted accessible and accurate communication from management and new policies, procedures, and protocols for future outbreaks.

The implications of this paper:

- Managing a pandemic situation in health care settings is challenging for all levels of staff including management and all occupational work groups.
- The use of occupational group-relevant strategies and COVID-19 protocols, as well as the on-going use of email, face-to-face meetings with debrief sessions, are needed to improve communication and support staff to fulfil their roles.

1 | INTRODUCTION

Coronaviruses were first cultured from humans in 1965, with samples obtained from a boy with typical common cold like symptoms (Kendall et al., 1962). Following on from this, new strains of the virus were identified, with patients often presenting with a common cold, malaise, limited cough, and runny nose (van der Hoek, 2007). In January 2020, the World Health Organization declared a new outbreak of the coronavirus, COVID-19 in China, and there was great concern for the spread of the virus to other countries around the world. This fear was realized in March 2020, when the outbreak was reassessed and characterized as a pandemic (World Health Organization, 2020b). COVID-19 has a lower case-fatality rate (3%–4%) (World Health Organization, 2020a) compared to SARS and MERS but has a death rate higher than both SARS AND MERS combined, with 617 597 680 confirmed cases and 6 532 705 deaths worldwide as of 3 October 2021 (World Health Organisation, 2021).

The COVID-19 pandemic, like SARS and MERS, results in varying symptoms from a mild cold to pneumonia (Department of Health, 2020). Data suggest 80% of infections are mild or asymptomatic, 15% are severe and require oxygen therapy, and 5% cause critical illness requiring ventilation (World Health Organization, 2020a). The response to this outbreak has seen the implementation of global public health measures to prevent community transmission (Rothan & Byrareddy, 2020). Governments have restricted public gatherings, (Shanafelt et al., 2020) quarantined those with the virus (Hellewell et al., 2020), socially isolated communities, closed schools and other non-essential organizations (Shanafelt et al., 2020), and implemented vaccination strategies (Department of Health, 2021). Many hospitals have also implemented public health measures, as a result of the 2003 SARS outbreak, including the mandatory use of personal protection equipment, such as gloves, gowns, and N95 masks, when attending to patients (Leo et al., 2003). In addition, restricted access to hospitals, screening of employees, visitors and family members when entering

hospitals, isolation precautions, and restrictions on transfers of patients between institutions and wards have also been introduced (Maunder et al., 2003).

In a pandemic, the health and safety of hospital staff is crucial for the safe delivery of patient care and for controlling outbreaks (Liu et al., 2020; Wu & McGoogan, 2020). If staff well-being (individual perception of the psychological, physical, and social internal constructs) is not maintained, then the integrity of the health care system and its capacity to undertake adequate care of patients is at risk (Liu et al., 2020; Wu & McGoogan, 2020). Health care workers in other pandemics have shown to have high stress levels and anxiety and be low in mood with negative psychological impacts still identified after 1 year and post-traumatic stress being identified after just a few weeks (Chan & Huak, 2004; Goulia et al., 2010; McAlonan et al., 2007). The COVID-19 pandemic is no different, with health care workers experiencing an increase in work demands and workers being exposed to high mortality (Gavin et al., 2020), extreme workloads, rationing of personal protective equipment, and ethical dilemmas due to the rationing of ventilators and other health care supplies (Shanafelt et al., 2020). The perception of personal danger for staff has also been heightened by the lethality of the virus, the intense media coverage of the outbreak and its impacts (Shaw, 2020), including death and illness of fellow workers. In China, 14.8% of confirmed cases of health care worker infection were classified as severe or critical and five deaths were observed (Wu & McGoogan, 2020). Resulting in staff anxiety, depression, and stress about the risk of infection to themselves and the well-being of family members who are isolated (Cag et al., 2021; Gavin et al., 2020; Wu & McGoogan, 2020). Socially, health care workers are also at risk of being stigmatized, alienated, and isolated from friends and social groups due to fear of the virus, which may impact on staff well-being (Blake et al., 2020; World Health Organization, 2020b). Other stressors include organizational support for family if they develop the infection, access to childcare and support for families during increased work hours, being able to

provide competent care if deployed to a new area, and lack of access to up to date information and communication (Shanafelt et al., 2020).

