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Impact of the COVID-19 pandemic on Australian community health service staff's occupational and personal lives: a longitudinal study

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ABSTRACT

Background. Little is known about the impact of the coronavirus disease 2019 (COVID-19) pandemic on community health service staff. The aim of this study was to assess the immediate and longer-term psychosocial impacts of COVID-19 on community health service staff in Australia. **Methods.** A prospective cohort design with an anonymous cross-sectional online survey that was administered at two time points (March–April 2021; $n = 681$ and September–October 2021; $n = 479$). Staff (clinical and non-clinical) were recruited from eight community health services in Victoria, Australia. Study-specific questions evaluated the impact of COVID-19 on respondents' work and personal lives. Space was provided at the end of the surveys for free-text comments. **Results.** There were no significant differences in respondent characteristics between the two surveys. At both survey time points, respondents were mostly concerned about their family's health. Compared to the first survey, survey two respondents were significantly more likely to report concerns about infecting family members (48.8% vs 41.6%, $P = 0.029$), clients having COVID-19 (43.2% vs 36.2%, $P = 0.035$), getting COVID-19 at work (53.7% vs 45.6%, $P = 0.014$), not being prepared to care for clients with COVID-19 (27.5% vs 18.8%, $P = 0.006$) and feeling more stress at work (63.7% vs 50.8%, $P < 0.001$). A significantly greater proportion of respondents indicated they were considering transitioning into another sector at the time of the second survey compared to the first (24.8% vs 18.7%, $P = 0.026$). **Conclusions.** The COVID-19 pandemic has had a considerable impact on the work and personal lives of community health service staff. Staff would benefit from continued and targeted initiatives that address their wellbeing and concerns.

Keywords: Australia, community health services, COVID-19, longitudinal study, occupational health, pandemic, psychosocial, survey.

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Introduction

Evidence is emerging about the impact of the coronavirus disease 2019 (COVID-19) pandemic on the occupational and personal lives of healthcare workers. Healthcare workers have reported concerns about contracting COVID-19, accessing and using personal protective equipment (PPE), redeployment, infecting family members, financial concerns, and managing work and family responsibilities such as remote learning for school-aged children (Nie *et al.* 2020; Billings *et al.* 2021; Digby *et al.* 2021; Holton *et al.* 2021*a*). However, most studies to date have been cross-sectional in design and focused on 'frontline' hospital clinical staff (Billings *et al.* 2021; Digby *et al.* 2021; Holton *et al.* 2021*a*). Little is known about the ongoing psychosocial impact of the COVID-19 pandemic on community health service staff who work in diverse settings and in a variety of primary healthcare roles, including advocacy, clinical services, and education.

Community health services in Australia provide government-funded primary health care to a range of communities, including those which experience disadvantage, are culturally and linguistically diverse, and people with, or at risk of, poorer health. The services they

provide include allied health services, chronic disease management, disability services, health promotion, home and community care services, medical services, mental health services and refugee health (Department of Health 2021).

Community health services played a critical role in the COVID-19 pandemic response, including continuing to support and provide services to their existing client groups, as well as establishing and expanding services to other population groups within their communities, particularly those who were vulnerable to COVID-19 infection, social isolation, economic hardship, and health risks. As the COVID-19 pandemic progressed, community health services were involved in the public health response and in delivering government-funded pandemic initiatives, including respiratory clinics, testing sites, caring for COVID-19-positive patients in community settings, and working with people in high-risk accommodation settings. Community health services also implemented localised communication and engagement strategies to ensure vulnerable and difficult to reach population groups received information about COVID-19, infection prevention, health care and support services. These strategies assisted in reducing fear about COVID-19 in these groups and increasing their understanding of infection prevention and control measures (Victorian Healthcare Association 2021).

Community health services faced several challenges during the COVID-19 pandemic, including the adaptation of many of their services to non-face-to-face delivery such as telehealth, maintaining adequate staffing levels and workforce well-being, and many community health service staff transitioned to remote working (i.e. 'working from home') to limit infection transmission (Victorian Healthcare Association 2021).

