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# Nurse wellbeing during the coronavirus (2019) pandemic: A qualitative descriptive study



Rebecca J. Jarden<sup>a,\*</sup>, Aaron J. Jarden<sup>b</sup>, Tracey J. Weiland<sup>c</sup>, Glenn Taylor<sup>d</sup>, Naomi Brockenshire<sup>e</sup>, Michelle Rutherford<sup>f</sup>, Catherine Carbery<sup>g</sup>, Kate Moroney<sup>h</sup>, Marie F. Gerdtz<sup>i</sup>

- <sup>a</sup> Department of Nursing, Melbourne School of Health Sciences, The University of Melbourne, 161 Barry Street, Carlton, Vic, 3053, Australia
- <sup>b</sup> Centre for Wellbeing Science, Melbourne Graduate School of Education, The University of Melbourne, Kwong Lee Dow Building, 234 Queensberry Street, Parkville, Melbourne, Vic, 3053, Australia
- <sup>c</sup> Melbourne School of Population and Global Health, The University of Melbourne, 207 Bouverie Street, Carlton, Melbourne, Vic, 3053, Australia
- <sup>d</sup> Nursing and Midwifery Health Program, Richmond, Vic, Australia
- e Department of Nursing, Melbourne School of Health Sciences, The University of Melbourne, 161 Barry Street, Carlton, Melbourne, Vic, 3053, Australia
- <sup>f</sup> Eastern Health, 5 Arnold Street, Box Hill, Melbourne, Vic, Australia
- g Melbourne Health, 300 Grattan Street, Parkville Vic. 3050, Australia
- <sup>h</sup> Goulburn Valley Health, Graham Street, Shepparton, Vic, Australia
- Department of Nursing, Melbourne School of Health Sciences, The University of Melbourne, 161 Barry Street, Carlton, Vic, 3053, Australia

## ARTICLE INFO

Article history: Received 1 April 2021 Revised 2 June 2021 Accepted 8 June 2021

Keywords: COVID-19 Experiences Mental health Nurses Perceptions Wellbeing Work wellbeing

## ABSTRACT

Background: The wellbeing of individuals influences organisational outcomes. Insight into nurses' wellbeing is crucial to a sustaining a high-quality workforce.

Aim: To describe nurses' perceptions and experiences of wellbeing, work wellbeing, and mental health. *Method:* Using a qualitative descriptive design, semi-structured interviews were conducted, transcribed verbatim, analysed inductively and thematically, and reported per consolidated criteria for reporting qualitative research.

Findings: Nine Australian nurses were interviewed in 2020, each for 60 to 90 minutes. These nurses had a broad range of clinical roles and years of experience in metropolitan healthcare organisations. Six themes, each related to nurse wellbeing, depicted: (i) value and sense of purpose from nursing, yet also negative consequences of losing sight of oneself within the nursing role; (ii) work nurses did to disengage from their job and create a balance within their life; (iii) significance of the team and senior team as a source of both strength and opportunity for wellbeing; (iv) a range of wellbeing initiatives with a perception these were often developed, and for use, in response to crisis as opposed to preventative or proactive measures; (v) value of additional nurse wellbeing education and promotion of available support; and (vi) novel challenges and ways to wellbeing during times where resources were stretched and usual support systems impacted.

Discussion: Identified positive and negative consequences of nursing must be addressed when developing targeted wellbeing interventions.

Conclusion: New ways of working and supporting individual, team and organisational wellbeing are needed for flourishing working environments. Potential strategies to either leverage or mitigate the positive and negative consequences of nursing are offered.

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Corresponding author. Tel.: +61 3 834 40734

E-mail address: rebecca.jarden@unimelb.edu.au (R.J. Jarden).

# Summary of relevance

#### Problen

There is limited understanding of Registered Nurses' perceptions of wellbeing, nor their perceived barriers and enablers of wellbeing, particularly during the coronavirus-2019 pandemic

# What is already known

Workers' wellbeing impacts on organisational outcomes. Previous research has focused largely on the mental illbeing of registered nurses.

## What this paper adds

This study enhances understanding of the positive and negative consequences of nursing for an individual's wellbeing. This understanding enables these consequences to be embraced and leveraged, or mitigated. Insights into strategies to enhance wellbeing inform targeted interventions for health promotion and prevention. Pandemic-specific findings offer new ways forward in healthcare organisation pandemic preparedness.

## 1. Introduction

Maintaining and sustaining a health workforce to meet the increased demand for healthcare is both a local (Burns, Hamer, & Bissell, 2020) and global challenge (World Health Organisation, 2020). Developing an understanding of nurse wellbeing generally, and in times of the COVID-19 pandemic, enables the strengthening of both existing and future health systems.

## 2. Literature review

Wellbeing is now embedded in the definition of health and is defined as a balance between an individual's resources and challenges faced (Dodge, Daly, Huyton, & Sanders, 2012), and feeling good and functioning effectively (Huppert, 2009). Models of wellbeing typically include positive relationships, emotions, purpose in life and meaning, personal growth, autonomy, engagement, accomplishment, and self-acceptance (Hone, Jarden, Duncan, & Schofield, 2015).