In order to support staff during a pandemic, management needs to effectively coordinate, communicate, and collaborate with staff (Perret et al., 2000). Effective communication that is timely and two-way in nature is essential in a pandemic response (Goh et al., 2020; World Health Organization, 2020b). This includes organizations listening to staff concerns, having their voices heard and expertise included in the development of the emergency plan (Shanafelt et al., 2020), and providing clear, honest, and frequent communication (Wu & McGoogan, 2020). Communication with staff is best undertaken via several media, such as telephone hotline, hospital intranet, social media, and text-based messages (Chopra et al., 2020). Research suggests that nonprofessional staff and those working in less visible areas, such as laundry and facilities, receive less information than front line staff, which can make them feel disempowered and isolated (Wu & McGoogan, 2020). Therefore, managers need to ensure that communication updates are provided to all staff (World Health Organization, 2020b). The importance of effective communication can be identified from the SARS outbreak, where the initial response was staff uncertainty and fear. Hospital executive met these responses with immediate clear information that was repeated in succinct messages. This allowed for a consistent and collaborative approach to work from all two disciplines (Maunder et al., 2003). While many articles have focused on the need for effective communication, little is known about the effectiveness of this communication during the COVID-19 pandemic and the impact of this on staff well-being and ability to undertake their roles within the hospital.

2 | METHODS

2.1 | Aims

This work aims to explore staff perceptions of (1) the effectiveness of organizational communication during the COVID-19 pandemic and (2) the impact of organizational communication on staff well-being and ability to progress their work and patient care.

2.2 | Study design and setting

An exploratory cross-sectional research design was used. The study was conducted at a tertiary teaching hospital in Perth, Western Australia, with 600 beds and employing 5500 staff. Data were collected between December 2020 and May 2021.

2.3 | Sample/participants

Convenience sampling was used for the distribution of the surveys. These occupational groups included nursing, medical, allied health services, admin and clerical, and patient support services. The inclusion

criteria for potential participants were all staff employed and working at the hospital. Excluded from participation were casual and agency workers employed by external organizations and health care students completing practicum placement. Every attempt was made to ensure that staff in all occupational groups received an invitation to complete the survey. Department heads worked with the research team to ensure all staff were aware of the survey. However, the research team were not able to ascertain how many opened the email correspondence or received a hard copy version and therefore are unable to calculate a response rate.

2.4 | Data collection and survey instrument

At the time of the study period, there were no survey instruments identified in the literature that measured the effectiveness of communication during a pandemic. Based on available literature, a 33-item survey tool was developed by the research team and reviewed for accuracy by 15 clinical experts across all occupational groups at the hospital. The Staff Perceptions of Pandemic Management Scale (SPPMS) was specifically designed to measure staff perceptions of the effectiveness of organizational communication during the COVID-19 pandemic and the impact on their well-being (individual perception of the psychological, physical, and social internal constructs) and ability to process their work and patient care.

The SPPMS incorporated a 10-item demographic component including non-identifying characteristics such as gender, age, education levels, length and type of employment, occupation, and speciality. Communication satisfaction and well-being were measured through 18 closed ended items. These items were measured on a 7-point Likert-type scale from *strongly disagree* to *strongly agree*. Included in the survey were five open-ended items, asking participants to further explain their satisfaction with communication and overall experience with working during the COVID-19 pandemic.

Face-validity and content validity of the survey instrument was established by circulating drafts of the survey to 15 clinical experts working in the nursing, medical, allied health, and administrative occupational groups at the hospital, for comment on content and user friendliness. All suggestions were considered, and minor amendments were made to the survey.

Surveys were distributed via individual email accounts with a link for online completion via the Qualtrics platform. In addition, hard copy versions were distributed to all departments and wards.

2.5 | Ethical considerations

The study commenced after approval from the University Human Research Ethics Committee and the Hospital Human Research Ethics Committee. Each participant was given an information sheet via email and notified that participation was voluntary. Completion and return of the survey assumed the principle of implied consent. All data were deidentified and could not be linked to individual participants,

departments, or ward areas. Confidentiality and anonymity were maintained throughout.