Studies conducted during the COVID-19 pandemic in primary or community health settings have mainly investigated particular groups of healthcare workers such as nurses or personal care assistants (Halcomb *et al.* 2020; De los Santos and Labrague 2021; Holroyd *et al.* 2021); few have investigated the experiences of a range of community health service staff including those in both clinical and non-clinical roles. The impact of the COVID-19 pandemic on community health service staff in Australia is also not well understood; their experiences and concerns may be different to community health care workers in other countries or settings, especially given the relatively fewer COVID-19 deaths per million people in Australia compared to other countries (Our World in Data 2022).

The aim of this study was to assess the immediate and longer-term psychosocial impacts of COVID-19 on community health service staff in Australia. The specific objectives of the study were to identify at each time point (and compare between time points): (1) the self-reported concerns of community health service staff about COVID-19; (2) the use and impact of COVID-19 precautionary measures; (3) community health service staffs' perceptions of the initiatives implemented by their organisations to support employees throughout the COVID-19 pandemic; and (4) the work and personal impacts of the COVID-19 pandemic.

Methods

Study design, setting and participants

A prospective cohort design was used with a cross-sectional survey at two time points: (1) after the second 'wave' of the COVID-19 pandemic in Victoria, Australia (March–April 2021); and (2) 6 months later (September–October 2021).

The study time frame was chosen to enable assessment of the 'immediate' and 'longer-term' impact of the COVID-19 pandemic on community health service staff. Conducting the surveys at 6-month intervals was also due to pragmatic reasons, including the lack of certainty at the commencement of the study about how often and when the state of Victoria would experience future COVID-19 'waves' and their severity, and the time-sensitive nature of the research. Data were also collected at only two time points to minimise the burden on community health staff so that they could continue to provide care and services to their clients with minimal interruption.

There had been over 20 000 confirmed COVID-19 cases in Victoria when the study began (Department of Health and Human Services 2021*a*), and 'lockdown' restrictions implemented by the state government were beginning to ease (Department of Health and Human Services 2021*b*). By the time the second survey was administered, the total number of COVID-19 cases had increased to over 27 000 (Department of Health and Human Services 2021*c*).

Community health service staff from eight Victorian community health services were invited to complete a survey at each time point. The services provide a range of publicly funded primary healthcare services, including allied health, child health, dental health, disability, drug and alcohol, health promotion, home and community care, medical, and mental health (Department of Health 2021). At the time of the first survey, there were approximately 3176 staff employed by the participating community health services.

Procedure

The CEO/Executive team of each participating community health service invited their staff via email to complete a survey at each time point. The email included an overview of the study, a link to the online survey (Supplementary Material) and a participant information sheet. A reminder email was sent 2 weeks after the initial invitation email. The first survey was open for 7 weeks (22 March 2021 – 7 May 2021), and the second for 8 weeks (7 September 2021 – 2 November 2021). Completion of the survey was taken as informed consent.

The surveys were available in Qualtrics (an online survey platform) and took approximately 10–15 min to complete. The survey questions were based on those from a similar study with hospital clinical staff and was conducted by members of the research team (Wynter *et al.* 2022; Holton *et al.* 2021*a*, 2021*b*, 2021*c*). The surveys included mostly fixed-response questions and assessed respondents' sociodemographic and employment characteristics; concerns about the impact of COVID-19 on personal and family health (six items using a five-point Likert scale ranging from 'not concerned' to 'extremely concerned'); perspectives on the use and effects of COVID-19 precautionary measures (nine items rated using a three-point Likert scale ranging from 'does not affect my ability to do my job' to 'affects my ability to do my job a lot'); work impacts of COVID-19 (15 items rated on a five-point Likert scale ranging from 'strongly disagree' to strongly agree'); personal impacts of COVID-19 (11 items rated using a five-point Likert scale ranging from 'strongly disagree' to strongly agree'); and perceptions of their organisation's response to the COVID-19 pandemic (seven items rated on a five-point Likert scale ranging from 'very poor' to 'excellent'). For analysis, responses to the Likert scale items were recoded to binary variables. Space was provided at the end of each survey for respondents to make free-text comments.

The surveys were the same at each time point; however, the second survey also included questions about COVID-19 vaccination intentions, concerns and experiences. The first survey did not include vaccine questions as the COVID-19 vaccine roll out did not start until February 2021 in Australia, and was initially restricted to people living and working in aged care and disability care, and quarantine, border and frontline health workers (Prime Minister of Australia 2021). COVID-19 vaccines became mandatory for Australian healthcare workers in September 2021 (Melbourne Vaccine Education Centre 2021).