Context matters for wellbeing, for example a nurse's personal wellbeing related to life external to work can be very different to their wellbeing as experienced within the work environment (Hamling, Jarden, Jarden, & Synard, 2020; Jarden, Sandham, Siegert, & Koziol-McLain, 2018). In other words, work wellbeing is a subcomponent of wellbeing per se. Work contributes to mental health, highlighted by the World Health Organisation's definition of mental health as, "a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2013, p. 6). Job characteristics and employee motivation, engagement, satisfaction, and performance are inherently linked, as described by a range of theories and models such as the Job Characteristics Theory, Person-Organisation Fit Theory, and the Job Demands-Resources Model (e.g., see Gordon, Demerouti, Bipp, & Le Blanc, 2015). The wellbeing of health workers influences the performance of organisations where empowerment, quality sleep, and positive workplace relationships have been associated with high performance, patient satisfaction, and lower turnover intentions (Ray-Sannerud, Leyshon, & Vallevik, 2015) and increased levels of resilience (Yu, Raphael, Mackay, Smith, & King, 2019). In terms of ill-health, burnout, psychological distress, and poor social capital are associated with suboptimal patient care, unprofessional conduct, and medical leave (Brunetto et al., 2013; Ray-Sannerud et al., 2015). Qualitative research suggests self-awareness, coping, feeling spiritually enriched and setting boundaries underpin a sense of balance and emotional wellbeing for palliative care nurses (Rose & Glass, 2009, 2010). For nurses in acute hospital settings, the nurses' perceptions of organisational values congruence with their own values was perceived to be key for their wellbeing, patient care, and safety (Dunning, Louch, Grange, Spilsbury, & Johnson, 2021). For nurses in their first year of practice, feeling valued and part of the team, and learning from and being supported by other nurses underpinned their wellbeing (Jarden et al., 2021). In sum, enhanced health workers' wellbeing has wide reaching effects to the public, nurses themselves, and organisations (e.g., see Brunetto et al., 2013; Ray-Sannerud et al., 2015).

Nurses have already, and will continue to, have a significant role in managing the consequences of the pandemic of coronavirus disease, 2019 (COVID-19; International Council of Nurses, 2020). As such, it is crucial to develop an understanding of these nurses' wellbeing to enable and support this workforce now and into the future. This need has never been so imperative, given that around 10% of COVID-19 cases globally were among healthcare workers (International Council of Nurses, 2020). The impact of COVID-19 on health workers is being rigorously investigated (Waters et al., 2021), and these studies have begun to unpack aspects such as nurse stress, anxiety, distress, and fear (Hu et al., 2020) with evolving recommendations to support nurses' mental health (Maben & Bridges, 2020; Mills, Ramachenderan, Chapman, Greenland, & Agar, 2020). What we do not yet know is how these frontline nurses' wellbeing is prevailing, nor what strategies they are using to maintain or enhance their wellbeing. Therefore, the aim of this study was to describe frontline nurses' perceptions and experiences of nurse wellbeing, work wellbeing, and mental health.

## 3. Methods

This research was part of a larger project investigating nurse wellbeing, work wellbeing, and mental health, which commenced with a longitudinal survey in 2019. Participants of the survey were invited to participate in semi-structured interviews which were conducted subsequent to the longitudinal survey ending. Using a descriptive qualitative study design (Sandelowski, 2010), semi-structured interviews were conducted with nurses from July 2020 (COVID-19 peak in Victoria, Australia; Department of Health and Human Services - Victoria, 2021) to September 2020. The research is reported according to the consolidated criteria for reporting qualitative research (COREQ; Tong, Sainsbury, & Craig, 2007). The two research questions were: (i) What are registered nurses' perceptions and experiences of barriers and enablers of their wellbeing when nursing?

# 3.1. Ethical considerations

The study protocol was approved by the university and organisation Human Research Ethics Committees (HREC/56492/MH-2019; 1954762.1) and all organisations approved the study through their research governance offices. Informed consent was obtained from all participants.

# 3.2. Participants

Recruitment was by purposeful sampling from three healthcare organisations in the state of Victoria, Australia, two large metropolitan healthcare organisations and one smaller rural healthcare organisation. All Registered Nurses across the three organisations were eligible for recruitment and were invited to register their interest in participating in the interviews after completing a longitudinal survey related to wellbeing and work wellbeing. Of a potential 49 survey participants, nine provided consent to be interviewed and all nine were interviewed. Given the richness of the data from the nine interviews, no further participants were sought. Each interview participant received a \$50 gift card to compensate for their interview time.

## 3.3. Data collection

The semi-structured telephone interviews were conducted ((NB) in August and September 2020), audio-recorded, then transcribed verbatim (RJ). To the researcher's knowledge, there were no other non-participants present at the interview and the interviews were conducted in participants' home environments. The interviewer had not previously met the participants and had both qualitative research and interviewing education and experience. The interview question guide is provided in Supplementary File 1. Each participant was interviewed once and neither transcripts nor findings were returned to participants for comment.

## 3.4. Analysis approach

The six-step inductive thematic analysis of the interview transcripts applied the approach of Braun and Clarke (2006, 2021), which includes (i) familiarising self with data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining themes, and (vi) producing the report. Steps (i) to (vi) were conducted independently by two authors with experiences in qualitative analysis approaches (RJ & NB). The themes identified were then reviewed and refined by both researchers together before they were finally named. As the inductive analysis progressed, data saturation was represented by the range of perceptions and experiences of several nurses related to the same sub-themes, where meaning was generated through the interpretation of the data (for elaboration, see Braun & Clarke, 2021). We have provided a sample of the analysis procedure in Supplementary File 2.