2.6 | Data analysis

The data from Qualtrics® was downloaded into SPSS. Data from hard copy surveys were manually inserted into SPSS. Data analysis was undertaken using SPSS®. Participant demographics and occupational data were analysed using descriptive statistics and presented in means, medians, and standard deviations. Responses to the communication items were recorded on a 7-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). Each item was given a score from 1 to 7, with negatively worded items reverse scored such that a higher score indicates a positive perception, and a lower score indicates a negative perception of communication. These negatively worded items are written in italics throughout. As the survey followed an ordinal response structure, and responses were not normally distributed, nonparametric Kruskal–Wallis statistical analyses were conducted to compare occupational group differences. Post-hoc pairwise comparisons were conducted using the Bonferroni correction for multiple tests.

The data from the open-ended survey items were summarized according to the most frequently written comments for each occupational group. These most frequently written comments were then grouped into themes based on the content covered by the participants. Two investigators analysed and summarized these responses.

3 | RESULTS

A total of 384 staff members responded to the survey via Qualtrics ($n = 352$) or hard copy ($n = 32$). Of those 384 participants, 59 did not complete any aspect of the total survey demographics, SPPMS, or open-ended questions and were excluded from the analysis. The results presented are from the remaining 325 participants, hereafter referred to as the “final sample.” Of those 325 participants, 261 (80.3%) fully completed the 18-item survey. Fourteen participants missed one survey item (4.3%), eight (2.5%) missed between two and six items (0.6%), and 40 (12.3%) did not complete any of the 33 items on the SPPMS part of the total survey. The maximum amount of missing data for any survey item was 19.7%.

3.1 | Demographic characteristics

Participants' demographic data are presented in Table 1. Most participants were female ($n = 264$, 81.2%), the average age of respondents was approximately 45 years and the mean number of years worked in their current role was approximately 10 years. Participants were mostly employed full-time ($n = 203$, 62.5%), with most of the cohort working permanent day shifts ($n = 200$, 61.5%). The largest occupational group were represented by nurses ($n = 144$, 44.3%), followed

TABLE 1 Sample characteristics.

Sample characteristics	Mean (SD)
Mean age (SD)	44.7 (12.0)
Mean years worked in role (SD)	10.1 (8.6)
Sample characteristics	n (%)
Female	264 (81.2)
Employment status	
Full-time	203 (62.5)
Part-time	106 (32.6)
Casual	12 (3.7)
Missing	2 (0.6)
Shift schedule	
All shifts	91 (28.0)
Permanent days	200 (61.5)
Permanent nights	19 (5.9)
Other	11 (3.4)
Missing	4 (1.23)
Employment group	
Nursing	144 (44.3)
Medicine	16 (4.9)
Allied health services	91 (28.0)
Admin/clerical	49 (15.1)
Patient support	8 (2.5)
Other	13 (4.0)
Missing	4 (1.2)
Previously trained in communication strategies	173 (53.2)

Note: n = number, SD = standard deviation, TAFE = technical and further education.

by allied health ($n = 91$, 25%) and administrative and clerical staff ($n = 49$, 15.1%). Participants in the “other” occupational group ($n = 13$, 4%) consisted of radiochemists, researchers, radio therapist, biomedical engineering, biomedical services, engineer, food service attendant, project manager, health service administrator, and health service union officer.

3.2 | Comparison by occupational groups

Median responses for all questions are reported in Table 2. All occupational groups median response disagreed that management and key staff communicated sufficiently for them to understand changes in patient care (Question 1). However, only the medical group median response agreed that the lack of communication from management and key staff impacted on their care delivery (Question 2) and agreed the lack of clear information and direction made them anxious (Question 4). Interestingly, all occupational groups except for medical agreed they could communicate and address their concerns with their supervisor (Question 5); were given clear directions from management (Question 6); felt updated information was shared (Question 7); felt

TABLE 2 Staff perceptions of pandemic management survey responses: Comparison of median Likert scale and sum of mean ranks by occupational groups.