Data management and analysis

Quantitative data were analysed using IBM SPSS Statistics version 26 (IBM Corp., Armonk, NY, USA). Data were summarised using descriptive statistics.

Chi-squared or Mann–Whitney U-test (Likert scale responses) tests were used as appropriate to test for differences between the two surveys (time points) in terms of sociodemographic characteristics, COVID-19 concerns, and COVID-19 impacts.

Free-text comments were analysed using content (conceptual) analysis in order to identify the presence and meaning of certain themes or concepts (Croghan *et al.* 2021). The comments provided by respondents at both survey time points have been summarised by theme and illustrate their concerns about COVID-19 and the impact the pandemic has had on their wellbeing, work and personal lives (Supplementary tables).

Ethics approval

Ethics approval was granted by the Deakin University Human Ethics Advisory Group Faculty of Health (HEAG-H) (Project reference number: HEAG-H 12_2021; 25 February 2021). Completion of the survey(s) was taken as implied consent.

Results

Sample and response

Six hundred and eighty-one community health service staff (approximately 21.4%) completed the first survey and 479 (15.1%) completed the second.

Most respondents in both surveys identified as women and were born in Australia; fewer than half lived with dependent children and of these, most had school-aged children. No respondents had been diagnosed with COVID-19 at either survey time point, and most had had no direct contact with people (either at work or outside of work) with a COVID-19 diagnosis. There were no significant differences in respondent characteristics between the two surveys (Table 1).

Most respondents were employed on a permanent basis; just over half were part-time; more than half of the respondents were health professionals and approximately one in five was a manager of one or more employees. On average, respondents had worked in the community health service sector for >9 years and at their current community health service for >6 years. Almost three-quarters of the respondents worked in metropolitan Melbourne. There were no statistically significant differences in the employment characteristics of the samples at each survey time point (Table 1).

Concerns about COVID-19

About half of the respondents were extremely or very concerned about their family's health and passing COVID-19 on to family members (Table 2). Overall, there was a significant increase from the first survey to the second regarding concerns about passing COVID-19 on to family members and clients having COVID-19 (Table 2), which was reflected in respondents' free-text comments.

> I am very concerned about going back to face to face work with clients and their families. This also includes going out to do general daily and social activities. . . . Although I am fully vaccinated, I can still contract and/or spread the virus to family, friends and clients. (Survey 2 respondent)

The use and effects of COVID-19 precautionary measures

Most respondents indicated that restricted face-to-face meetings or gatherings, staying away from work due to

Table 1. Respondents' sociodemographic and employment characteristics (Surveys 1 and 2).

Characteristic	Survey 1 N (%)	Survey 2 N (%)	*P*-value
Gender identity	*n = 646*	*n = 456*	0.295
Woman	523 (81.0)	380 (83.3)	
Man	112 (17.3)	65 (14.3)	
Prefer not to disclose/self-described	11 (1.7)	11 (2.4)	
Age	*n = 637*	*n = 443*	0.714
Range (years)	19–76	21–71	
Mean (s.e.)	44.2 (11.7)	44.4 (12.3)	
Country of birth	*n = 638*	*n = 456*	0.764
Australia	475 (74.5)	344 (75.4)	
Overseas	163 (25.5)	112 (24.6)	
Live with dependent children	*n = 643*	*n = 454*	0.448
Yes	268 (41.7)	178 (39.2)	
No	375 (58.3)	276 (60.8)	
Dependent children attend			
Child care	51 (7.5)	37 (7.7)	
Primary school	136 (20.0)	92 (19.2)	
Secondary school	144 (21.1)	74 (15.4)	
Employment status	*n = 643*	*n = 456*	0.474
Permanent full-time	205 (31.9)	143 (31.4)	
Permanent part-time	257 (40.0)	195 (42.8)	
Fixed-term full-time	84 (13.1)	51 (11.2)	
Fixed-term part-time	72 (11.2)	51 (11.2)	
Other (casual, 'mixture')	5 (0.8)	16 (3.5)	
Geographic location	*n = 634*	*n = 449*	0.320
Metropolitan	456 (71.9)	336 (74.8)	
Regional/rural	178 (28.1)	113 (25.2)	
Professional role	*n = 522*	*n = 382*	0.980
Clinical	299 (57.3)	220 (57.6)	
Non-clinical	223 (42.7)	162 (42.4)	
Manager of one or more employees	*n = 639*	*n = 452*	0.373
Yes	126 (19.7)	100 (22.1)	
No	513 (80.3)	352 (77.9)	
Years worked in the community health sector	*n = 635*	*n = 450*	0.815
Range (years)	0–45	0–44	
Mean (s.e.)	9.6 (8.3)	9.5 (8.7)	
Years employed at current health service	*n = 631*	*n = 449*	0.634
Range (years)	0–37	0–40	
Mean (s.e.)	6.3	6.1 (6.7)	
COVID-19 contact status	*n = 582*	*n = 423*	
No direct contact with people with known COVID-19 diagnosis	510 (87.6)	337 (79.7)	< **0.001**
Direct contact with people who have had COVID-19 diagnosis, which resulted in self-isolation or testing (with a negative COVID-19 result)	72 (12.4)	86 (20.3)	
Diagnosed with COVID-19	0 (0)	0 (0)	