Validity and rigor were addressed by the researchers in the qualitative analysis through adopting a reflexive stance to examine how preconceived expectations related to the research phenomenon may have influenced both development of the interview questions and analysis (Berger, 2015; Braun & Clarke, 2019). Reflexivity supported an ethical and political self-awareness, and it is acknowledged here that both researchers conducting the qualitative analyses were 'insiders' as registered nurses – although neither were working in any of the participant healthcare organisations. Additional peer review and debriefing supported conceptualisation, as recommended by Morse (2015), inclusive of exploration of the researchers' ever evolving positioning and how that may have influenced the research (e.g., see Berger, 2015).

# 4. Findings

The nine registered nurses who participated in the interviews were all working in at least one large metropolitan hospital. These nurses included: eight females and one male from 31 to 62 years of age. Two of the nurses were in their first year of practice, three had nine to greater than 30 years of experience, two Clinical Nurse Educators had up to three decades of experience, and an Associate Nurse Unit Manager and a Nurse Unit Manager both had more than a decade of experience. Interviews ranged from 60 to 90 minutes.

Analysis of the interview transcripts revealed six themes, each with four sub-themes: (i) the impact of nursing on wellbeing, (ii) personal wellbeing strategies, (iii) wellbeing and the team, management and leadership, (iv) the organisational impacts on nurse wellbeing, (v) mitigating the impact of nursing on wellbeing, and (vi) COVID-19's influence on nurse wellbeing. The nurses reported

individual level experiences ('Me'), collegial or team level experiences ('We'), and organisational or community level experiences ('Us'), aligned with Jarden & Jarden's (2016) 'Me, We, Us' framework. The first five themes and subthemes are illustrated in Fig 1, the COVID-19 specific theme six is presented later, in Fig 2.

Presented below are the six themes and subthemes. Table 1 provides the associated descriptors and corresponding participant quotes.

Theme 1: The impact of nursing on wellbeing

The impact of nursing on wellbeing was a strong theme, particularly when participants spoke of their life journeys in the nursing profession. The four sub-themes included: 'A sense of purpose and helping others', 'The altruistic culture of nursing practice', 'Prioritising preventative self-care', and 'Feeling inadequate and hiding vulnerabilities'. Across the four sub-themes for 'The impact of nursing on wellbeing', whilst there was a sense of nursing having the potential to bring about a sense of purpose there were significant concerns for the negative consequences of nursing for wellbeing. However, each of the nurses also had a strong sense of personal wellbeing strategies to buffer these impacts and these are now detailed in Theme 2, 'Personal wellbeing strategies'.

Theme 2: Personal wellbeing strategies

For participants, 'Personal wellbeing strategies' were seen to evolve over time and the predominant element of this theme was the work nurses did to disengage from work and create a balance within their life. The four sub-themes included 'Creating a good work-life balance', 'Disengaging from work', 'Social connection', and 'Rejuvenation outside work'. Participants' personal relationships with their family and friends were paramount in terms of maintaining and promoting their wellbeing. There was recognition of the importance of a healthy diet and exercise as part of their personal health promotion in rejuvenating from work; however, some spoke of this reminiscently and hoped to do more.

Across the four sub-themes for 'Personal wellbeing strategies', creation of a clear break between the workplace and home was paramount. Home was a place for rest and rejuvenation outside of a demanding and challenging workplace. The influence of the team, management, and leadership on wellbeing within the workplace is now explored in Theme 3.

Theme 3: Wellbeing and the team, management, and leadership

The significance of the team and the senior team, such as educators, managers, and leaders, was a source of both strength and opportunity for wellbeing in the workplace. Some of the nurses had experienced or developed effective role models, whilst others felt there was an opportunity to strengthen these exemplars. All nurses highlighted the value they placed on their workplace relationships in both supporting each other and unpacking their working experiences together. The four sub-themes included: 'Meeting the demand for nursing role models', 'Preceptorship and mentorship', 'Teamwork and camaraderie', and 'Debriefing and shared experiences'. Across the four sub-themes, there were times the local frontline team on the ward or unit was expressed in terms of 'us', and the senior team such as managers and organisational leaders being perceived as 'them'. This division was also evident in Theme 4 which is now explored.

Theme 4: The organisational impacts on nurse wellbeing

Whilst nurses did identify a range of wellbeing initiatives both internal and external to the organisation, there was a perception these were often developed and for use in response to crisis as opposed to preventative or proactive measures. One of the most significant undercurrents was the participants' sense that they were not valued by the organisation, nor that their personal and local wellbeing strategies were supported. The four subthemes included: 'Visible wellbeing strategies', 'Feeling valued and respected', 'Support and resourcing', and 'Reactiveness'. Despite the nurses being able to identify a range of organisational and external

Table 1
Themes, subthemes, and associated participant quotes.