Survey item	Median Likert scale and sum of mean ranks by occupational groups [Higher scores indicate “more agreement” with the given statement]							KW test statistic (χ^2)	p value
		Nursing	Admin/ clerical	Allied health	Patient support	Other	Medical		
1. Management and key staff communicated sufficiently for me to understand changes in patient care.	Median	2	2	2	2	2	2.5	19.4	0.002
	Mean rank	134.1	171.0*	145.5 [†]	173.8	165.2	75.3 ^{*,†}		
2. The lack of communication from management and key staff has impacted on my care delivery	Median	3	2	3	2.5	2	4.5	13.1	0.022
	Mean rank	140.7*	124.2 [†]	146.5	138.1	112.8 [‡]	206.5 ^{*,†,‡}		
3. At all times I felt in control of the situation	Median	3	5	4	5	4	2.5	21.0	0.001
	Mean rank	125.6*	175.5*	151.9	204.9	141.0	104.0		
4. The lack of clear information and direction made me anxious	Median	4	2	3	2	4	5.5	15.3	0.009
	Mean rank	149.5	112.1*	132.9	106.6	131.7	194.0*		
5. At all times I was able to communicate with my supervisor and address my concerns	Median	6	6	6	6	6	3.5	17.8	0.003
	Mean rank	133.5	166.5*	151.3 [†]	162.6	147.8	72.3 ^{*,†}		
6. Given clear directions from management and key staff, I was able to adequately perform my job	Median	5	6	5	6	5.5	4.5	20.1	0.001
	Mean rank	131.6*	181.2 ^{*,†}	145.7	170.1	134.9	86.8 [†]		
7. At all times I felt updated information was shared with all staff across the hospital	Median	5	6	5	6	5.5	2.5	21.4	0.001
	Mean rank	136.2 [†]	176.4*	143.8 [‡]	164.2	141.3	65.9 ^{*,†,‡}		
8. At all times I felt there was strong leadership from management and key staff	Median	5	6	5	6	6	3	21.0	0.001
	Mean rank	131.7 [†]	177.9 ^{*,†}	145.4	188.6 [‡]	152.2	81.8 ^{*,‡}		
9. There were times when I could not keep up with all the changes	Median	6	3.5	5	2	4.5	5	33.1	<0.001
	Mean rank	157.4 ^{†,‡}	92.3 ^{§,‡,#}	147.7 ^{*,§}	50.0 ^{*,†,‡}	124.9	167.7 ^{‡,#}		
10. Managing the COVID-19 pandemic had no impact on my well-being	Median	2	4	3	6	4	3	16.4	0.006
	Mean rank	125.1*	162.7	146.1	221.5*	158.6	133.3		
11. There was sufficient protective equipment (for example gloves, masks and gowns) to manage COVID-19 patients	Median	5	4	5	6	4	4.5	12.8	0.025
	Mean rank	146.2	131.0 [†]	140.1	228.1 ^{*,†}	127.3	104.0*		
12. I felt worried about my health nursing COVID-19 patients	Median	5	4	4	4	4	5	13.7	0.018
	Mean rank	156.1*	112.9*	130.8	110.9	119.1	152.6		
13. The closing of hospital beds was very disruptive to staff well-being	Median	4	4	4	4	4	4	4.1	0.537
	Mean rank	145.4	119.5	143.4	127.6	132.5	130.5		
14. At all times patient care was delivered safely	Median	5	5	5	5	5	4.5	3.6	0.612
	Mean rank	142.8	146.2	138.9	150.3	144.9	103.5		
15. Patients were not disrupted in any way	Median	3	4	3	4	2.5	2	12.8	0.025
	Mean rank	135.0	170.5	133.0	196.9	148.2	112.1		
16. The closing of hospital beds was very disruptive to patient care	Median	4	4	4	3.5	5	4	5.1	0.406
	Mean rank	141.4	126.9	142.3	97.3	166.4	126.2		
17. The on-going communication from management and key staff has been smooth and informative	Median	5	5	5	6	5	2.5	25.2	<0.001
	Mean rank	128.8 [‡]	175.0 ^{*,‡}	146.3	212.6 [†]	134.4	80.1 ^{*,†}		

(Continues)

TABLE 2 (Continued)

Survey item	Median Likert scale and sum of mean ranks by occupational groups [Higher scores indicate “more agreement” with the given statement]							KW test statistic (χ^2)	p value
		Nursing	Admin/ clerical	Allied health	Patient support	Other	Medical		
18. I feel well equipped to manage a second wave outbreak if it were to occur	Median	5	5	5	6	5	2.5	19.0	0.002
	Mean rank	134.5	162.8*	140.9	217.2 [†]	137.9	81.8 [†]		

Note: Likert scale, 1 = *strongly disagree*; 2 = *disagree*; 3 = *slightly disagree*; 4 = *neither disagree or agree*; 5 = *slightly agree*; 6 = *agree*; 7 = *strongly agree*. KW, Kruskal–Wallis; χ^2 , Chi Square; *, †, ‡, §, ¶, and # indicate significant pairwise comparisons adjusted by Bonferroni correction for multiple tests. The scoring for the negatively worded items, presented in italics, have been reversed.