Bold indicates significance.

Table 2. Respondents' psychosocial concerns about COVID-19 (*n* (%) extremely/very concerned).

	Survey 1 *N* (%)	Survey 2 *N* (%)	*P*-value
Your family's health (Survey 1 $n = 578$; Survey 2 $n = 419$)	277 (47.9)	218 (52.0)	0.224
Passing COVID-19 on to family members (Survey 1 $n = 572$; Survey 2 $n = 418$)	238 (41.6)	204 (48.8)	**0.029**
Clients having COVID-19 (Survey 1 $n = 544$; Survey 2 $n = 398$)	197 (36.2)	172 (43.2)	**0.035**
Caring for a client who has or has suspected COVID-19 (Survey 1 $n = 457$; Survey 2 $n = 322$)	125 (27.4)	100 (31.1)	0.297
Your colleagues having COVID-19 (Survey 1 $n = 570$; Survey 2 $n = 417$)	142 (24.9)	120 (28.8)	0.199
Falling ill as a result of COVID-19 (Survey 1 $n = 580$; Survey 2 $n = 420$)	142 (24.5)	112 (26.7)	0.478

Bold indicates significance.

illness symptoms and wearing PPE (e.g. face shields) had impacted their ability to do their duties (Table 3). There was a significant increase in the proportion of respondents who reported that restricted face-to-face meetings or gatherings, face shields, and goggles/eye shields interfered with their work from the first survey to the second (Table 3).

Respondents also commented on the impact PPE had on them personally and on the provision of high-quality client care (Supplementary Tables).

> I had nightmares about wearing PPE. Wearing masks made it very difficult to be a speech pathologist as I couldn't understand people with speech impairments and some clients couldn't lip read so I wore a face shield which felt less safe. (Survey 1 respondent)

> The organisation had Covid safe policies but they very publicly were not adhered to. I found it very distressing that masks were not being used in office settings while they were required by the CMO [Chief Medical Officer]. (Survey 1 respondent)

Work impacts of COVID-19

Respondents at both survey time points highlighted the work impacts of the COVID-19 pandemic. From the time of the first survey to the second, there was a significant increase in the proportion of respondents who agreed that they: felt more stress at work; had to cancel or postpone their annual leave; were disappointed about having to cancel or postpone their annual leave; believed their job put them at risk of being infected with COVID-19; did not feel well prepared to care for clients with COVID-19; and had considered transitioning into other sectors due to COVID-19 (Table 4).

Table 3. Interference of precautions with work (*n* (%) a lot/a little).

	Survey 1 *N* (%)	Survey 2 *N* (%)	*P*-value
Restricted face-to-face meetings or gatherings (Survey 1 $n = 551$; Survey 2 $n = 410$)	404 (73.3)	343 (83.7)	**<0.001**
Staying away from work when you have any signs of illness (Survey 1 $n = 468$; Survey 2 $n = 391$)	328 (70.1)	239 (61.1)	0.274
Face shields (Survey 1 $n = 366$; Survey 2 $n = 291$)	247 (67.5)	219 (75.3)	**0.036**
Imposed self-isolation on return from overseas trip (Survey 1 $n = 519$)	322 (62.0)	(*not asked*)	
Restricted access to some or all sites (Survey 1 $n = 510$; Survey 2 $n = 382$)	313 (61.4)	254 (66.5)	0.133
Mask (Survey 1 $n = 531$; Survey 2 $n = 400$)	325 (61.2)	264 (66.0)	0.152
Social distancing from colleagues (Survey 1 $n = 556$; Survey 2 $n = 407$)	338 (60.8)	273 (67.1)	0.053
Social distancing from clients (Survey 2 $n = 355$)	(*not asked*)	262 (73.8)	
Goggles/eye shields (Survey 1 $n = 335$; Survey 2 $n = 270$)	183 (54.6)	175 (64.8)	**0.014**
Gloves (Survey 1 $n = 309$; Survey 2 $n = 211$)	115 (37.2)	91 (43.1)	0.207
More frequent handwashing or sanitising (Survey 1 $n = 533$; Survey 2 $n = 398$)	104 (19.5)	91 (22.9)	0.245