Themes	Subthemes	Participant quotes	
Theme 1: The impact of nursing on wellbeing	Sub-theme 1.1: A sense of purpose and helping others	The profession of nursing was highlighted as a key component in creating a sense of purpose in work life, and for some this was underpinned by the value of helping others. Finding a sense of purpose the nursing was significant, with one participant stating:  "I guess, I'd done a lot of different things, probably just an unfulfilled sense of purpose, yeah, wanting to discomething really hands on and useful, and I thought it would be rewarding in terms of the human connect as well" (Interview 2).  For another, helping others was therapeutic:  "seeing patients is beneficial because it takes you away from your problems, so you're focusing on their problems not yours, so work can be therapeutic (Interview 3).  Being needed was an important element to work wellbeing, as one participant described:  "work wellbeing is all about feeling needed and being able to do a good job for other people and helping of people be the best version of them that they can be and giving them lots of resources and listening to ther that sorts of stuff, and then my physical wellbeing, or my own wellbeing away from work is very much ties."	
	Sub-theme 1.2: The altruistic culture of nursing practice	in that" (Interview 5).  The negative consequences of an altruistic nursing culture were elucidated. A nursing culture underpinned by both sacrifice and self-sabotage was a common thread:  "the lifestyle is awful and culture of sacrificing yourself is awful, you can't go to the toilet, you can barely sit down, you don't get a break all that stuff and if you pick those habits up for 8 hours a day it becomes your whole life" (Interview 1),  "I think it self-sabotage on the part of the nurses cos we're so used to carrying on and just dealing with it" (Interview 4),  "I think there's sort of some cultural engrained in nursing, you know, put your hand up and say I'm not coping	
	Sub-theme 1.3: Prioritising preventative self-care	is not sort of done" (Interview 6).  Prioritising and engaging with self-care was frequently highlighted as key to both prevention of illbeing and promotion of wellbeing. For one participant, this self-care was linked to feeling confident: "I've had to very much look after myself, not rely on the organisation to do that, I've got enough self-confidence to say when enough is enough for me and to make sure I take my breaks" (Interview 3).  For another, their physical health condition was thought to be a symptom of burnout, resulting in delays in seeking a medical review:	
	Sub-theme 1.4: Feeling inadequate and hiding vulnerabilities	"I thought I was burning out and I had had what turns out some overt symptoms of a significantly low haemoglobin looking back on it, I just thought I was burning out" (Interview 4).  Sacrificing self-care was a prevalent issue across a range of subthemes: "I guess maybe sometimes I take on too much of the burden of making sure everyone else is ok and not wanting to give them extra work and monitoring everything going on, so I think in terms of, yeah, trying to keep everyone happy is certainly something that can become a burden" (Interview 6).  Asking for help was identified as problematic for nurses, as there was a general concern they would be perceived as struggling, which was undesirable. For one nurse, being seen as struggling was an uncomfortable feeling: "I started to be seen as a bit like I was struggling [] I can't say that I really liked that though" (Interview 2). For others, there was a sense of not wanting to be exposed as not coping for fear of bullying: "it's difficult to expose yourself in the workplace, any sign of weakness, as victims of bullying they all pick on you and find a way to get at you, that's the way I've felt" (Interview 3).	
Theme 2: Personal wellbeing strategies	Sub-theme 2.1: Creating a good work-life balance	Hiding vulnerability was seen as the preferred option: "a lot of the support I'm giving is one directional and because I don't really feel I can go to my management team and talk about if I'm not coping – you know I wouldn't put that out there (Interview 7)". Finding the right balance between work and life was identified as an important enabler of wellbeing. This balance was found in numerous ways, for instance, one nurse described a range of activities outside work: "[I] spend a lot of time with my partner, and being domestic, cooking, growing my garden, read books, exercise, so really finding a really good balance" (Interview 2). For another nurse this meant being supported by relationships outside work: "having good health in terms of physical, mental, and relationships and connection outside of work and balancing the two" (Interview 9). This balance was also seen as important in future-proofing the workplace: "the generation that's coming through now actually do recognise work life balance and we can no longer ask	
	Sub-theme 2.2: Disengaging from work	them to do 80-hour weeks" (Interview 5).  Switching off from work during breaks and after work were highlighted as crucial for wellbeing. For example, one participant highlighted the potential to be dragged down by work:  "I think what I and a lot of people do is try to switch off when where not at work so we're not dragged down by it" (Interview 3).  Another nurse found the time for replenishment by leaving the workplace during breaks:  "I'm able to give myself the downtime, you know go out in the garden, go for a walk, do what I need to do,	
	Sub-theme 2.3: Social connection	replenish myself (Interview 6).  Creating an endpoint to the working day was seen as important:  "marking an end to the work day when I leave, like leaving work at work [] we rule a line at the end of the shift and we walk out and we don't do more work at home" (Interview 9).  Relationships and the support of family and both work and non-work friends were viewed as pivotal. These relationships were described as helpful for working through challenges:  "it's about social connection and working through all the obstacles that pop up and yeah, relationships are extremely, extremely important" (Interview 1).  Family and friends were ultimately considered the key:  "for me one of the most important things is family" (Interview 8),  "the things that are important are outside of here like your family and your friends, you're not replaceable to them" (Interview 9).	