there was strong leadership from management (Question 8); the on-going communication from management and key staff had been smooth and informative (Question 17); and felt well equipped to manage a second wave outbreak if it were to occur (Question 18). All occupational groups agreed there was sufficient personal protective equipment (Question 11). Even though questions regarding closing of hospital beds (Question 13 & 16) had median responses of neither agree or disagree, all groups agreed patient care was not disrupted (Question 15). Of concern, nursing, allied health, and medical felt there were times when they could not keep up with all the changes (Question 9) and felt managing the COVID-19 pandemic had impacted their well-being (Question 10). Additionally, medical and nursing groups did not feel in control of the situation (Question 3) and felt worried about their health nursing COVID-19 patients (Question 12).

Overall, there was a significant difference in response to 14 of the 18 survey items between occupational groups (Table 2). Medical staff had the least favourable responses across all survey items closely followed by nurses. In contrast, patient support, admin, and clerical staff showed more favourable responses.

Most of the statistically significant differences were between the medical group and any of the other occupational groups (Questions 1, 2, 4, 5, 7, and 18); followed by nursing and any of the other occupational groups on the questions related to communication and management (Questions 3, 6, 10, and 12). There was also a mixture of significant differences in responses among all groups (Questions 8, 9, 11 and 17). See Table 2.

3.3 | Open-ended item results

The data from the open-ended survey questions were summarized according to the most frequently written comments for each occupational group. Table 3 presents the themes identified for each occupational group. Common themes emerged across responses. Overall, all occupational groups found working during the COVID-19 pandemic to be stressful, all groups wanted accessible and accurate communication from management and policies, procedures, and protocols for future outbreaks. Largely, medical staff found communication

ineffective, inaccurate, and disrespectful, while other groups spoke more positively of good emailing systems, face to face meetings, and staff debriefing.

4 | DISCUSSION

The findings from this study highlight that all occupational groups found working during the COVID-19 pandemic stressful, and all groups wanted accessible and accurate communication from management with new policies, procedures, and protocols developed for future outbreaks. Overall, medical staff rated the communication strategy to be least effective and disrespectful. They felt this was disruptive to patient care. However, the sample size was very low compared with the total number of medical staff employed in the hospital. This low survey response rate from the medical staff is not uncommon and well documented in the literature (VanGeest et al., 2007). However, it maybe, that these findings are not representative of the whole medical group. Other occupational groups rated communication more positively with the use of email communiques, face to face meetings, and staff debriefing sessions. The differences noted across the occupational groups may be related to the differing roles and experience of care provision during the COVID-19 pandemic.

Available literature focuses on the importance of effective communication that is timely and two-way in nature (Goh et al., 2020; World Health Organization, 2020b) including for reducing errors between the multidisciplinary team at the unit level (Carenzo et al., 2020; Shanafelt et al., 2020). However, there is currently little research that explores the effectiveness of communication between management and hospital staff during the COVID-19 pandemic for comparison with these findings. Nonetheless, findings are consistent with previous research in that nursing and other health care staff in this study were found to have high levels of stress and anxiety as a result of working during the pandemic (Chan & Huak, 2004; Goulia et al., 2010; McAlonan et al., 2007). High levels of stress and anxiety in staff are known to impact their mental and physical health and increase staff turnover. A systematic review conducted by Stuijzand et al. (2020) showed that health care workers were at risk of experiencing both short- and long-term mental health problems due to the COVID-

TABLE 3 Summary of most the frequently written comments between occupational groups.