Bold indicates significance.

The majority of respondents at both survey time points indicated that the COVID-19 pandemic had had an impact on the way they did their work, such as changes to the way they delivered service to their clients or stakeholders, including providing services via telehealth and working from home (Table 4).

> Being able to work from home has largely been a personal benefit due to my own health needs, but can be more difficult in supporting clients in the way they need. (Survey 1 respondent)

> I have not been able to build rapport with clients as easily over the phone/online as I would have in person. I am also not able to provide as much outreach support and therefore, not always able to provide the service/support they really need. (Survey 2 respondent)

Positive impacts were also identified by most respondents, such as an increase in their awareness and knowledge of

Table 4. Impact of COVID-19 on respondents' work lives (*n* (%) strongly agree/agree).

	Survey 1 *N* (%)	Survey 2 *N* (%)	*P*-value
It has been a learning experience (Survey 1 *n* = 566; Survey 2 *n* = 419)	528 (93.3)	387 (92.4)	0.666
My awareness and knowledge of disease control has increased (Survey 1 *n* = 564; Survey 2 *n* = 421)	480 (85.1)	363 (86.2)	0.688
I had to significantly change the way I delivered service to my clients/stakeholders (Survey 1 *n* = 550; Survey 2 *n* = 399)	449 (81.6)	333 (83.5)	0.521
I worked from home/remotely (Survey 1 *n* = 550; Survey 2 *n* = 410)	424 (77.1)	333 (81.2)	0.142
I provided services to some/all of my clients/stakeholders via telehealth (Survey 1 *n* = 462; Survey 2 *n* = 330)	330 (71.4)	245 (74.2)	0.427
I have had to do work tasks that I don't usually do (Survey 1 *n* = 571; Survey 2 *n* = 416)	347 (60.8)	265 (63.7)	0.384
I have had to cancel or postpone my annual leave because of the COVID-19 outbreak (Survey 1 *n* = 545; Survey 2 *n* = 398)	307 (56.3)	268 (67.3)	<**0.001**
I have had to do more work than I usually do (Survey 1 *n* = 570; Survey 2 *n* = 422)	297 (52.1)	209 (49.5)	0.460
I feel more stress at work (Survey 1 *n* = 577; Survey 2 *n* = 424)	293 (50.8)	270 (63.7)	<**0.001**
I am disappointed that I have had to cancel or postpone my annual leave due to COVID-19 (Survey 1 *n* = 496; Survey 2 *n* = 368)	254 (51.2)	258 (70.1)	<**0.001**
There is an increased sense of togetherness and cooperation among the staff (Survey 1 *n* = 568; Survey 2 *n* = 420)	269 (47.4)	207 (49.3)	0.593
My job puts me at risk of getting COVID-19 (Survey 1 *n* = 577; Survey 2 *n* = 421)	263 (45.6)	226 (53.7)	**0.014**
The situation has brought me closer to my manager (Survey 1 *n* = 557; Survey 2 *n* = 410)	185 (33.2)	148 (36.1)	0.387
I was redeployed to another role (Survey 1 *n* = 508; Survey 2 *n* = 361)	116 (22.8)	94 (26.0)	0.314
I have had to retrain or do training courses so I can do a role/job I normally wouldn't (Survey 1 *n* = 513; Survey 2 *n* = 375)	115 (22.4)	102 (27.2)	0.119
There is more conflict amongst colleagues at work (Survey 1 *n* = 560; Survey 2 *n* = 409)	123 (22.0)	90 (22.0)	0.988
I don't feel very prepared to care for clients with COVID-19 (Survey 1 *n* = 431; Survey 2 *n* = 335)	81 (18.8)	92 (27.5)	**0.006**
I have considered transitioning into other sectors because of COVID-19 (Survey 1 *n* = 568; Survey 2 *n* = 416)	106 (18.7)	103 (24.8)	**0.026**
I have considered resigning because of COVID-19 (Survey 1 *n* = 562; Survey 2 *n* = 413)	101 (18.0)	90 (21.8)	0.160
I have been less busy than usual (Survey 1 *n* = 557; Survey 2 *n* = 419)	68 (12.0)	76 (18.1)	**0.009**
I have considered taking early retirement because of COVID-19 (Survey 1 *n* = 488; Survey 2 *n* = 350)	33 (6.8)	34 (9.7)	0.154