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Themes	Subthemes	Participant quotes	
	Sub-theme 2.4: Rejuvenation outside work	Purposeful and focused rejuvenation outside of work was important, with one participant stating: "I choose to meditate for half an hour each morning, I've designed my own weight training program, and I commit to those, and I understand behaviour change, and I set goals" (Interview 1).	
		For another, replenishment occurred through the home environment and nature:  "I'm able to give myself the downtime, you know go out in the garden, go for a walk, do what I need to do, replenish myself" (Interview 6).	
		Others talked of needing to do more:	
		"we get a bad reputation that nurses are unhealthy, there's evidence to say that we're more more obese, less active, eat less vegetables than the general population – that's not good enough, we need to walk our talk as well" (Interview 1),	
		"at the moment all I do is walk the dogs outside of work, other than that I could probably be a bit healthier, eat better, drink less, exercise more" (Interview 8).	
Theme 3: Wellbeing and the team,	Sub-theme 3.1: Meeting the demand	Nursing role models were discussed by RNs seeking role models: "sometimes I wish there was someone out there that was passionate enough out there that would lead by	
nanagement, and	for nursing role	example" (Interview 1).	
leadership	models	Others sought to recruit future role models: "[] getting the right people into the team [] then they're modelling the behaviour" (Interview 4).	
		This same nurse sought to be that role model,	
		"we can't do anything about the patients or the infrastructure, what we can work on is the team. You've got to have one of the three so people will actually want to come back" (Interview 4).	
		The way this nurse sought to role model was through communication:  "[] I think it's about recognising and appreciating all your staff" (Interview 4).	
		Reflecting on their observations of positive role modelling, one nurse described the behaviour of a charge	
		nurse: "they'd put the phone down, they'd have a chat with the team, they'd sit outside, they had a beautiful	
		tea-room if you saw the nurse in charge do it you felt now I could do it" (Interview 1).	
		However, this nurse also highlighted a later example of what they perceived as negative role-modelling:	
		"the nurse in charge only goes to tea after the entire ward round and after everyone else is fed – that's heroic 'wahoo' [] it doesn't set the same example" (Interview 1).	
	Sub-theme 3.2:	The promise of a preceptor was unfulfilled for two RNs:	
	Preceptorship and mentorship	"the preceptor model has been a failure I would say [] they could have done better with the rostering at th start" (Interview 9),	
	mentorship	"[] having to sort of seek out those people [their preceptor] not having been introduced to them and not knowing who they were and then finding out that they didn't know they'd been allocated to me" (Interview	
		2). Another nurse found mentorship lacking:	
		"there was no opportunity for mentorship within the division, and my boss was very overwhelmed with her role	
		so it was very much learning by failing I suppose" (Interview 4).	
		Challenges were described by one RN working as a preceptor: "there's a lot of pressure on trying to sort yourself out and trying to talk to someone else when they're with	
	Sub-theme 3.3:	you all the time, on your breaks, I need alone time" (Interview 3).  Building relationships and camaraderie within the team were expressed as essential to wellbeing:	
	Teamwork and camaraderie	"it's probably the positive attitude that people bring to work every day that makes it easier" (Interview 8). Teamwork and support were considered an essential part of the ward culture, with one participant stating: "I think that's a daily practice, in actively being part of a positive, supportive culture, cos we all make that" (Interview 2).	
		It was highlighted that all members of the team contributed to this culture: "everyone contributes to that [culture] by just being positive and non-judgemental and willing to just try and	
		not let their own issues bring others down (Interview 2).  For other participants, this camaraderie had a buffering effect for daily challenges of the work role:	
		"as long as I know I've got that to go back to, then that keeps me happy at work, happy and healthy at work" (Interview 5).	
	Sub-theme 3.4: Debriefing and shared	The importance of sharing experiences amongst nurses was key: "you know that inside knowledge and understanding, cos they're [nursing colleagues] really useful to debrief	
	experiences	with rather than non-nurses" (Interview 4), "it's still good to come together as a group and sit among people and see what everyone's experiencing"	
		(Interview 6).  Having the work time coupled with a place to share experiences was important:	
		"a tearoom that's a decent size, you know environmental things, that you can't often change that easily, they impact" (Interview 6),	
		"those debrief sessions were weekly we'd have a chat or we might have an education topic or something that was relevant to the group, and I thought those were super useful" (Interview 9).	
Theme 4: The organisational impacts	Sub-theme 4.1: Visible wellbeing strategies	A range of potential wellbeing programs and services, both internal and external to the organisation, were identified by participants:	
on nurse wellbeing		"we have a STAR program which is a peer support where staff take on a role of being a mental health star and they make themselves available to help others across departments, we had an information session on that and we were certainly told about EAP, and that was part of the whole 'all nurses' induction/orientation" (Interview	
		2),	
		"they've got a weekly bulletin that goes out and they put reminders in there about the [EAP] so they have that, they have this mind tools program that they advertise they've got articles and things about mental health and ummm that sort of is about it" (Interview 6),	
		"if someone's not coping we have organisational supports that we can refer people to and we might encourage them to use EAP for example or peer support or something like that" (Interview 7).	
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Themes	Subthemes	Participant quotes
	Sub-theme 4.2: Feeling valued and respected	Lacking a sense of feeling valued and recognised for nursing knowledge and contribution was strongly expressed by participants: "demoralising and disempowering and not recognising the knowledge and skills that is built up over nurse education and years of learning, thinking all we have to do is tick boxes" (Interview 3),
		"the number of hours you put in with no recognition, and you really have to search for ways to make it a positive experience" (Interview 5), "you don't feel valued so you know, you're just a number on a page, filling a spot so you can look after patients"
	Sub-theme 4.3: Support and resourcing	(Interview 6).  Nurses felt disappointed by the missing support for wellbeing initiatives of the frontline workers: "nothing was supported it was hindered and not taken up by management and that was very disappointing" (Interview 1),
		"there are a lot of things written in mission statements, but we found all their actions were the opposite, they were obstructing people trying to manage their lives, childcare and things. Saying how they support all this, then doing exactly the opposite in practice (Interview 3),
		"you're not very supported withat one point some people were told they were taking too much sick leave even though they had the hours and they were asked if they wanted to drop their hours, they were trying to bring down sick leave in the hospital, you're told to feel guilty" (Interview 8).
	Sub-theme 4.4: Reactiveness	There was a perception by the nurses of new wellbeing initiatives appearing in response to a crisis rather than proactive development, implementation, evaluation and embedding: "my organisation it needs a crisis to be responsive" (Interview 5),
		"lots of programs come and go, and so there might be things that happen and you'll go, oh yeah what are they [the organisation] doing this time they want us to take less sick leave cos they're doing a mental health workshop so we don't have time off, so there's culture in it as well" (Interview 6),  "think there's a lot of lin carrier paid to it they not program to real follow through" (Interview 7)
Theme 5: Mitigating the impact of nursing on wellbeing	Sub-theme 5.1: Visible nurse wellbeing education from	"think there's a lot of lip service paid to it, but not necessarily real follow through" (Interview 7).  Participants spoke of the importance of wellbeing being a focus from nursing studenthood:  "perhaps having more of a focus on student wellbeing would be really helpful" (Interview 2).  Although, education was not always thought to be the answer:
on wenseing	studenthood	"sometimes you just need to figure things out for yourself, then sometimes it's not quite like that" (Interview 2). Some suggested educators could have highlighted the importance of prioritising wellbeing: "I guess perhaps if they had just spoken about the concept [of wellbeing] a bit more just in general terms, like
		it should be a priority for you, that would probably would have been a good start" (Interview 6).  One participant felt the education could be strengthened by drawing from people with nurse wellbeing expertise rather than nursing practice expertise:
	Sub-theme 5.2: Increased awareness	"[nurse wellbeing was] taught by people who know a lot about nursing practice [] you probably need to bring in a person who is an expert in the area to talk about it (Interview 9).  Participants expressed the need for a more graduated and supported transition period for graduate nurses, where confidence could be built:
	and support for graduate transition	"I do wonder if there's a way that the graduate experience could be a bit more 'graduated', yeah like, stepping up the responsibility a little more gradually" (Interview 2), "the transition from student to grad is massive and it's terrifying, particularly in the environment in which I
		work" (Interview 7). Additional time was also identified as valuable: "just a couple of extra days in each rotation would really help so you feel like you really know how to
	Sub-theme 5.3: Promotion of available supports	structure your day, 'I know where things are', 'I know how things are done around here'" (Interview 9). Increasing the visibility and promotion of support systems was expressed by the nurses, commencing from the education programs and continuing throughout the healthcare organisations:  "It seems like the services are there, not that they couldn't be improved, but they could be more visible
		(Interview 2).  One nurse felt the resources became apparent in a reactive manner:  "the knowledge is pretty much what you've learned on the fly as opposed to being told these are your resources, and that's a struggle" (Interview 4).
	Sub-theme 5.4: Active	For another, there was opportunity for increased promotion: "the information's always been there, it's just not well advertised" (Interview 5). Pro-actively checking in with nurses and assessing their need for support was expressed as important, with
	nurse wellbeing check-ins with early support	one nurse explaining: "if I was a senior nurse I think I would want to be much more proactive in making that [new] person feel that they can come to me and that it's ok (Interview 2).
		Similarly, another felt this could be extended to specific mental check-ups and mental health leave options: "in corporate they have check-ups where you get your blood pressure taken and weighed and we almost need a mental health check-up in nursing" (Interview 6).  The responsibility to support managers in this process of assessment was highlighted by one participant:
		"if there's something impacting someone's work, I'm not backwards about guiding my boss in saying this is something they should follow up" (Interview 8).  Similarly, nurses speaking up for their own wellbeing was identified as essential, yet challenging:
		"it's a blurry line between delegating and asking for help [] I then sort of felt like I started to be seen as a bit like I was struggling" (Interview 2).  Although seeking help was encouraged by others, one RN suggested to:
Theme 6: COVID-19 pandemic's influence on nurse wellbeing	Sub-theme 6.1: New awareness and ways to wellbeing	"Reach out, yep, sideways, upways, downways reach out, you're not alone" (Interview 1).  In organisations, COVID-19 was thought to have both positive and negative impacts on the resourcing of wellbeing support systems:  "they [the organisation] recognised early on that if you're going to have 200 staff off work you're going to have
on nuise wendering	wendering	to check in on them every day, and that didn't exist before, the wellbeing team was just one person" (Interview 5).  For one nurse, COVID-19 enabled them to be more autonomous in practice:
		"everyone is under so much pressure and the environment has shifted so much that there has been quite a bit of a hands off approach with us" (Interview 7).
		(continued on next page)