Items	Occupational group major themes group			
	Medical	Nursing	Allied health	Admin/clerical
(1) Please list what communication strategy best enabled you to undertake your role during the COVID-19 pandemic?	<ul style="list-style-type: none"> Felt that communication was ineffective, inaccurate, disrespectful, and lacking Supported each other in managing their work and responsibilities Too many different lines of communication 	<ul style="list-style-type: none"> Email, video messages, daily updates and face to face were important Team leader/supervisor support Communication overload felt 	<ul style="list-style-type: none"> Email, face-to-face meetings, and staff debriefings were important Communication from direct line manager and head of departments Visual communications and you tube clips were important 	<ul style="list-style-type: none"> Email, video messages and informal meetings were important Direct communication and support from management Some felt direct manager and executive were slow to provide information to clerical staff and directives were not available for all staff. Communication overload Staff supported each other
(2) What information did you want to receive but did NOT receive during the pandemic?	<ul style="list-style-type: none"> Access to information on allocation and availability of protective equipment, including fitting. Clear and consistent communication from management and executive Clear policy, procedures, and protocols Clear identification of roles Direct lines of communication that need to be used to prevent staff feeling punished. 	<ul style="list-style-type: none"> Timely and up to date strategies, policies, and procedures available at home Greater visibility and access to ward managers Accurate and up to date information on the evolving pandemic available at home Access to and allocation of resources (personal protective equipment), including education and fitting More access and communication with direct managers Clear and succinct communication 	<ul style="list-style-type: none"> Consistent and clear communication on changes to protocols, policies, and procedures Timely decision making Allocation and access to resources Information on patient status Transparency Communication from one source Information on how to work from home Communication overload 	<ul style="list-style-type: none"> Timely access to strategies, protocols, policies, and procedures Clear communication from management Access to information on allocation and availability of resources Clear protocols, policies, and procedures. Access to up to date and evolving information
(3) What information do you want to receive as part of ongoing updates?	<ul style="list-style-type: none"> Policy, procedures, and protocols ready to be implemented for a second wave Access and availability of resources Direct support and communication lines that need to be used to prevent staff feeling punished 	<ul style="list-style-type: none"> Clarity of future directions, strategies, plans, protocols, policies, and procedures if second wave Access to and allocation of protective equipment, including education and fitting Debriefing sessions 	<ul style="list-style-type: none"> Access and allocation of resources Future plans, directives, protocols, strategies and changes to policy and procedures Timely decision making and feedback 	<ul style="list-style-type: none"> Access to up to date and evolving information prior to shift commencing Clear protocols, policies, and procedure changes To have a voice in hospital wide discussions and changes. Access to clear and up to date information Clear protocol, policy, and procedure updates

(Continues)

TABLE 3 (Continued)

Occupational group major themes group				
Items	Medical	Nursing	Allied health	Admin/clerical
		Access to up to date and evolving information	Clear and concise communication from one source	
(4) How could communication be improved in future pandemics?	<ul style="list-style-type: none"> • More face to face and team meetings • Formal protocols to be followed in the future • Single source of communication and information • Access to relevant information when not at work • Role identification • Clear and direct communication channels 	<ul style="list-style-type: none"> • Clear and timely update to strategies, protocols, policies, and procedures • Streamlined communication from one source • Manager visibility, understanding and support • Be included in changes made <p>Transparency of information from executive team</p>	<ul style="list-style-type: none"> • Clear and concise communication from one source to prevent overload • Regular visibility and access to management • Timely decision making and feedback • Communication at home <p>Clear and concise plan</p>	<ul style="list-style-type: none"> • To have a voice in hospital wide decision making and communication • Access to easy to understand, clear and up to date communication prior to a shift starting <p>Filter communication to prevent overload</p> <ul style="list-style-type: none"> • All staff have access to up-to-date information- not all have access to global emails • Have a voice and be understood <p>Continue with emails and video updates from infection control</p>
(5) Please add any further comments about your experience of working during the COVID-19 pandemic	<ul style="list-style-type: none"> • No leadership and support from executive team • No policy, procedures, or protocols. • No resource access and allocation provided • Access to communication at home • Clear communication to all staff including shift workers • Feel let down and undervalued by the executive team <p>Wanting to leave current role as a result</p>	<ul style="list-style-type: none"> • No information on the access and allocation of resources • Casual pool staff lost work and were underutilized • Lack of information • Increased anxiety and stress • Conflicting information • Increased anxiety and confusion • Lack of clear and accurate protocols, policies, and procedures • No support and understanding from executive and managers • Threats from managers • Increased stress • Staff feels undervalued, unrewarded and had no appreciation <p>All shifts to did not have access to accurate and timely information</p>	<ul style="list-style-type: none"> • Lack of communication around access, education, and fitting of resources • Workload increased • Felt anxious and worried • No access to communication at home • Communication was not available to all groups • Lack of support • Voices of staff not heard • Lack of transparency 	<ul style="list-style-type: none"> • Fear of the unknown- stressed and anxious about coming to work • Staff supported each other • Lack of managerial/ executive support • No up-to-date feedback on strategies, protocol, policies, and procedures changes <p>Staff supported each other well</p> <ul style="list-style-type: none"> • Coming to work was stressful and caused anxiety. • Lack of managerial support <p>Timely access to changes with strategies, protocols, policies, and procedures was needed to prevent stress and anxiety</p>