Bold indicates significance.

disease control and that the COVID-19 pandemic had been a 'learning experience' (Table 4).

> My team members have been an excellent support and we have developed skills we would not have otherwise gained. (Survey 1 respondent)

> Our response in the community has been amazing. Staff are well supported and are also supporting each other. I've learnt a great deal about COVID but also feel more confident in my leadership role. (Survey 2 respondent)

Despite the positive aspects of the COVID-19 pandemic, about one in five of the respondents indicated that they had considered transitioning into other sectors or resigning, and one in 10 stated that they were considering taking early retirement because of the pandemic (Table 4).

> I am going to leave the healthcare industry. The pandemic has highlighted so many problems with this broken system … the workload and expectations are too great. It's given me the opportunity to assess my life/work goals: I don't want to experience burn out like this again so I'm choosing not to work in healthcare at all. (Survey 2 respondent)

> I am a skilled and sought after practitioner who is fully intending to quit my profession and sector after the complete disregard, lack of support, and even acknowledgement I received through the worst 2 years

of my life and still coming [to work] to support unwell people through this. (Survey 2 respondent)

Personal impacts of COVID-19

The majority of respondents agreed that they had avoided public or crowded spaces and interacting with their friends and family due to COVID-19, and that their personal or family's lifestyle had been affected by the pandemic. A small proportion agreed that their family and friends were worried they might infect them. There was a significant increase in the proportion of respondents who reported these impacts from the first survey time point to the second (Table 5).

Respondents also commented on the impact of the COVID-19 pandemic on their psychological wellbeing and difficulties managing their work and family responsibilities (Supplementary Tables).

> COVID has significantly impacted my mental health during lockdown, and ability to be effective when in paid employment due to caring responsibilities for children and general stress. (Survey 1 respondent)

> The continued impact of COVID-19 and lockdown has negatively impacted my wellbeing. It has contributed to increased stress and impacted my ability to be remain hopeful when providing emotional support to my clients. It has been very difficult to support people through extended lockdowns and also engage with anti-vax attitudes. (Survey 2 respondent)

> Juggling home schooling and work has been a struggle for most staff, and is what has created the most angst among my team than anything else. Taking leave has not been possible to accommodate this, so team members, including myself, have worked longer hours outside of business hours to accommodate lost time during the day. This has also heavily impacted on family. (Survey 2 respondent)

Organisational response to COVID-19

Most respondents felt that their community health service's response to COVID-19 was excellent or good, particularly in terms of the availability and use of precautionary measures (e.g. PPE), communication with staff, level of preparedness and concern for the physical wellbeing of staff. There was a significant increase of respondents from the first survey to the second who agreed that their organisation's level of preparedness was excellent or good, and that there was emotional support available for those staff who need it (Table 6).

Nevertheless, many commented that they would have appreciated more support from their organisation, especially as the COVID-19 pandemic continues (Supplementary Tables).

> During the initial stages of the pandemic and during lockdown I feel both staff and clients were willing to make compromises so that everyone stayed safe. Emerging from the pandemic in 2021 has [been] challenging as things are not back to "normal" but the patience and understanding has waned. (Survey 1 respondent)

COVID-19 vaccination status, intentions, concerns and experiences

The second survey asked respondents about their COVID-19 vaccination status, intentions, concerns and experiences.

Table 5. Impact of COVID-19 on respondents' personal lives (*n* (%) strongly agree/agree).