Subthemes

## Participant quotes

These actions would be supported by the organisation:

...more of a 'do whatever you need to do to manage this and we've got your backs'" (Interview 7).

This was seen as valuable to one nurse who perceived micromanagement to be a common problem:

"...which is much better because there was a great deal of micromanaging" (Interview 7).

The bond between nurses was perceived as strengthening with the shared clinical COVID-19 experiences: "I think people got closer as a result of that, you know I think there was a real bond with people working there having gone through this experience that none of them had ever gone through before" (Interview 9). For more recent graduates, COVID-19 added stress:

"I'm still on this new ward I don't feel 100% comfortable with what I'm doing so that adds an extra layer of stress (Interview 9).

Alongside this stress, COVID-19 impacted on usual ways to wellbeing outside work:

"I used to do three things - go to the gym, play golf, and walk the dog - and during this lock down I think that's has been a huge barrier because the first two of those things I can't do" (Interview 9).

Alternative strategies were considered but found inadequate:

"in terms of spirituality, you can't attend church, you know you can again watch things online, but not everything is meaningful online (Interview 9).

However, for one nurse, who self-described as an introvert, COVID-19 simplified some aspects of their life in a positive wav:

"I've kind-of appreciated almost the excuse to not have to do anything else, and just focus on the job and essentially just the other things I like to do in the rest of my time" (Interview 2).