19 pandemic. These included distress, insomnia, substance misuse, post-traumatic stress disorder, depression, anxiety, burnout syndrome, and increased levels of stress (Stuijzand et al., 2020). Nursing and other health care research has previously shown a positive relationship between health care workers' stress and turnover intentions, with an increase in stress greatly increasing staff turnover intentions (Liu et al., 2019). This is of concern for the future health care workforce due to the prolonged stress caused by the current pandemic. The WHO have estimated a worldwide health care shortage of 18 million by 2030 (World Health Organization, 2021), but these figures do not account for the loss of health care workers lives as a result of the pandemic. It is therefore imperative for the psychological well-being and retention of the health care workforce that organizations provide strategies to support health care staff. Some consideration should be given for shift workers, mainly nurses and doctors, to ensure that staff in high-pressure areas have adequate breaks between shifts and do not work lengthy periods without days off as this may exacerbate burnout and intention to leave (Bellanti et al., 2021; Brophy et al., 2021; Bruyneel et al., 2021; Butera et al., 2021).

Chopra et al. (2020) identified the importance of presenting communication over several media during a pandemic. In the current study, staff had access to communication via several media; however, they interpreted this information differently depending on their occupational group. For example, staff in the medical group were more dissatisfied with communication feeling that it was less effective. In contrast, nursing staff and other occupational groups felt more positive about communication. Health care research has shown ineffective organizational communication impacting the quality of patient care, including patient outcomes and costs associated with nursing burnout (Ratna, 2019; Vermeir et al., 2018), nursing satisfaction, retention, and intention to leave (Doleman et al., 2020; Vermeir et al., 2018). In light of this, organizations may need to implement different communication strategies and provide specific information relevant to the role of the occupational group.

Organizational inefficiencies were identified in this present study with nursing staff and other health care workers wanting greater access to accurate information, especially at home prior to shift commencement, and timely updates to policies, procedures and protocols to reflect changes to care provision. These inefficiencies resulted in staff experiencing increased levels of stress and anxiety. Similarly, Sasangohar et al. (2020) identified inefficiencies related to a lack of established policies for pandemic triage and emergency management, which increased the burden on health care workers. In this study, nursing staff and health care workers also felt that information was presented from more than one source, which created communication overload and confusion. Further, issues with policy overload and mismatching policies from multiple sources has been identified as the cause of frustration for staff, resulting in teamwork issues (Sasangohar et al., 2020). It is therefore important that health care organizations create timely policies, procedures, and protocols to assist with adequate care provision and provide succinct information from one source to help reduce staff anxiety and stress. Future research is suggested to explore how information is disseminated

within each professional group and from management. This will allow for the identification and implementation of tailored communication strategies for each professional group.

4.1 | Limitations

The data from this study were collected from a single adult tertiary hospital and were self-reported in nature. Generalizability of study findings may be limited to comparable populations of interest and thorough description of participant characteristics (Shadish et al., 2002). Although every attempt was made to validate the survey instrument prior to the study being conducted, it may be beneficial to perform further tests to establish and improve the validity and reliability of the survey instrument.

5 | CONCLUSION

Managing a pandemic situation in the health care setting is challenging for all levels of staff including management and all occupational work groups. This study has provided knowledge and information on staff perceptions of the effectiveness of organizational communication during the COVID-19 pandemic and the impact of this on staff well-being and ability to progress their work and patient care. Results revealed that all occupational groups found working during the COVID-19 pandemic to be stressful, all groups wanted accessible and accurate communication from management and COVID-19 policies, procedures and protocols for future outbreaks. The findings from this study provides insight into areas of strengths and aspects that need attention to promote organizational communication, staff well-being and ability to progress work in future waves of COVID-19 hospital responses.

AUTHORSHIP STATEMENT

All authors made substantial contributions to conception and design of the study, data, and analysis. All authors were responsible for the interpretation of data, drafting of the manuscript or revising it critically for important intellectual content, and approving the version to be published.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Permission was not obtained to make data publicly available.

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