	Survey 1 *N* (%)	Survey 2 *N* (%)	*P*-value
I have avoided public or crowded spaces (e.g. shops, restaurants, public transport) (Survey 1 $n = 572$; Survey 2 $n = 418$)	407 (71.2)	342 (81.8)	<**0.001**
I have a greater appreciation of life and work (Survey 1 $n = 574$; Survey 2 $n = 415$)	390 (67.9)	249 (60.0)	**0.012**
My personal or family's lifestyle has been affected (Survey 1 $n = 573$; Survey 2 $n = 418$)	360 (62.8)	333 (79.7)	<**0.001**
The COVID-19 situation has brought me closer to my family (Survey 1 $n = 576$; Survey 2 $n = 417$)	293 (50.9)	176 (42.2)	**0.008**
I have avoided interacting with my friends and extended family (Survey 1 $n = 573$; Survey 2 $n = 412$)	271 (47.3)	256 (62.1)	<**0.001**
People close to me have been concerned about my health (Survey 1 $n = 570$; Survey 2 $n = 418$)	258 (45.3)	193 (46.2)	0.827
I am likely to suffer financial losses (Survey 1 $n = 566$; Survey 2 $n = 413$)	63 (11.1)	59 (14.3)	0.194
My family and friends are worried they might get infected from me (Survey 1 $n = 562$; Survey 2 $n = 414$)	62 (11.0)	68 (16.4)	**0.019**
People treat me and my family differently because I work in the community health sector (Survey 1 $n = 567$; Survey 2 $n = 411$)	59 (10.4)	53 (12.9)	0.269
People avoid me and my family because I work at a community health service (Survey 1 $n = 570$; Survey 2 $n = 409$)	37 (6.5)	31 (7.6)	0.594
I avoid telling people that I work at a community health service (Survey 1 $n = 576$; Survey 2 $n = 419$)	27 (4.7)	31 (7.4)	0.096

Bold indicates significance.

Table 6. Respondents' perception of their health service's response to COVID-19 (*n* (%) excellent/good).

	Survey 1 *N* (%)	Survey 2 *N* (%)	*P*-value
Availability and use of precautionary measures (e.g. PPE such as masks) (Survey 1 $n = 570$; Survey 2 $n = 423$)	518 (90.0)	379 (89.6)	0.571
Communication with staff (Survey 1 $n = 570$; Survey 2 $n = 423$)	456 (80.0)	343 (81.1)	0.729
Current level of preparedness (Survey 1 $n = 570$; Survey 2 $n = 421$)	456 (80.0)	361 (85.7)	**0.023**
Concern for the physical wellbeing of staff (Survey 1 $n = 569$; Survey 2 $n = 423$)	441 (77.5)	326 (77.1)	0.932
Training provided to staff (e.g. in use of masks) (Survey 1 $n = 569$; Survey 2 $n = 423$)	416 (73.1)	297 (70.2)	0.351
Concern for the emotional wellbeing of staff (Survey 1 $n = 569$; Survey 2 $n = 422$)	390 (68.5)	301 (71.3)	0.382
Availability of emotional support for those who need it (Survey 1 $n = 570$; Survey 2 $n = 422$)	368 (64.6)	305 (72.3)	**0.012**

Bold indicates significance.

At the time of the survey, most respondents ($n = 368$, 92.9%) had received two doses of a COVID-19 vaccine. Of those who had not yet been vaccinated ($n = 14$, 3.3%), more than half stated that they had been offered the vaccine, but had declined ($n = 8$, 57.1%) and would be interested in receiving the vaccine at a later date, mostly the following year ($n = 9$, 69.2%). The main reasons reported by respondents for not being vaccinated were concerns about the vaccines being developed too quickly and limited availability of information about the vaccines and their possible side-effects.

> I am waiting to receive second dose. Major concern is long term effects which we do not know, although I understand the need to have it now regardless. (Survey 2 respondent)

Several respondents reported concerns about the government requirement for healthcare workers to be fully vaccinated.

> Being forced to get the jab or lose your job is the worst demand made on a person. (Survey 2 respondent)

> We no longer have the right to choose whether or not we are vaccinated. I do not agree with this decision. (Survey 2 respondent)

The main sources of information about COVID-19 vaccines reported by respondents were government and health organisation websites, the community health service where they were employed and mainstream media.