Extra support resources and structures were visible for a number of nurses:

...given COVID-19, yeah cos everyone's under so much extra pressure and I feel like our educators have really made a point of prioritising us which has been wonderful" (Interview 2).

Others found support systems missing: ...yeah it was on the roller... different doctors looking after those patients and not knowing who to call, yeah, didn't feel there was much support there ..." (Interview 8).

There was an undercurrent of worry for both colleagues:

....I have a massive level of worry about the staff getting sick either in the community or being exposed to something here, and that weighs heavily on me in that regard..." (Interview 4), and new graduates:

"the normal grad year is already hard, then you add all that extra stress on top of it" (Interview 5).

The impact of COVID-19 on skill mix was highlighted as a significant concern:

"the experience level really changed, so we'd find shifts when the person in charge was the most experienced nurse on the ward, then half the shift was grads or people from the pool [casual staff]" (Interview 9). Feeling valued, but also undervalued, overlooked, and dismissed, were visible both specifically in relation to COVID-19, but also generally. For one nurse, the appreciation from communities was felt to be a positive

there has been some stuff, you know the really nice stuff that the communities are doing like a couple of nice" lunches that were provided by the people in the community" (Interview 4).

However, other nurses reported feeling their significant contribution was not acknowledged:

"we're not really singled out, even though we're ultimately the ones right there in front of corona [COVID-19], touching it, looking after it" (Interview 6).

Another nurse felt that whilst there was positive messaging of gratitude:

"the executive team giving positive messaging and certainly the management team when you'd start your shift saying thank you all for what you are doing" (Interview 9).

Financially there was felt to be insufficient incentive comparable to other workplaces:

"curiously, and I'm new to this profession, I couldn't help but wonder if this was a male dominated industry if we'd be getting danger money for working on a hot ward, so appreciated in terms of financial reward - no"

However, those rewards were not felt sufficient to demonstrate appreciation:

"they did provide meals [...] I thought it was a nice thing to do, free coffee was good, but up the hourly rate I think would have been really appreciative" (Interview 9).

Respect and recognition was highlighted as lacking, one nurse felt organisations could improve communication with the frontline workers:

"I think better communication and respect for those that work face to face with patients" (Interview 3).

Recognition for those nurses that inject additional effort was identified as important:

"I [...] recognise if someone's gone above and beyond that week, and just give that positive feedback as well (Interview 4).

One nurse felt this recognition should extend to those who face adversity:

"there should be recognition of those people that are not just the high-fliers, but those that face adversity"

Opportunities for additional support and a need to adapt systems of support were felt to be essential, specifically in relation to COVID-19 but also more generally. One nurse perceived the need for a shared model of ownership for wellbeing between both the organisation and the individual:

"I did see some flyers on some lockers with some additional resources and some emails from the union... it was more the culture was 'are you looking after your wellbeing' so there was no ownership taken from the organisation (Interview 1).

This was viewed as undermining to wellbeing programs:

"once again the finger is pointed back on the individual and that's such a hindrance [...] it makes you feel like the reason I feel this way is your own fault. And it's not..." (Interview 1).

Finding time, space, and a place for debriefing and sharing experiences was highlighted as a real challenge: "with all the increasing COVID-19 protocols at work it's actually impossible for everyone to find a room on their own to actually attend those supervision sessions" (Interview 2).

For one nurse, the shift from face-to-face meetings to online meetings resulted in lost networking and debriefing opportunities that usually occurred before the commencement of the meeting, whilst sitting together in a room next to colleagues:

(continued on next page)

Themes

Sub-theme 6.2: Stretched resources in

a shifting landscape

Sub-theme 6.3: Valuing the role of nurses on the frontline

Sub-theme 6.4. Altered

support systems and

spaces

Themes

Subthemes

#### Participant quotes

"you know you don't like everyone, there are some you don't have that relationship with and you don't want to bare your sole in front of 40 people [in the online meeting]" (Interview 4).

However, new ways of sharing experiences were opened by COVID-19:

"I catch up with my friends that are people from the NUM group that I'm friends with, we go and have a socially distanced coffee, just to have a chat" (Interview 4).

For another nurse, the fear online conversations would not be confidential when joining a meeting from the workplace was prohibitive:

"you can't join it while you're at work because there's no private place where you can join the call without it being overheard by other staff and patients..." (Interview 9).

The lack of space for breaks was highlighted as a problem by one nurse:

"[the tearoom is] not a very big space, and now with corona [COVID-19] you can only have I think 3 people in there at once" (Interview 6).

This lack of physical space impacted the timing of breaks to ensure the number of people in the room is not exceeded:

"you know you can be like desperate for a break and just want to sit down and relax and then you walk into the tearoom and uggh, ok, so I can't come in here" (Interview 6).

The revised spaces were not necessarily purpose built to meet the needs of nurses:

"so they've opened up another room but that's a daylight is issue, there's a window but it's not a very well-lit window so you don't get much of a sense of daylight, the other room that they've made for us is about the same size and has no window" (Interview 6).

For some nurses COVID-19 impacted on their ability to take annual leave:

"I can start to see the light at the end of that tunnel [and] hope that I can take some annual leave myself, even though I can't go anywhere, just so I cannot be here for a week or two" (Interview 4).

Specific local support strategies implemented during COVID-19 were highlighted by one nurse:

"...I also constantly speak at huddles, you know if you're feeling unwell go and get tested obviously, talk about looking after your mental health" (Interview 4).