Discussion

This longitudinal study found that the COVID-19 pandemic has had a considerable impact on the work and personal lives of community health service staff in Australia who played a critical role in the pandemic response. Consistent with the findings from other studies with hospital clinical staff in Australia (Holton *et al.* 2021*a*; Wynter *et al.* 2022), nurses in Portugal (Sampaio *et al.* 2020) and community health workers in New Zealand (Holroyd *et al.* 2021), the community health service staff in this study were mostly concerned about their family's health and infecting family members. These concerns reflect the increased risk of COVID-19 infection faced by healthcare workers due to their potential contact with COVID-19-positive patients. It was estimated that as of early July 2020, Australian healthcare workers were 2.7 times more likely to contract COVID-19 than members of the general population (Australian Institute of Health and Welfare 2021).

Cross-sectional studies have reported that about one in five healthcare workers intend to resign during the COVID-19 pandemic (Halcomb *et al.* 2020; Schug *et al.* 2022); however, little has been reported about changes in intentions over time. This study found an increase in the proportion of community health service staff who indicated that they were considering leaving the sector or resigning as the COVID-19 pandemic progressed. Almost one-quarter of staff surveyed indicated that they were considering leaving at the time of the second survey compared to less than one in five who were considering leaving at the time of the first survey. It is likely that healthcare workers' intentions about leaving the sector or resigning changed as the pandemic progressed due to their deteriorating psychological wellbeing; the burden of providing care and services to clients, particularly those who may be infected with COVID-19; perceptions of inadequate organisational support; redeployment to unfamiliar or undesired work duties; challenges associated with providing client care remotely; and difficulties managing their work and family responsibilities.

Other occupational and personal impacts of the COVID-19 pandemic identified by community health service staff were similar to those of hospital clinical staff in Australia. Both community health service and hospital staff reported positive aspects of the COVID-19 pandemic, including that it had been a learning experience and had increased their awareness and knowledge of disease control, as well as personal impacts including that their personal or family lifestyle had been affected and they had avoided public or crowded spaces (Holton *et al.* 2021*a*; Wynter *et al.* 2022). Nevertheless, the community health service staff in this study were more

likely to frequently endorse that changes in the ways they delivered services to their clients and working from home were some of the greatest work impacts of the COVID-19 pandemic, whereas hospital staff were more concerned that their job put them at risk of COVID-19 infection (Holton *et al.* 2021*a*; Wynter *et al.* 2022). These differences probably reflect the nature of the work that each group performs, as well as the environment in which it is conducted given many community health service staff provided services via telehealth during the COVID-19 pandemic (Victorian Healthcare Association 2021), whereas hospital clinical staff were providing care for and had direct and sustained contact with COVID-19 inpatients, including those in ICU (Holton *et al.* 2021*c*).

Strengths and limitations

This is one of the first studies to collect data about the psychosocial impact of the COVID-19 pandemic on community health service staff in Australia at more than one time point. Data were collected about the impact of the COVID-19 pandemic on staff's work and personal lives as the pandemic progressed. In order to minimise the burden on respondents, it was possible to collect data at only two time points. Future studies should collect data both during subsequent waves of the COVID-19 pandemic and after the pandemic in order to obtain a greater understanding of the long-term psychosocial effects on community health staff.

Implications for community health service policy and practice

Similar to the recommendations and findings of other studies (Digby *et al.* 2021; Holroyd *et al.* 2021; Nyashanu *et al.* 2022), the findings of this study indicate that community health service staff would benefit from additional and ongoing organisational initiatives to support their personal wellbeing, assist them to fulfil their professional duties, manage their paid work and family responsibilities, and reduce or prevent their intention to leave the healthcare sector or resign from their current position. In their free-text comments (Supplementary Table), respondents identified technological, occupational and psychological initiatives that would be beneficial, including: greater managerial and IT support for remote working; access to carer's leave and flexible work hours to manage home schooling and other family responsibilities; further psychological support such as opportunities to debrief, connect with colleagues and 'check-ins' with managers; additional employee asistance program (EAP) sessions; recognition from management about the impact COVID-19 has had on staff; continued communication from their organisation (including from both line managers and the executive team) about work-related changes; and an increase in staffing and resources to ensure the provision of high-quality services to a larger number of, and more complex, clients.

Conclusions

The COVID-19 pandemic had a significant psychosocial impact on community health service staff. Staff would benefit from ongoing targeted psycho-educational, social and occupational initiatives and support, which would help them to manage their psychosocial concerns.

Supplementary material

Supplementary material is available online.

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