External supports such as a COVID-19 staff wellbeing support telephone number:

"I have referred a couple of staff members to that line, strong encouragement for them to actually call them, they've come back and said thank you so much that's been very good" (Interview 4),

and healthcare worker online support services:
"we can get this app for free for health care workers" (Interview 7).

One nurse felt COVID-19 has increased the focus on mental wellbeing:

"I think COVID-19 changed everything really, everyone's trying to make sure people try to look after themselves mentally as well as physically and staying in the right frame of mind" (Interview 8).

The consequences of this focus are increased visibility of support services:

"so they're always harping on about the employee assistance program and the nursing and midwifery program [...] I think most of it was available before COVID-19 but they didn't make it as public" (Interview 8).

Whilst there may have been increased visibility of the support services, one nurse felt the phone or video call, rather than physically being together, had a negative impact:

"all of this stuff is only available via video call or phone call, you couldn't actually go and sit with someone and talk to them, ironically, so the availability was [better] but the proximity got worse" (Interview 9).

The value of engaging with nurses and sharing experiences was reinforced as valuable:

"I felt I got more value sitting in the tearoom talking to others going through the same things than I would have attending a zoom call where somebody talks to you remotely" (Interview 9).

The physical distancing of the support was seen to be a significant limitation:

"as human beings when we want comfort you want someone there, not on the other end of the phone" (Interview 9).

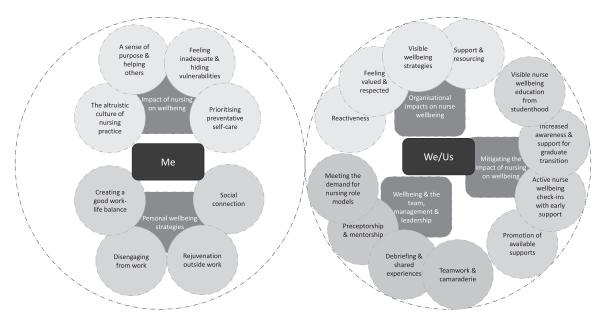


Fig. 1. Nurse wellbeing: 'Me', 'We', and 'Us'.

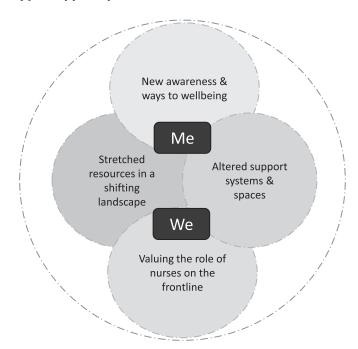


Fig. 2. Nurse wellbeing and the COVID-19 pandemic.

wellbeing initiatives, they highlighted a strong potential to increase the education and promotion of supports to mitigate the impact of nursing on wellbeing, which is explored in Theme 5.

Theme 5: Mitigating the impact of nursing on wellbeing

The more recent graduates did recall some specific nurse well-being education during their entry to practice and transition programs; these were highlighted as important areas to strengthen. For those who were further into their nursing career, the importance of ongoing active check-ins and promotion of available support was evident. The four sub-themes included: 'Visible nurse wellbeing education from studenthood', 'Increased awareness and support for graduate transition', 'Promotion of available supports', and 'Active nurse wellbeing check-ins with early support'. Mitigating the impact of nursing on wellbeing has never been so evident as during COVID-19. The influence of the COVID-19 pandemic on nurse wellbeing is explored in further detail in Theme 6.

Theme 6: COVID-19 pandemic's influence on nurse wellbeing

Nursing on the frontline during the COVID-19 pandemic had elucidated novel challenges and ways to wellbeing during times where resources were stretched and usual support systems impacted. Four sub-themes underpinned the COVID-19 pandemic's influence on nurse wellbeing and these are illustrated in Fig 2.

The four subthemes included: 'New awareness and ways to wellbeing', 'Stretched resources in a shifting landscape', 'Valuing the role of nurses on the frontline', and 'Altered support systems and spaces. Nursing during COVID-19 will have long-standing impacts across all facets of the healthcare system. These nurses have expressed a range of opportunities to strengthen nurse wellbeing both now, and in future pandemics. These insights will now be discussed in the context of the broader literature.

# 5. Discussion

A recent cross-sectional survey of Australian hospital clinical staff identified both nurses' and midwives' self-reported higher levels of anxiety, depression, and stress during the COVID-19 pandemic than the general Australian adult norms (Holton et al., 2020). Our research offers some new insights into potential strategies to support wellbeing both during and external to times of

a pandemic, stemming from studenthood through to roles in leadership, building on the recommendations from palliative care (Mills et al., 2020), critical care (Wong, Olusanya, Parulekar, & Highfield, 2020), and broader settings (World Health Organization, 2020).

For the Victorian nurses in our study, moving into the nursing profession resulted in both positive and negative impacts. Whilst there was a keen sense of purpose created by entering the profession, the altruistic culture of nursing practice had a range of effects that led to reduced self-care and hiding vulnerabilities. Personal wellbeing strategies to mitigate these effects were evident in the nurses' efforts to disengage and rejuvenated, creating a sense of work-life balance. Policy frameworks advocate for healthy diets, physical activity, and the promotion of mental health (World Health Organisation, 2013); however, for these nurses, there was a sense that as individuals there was more work to be done in terms of diet, exercise, and rejuvenation. Self-Determination Theory suggests supporting employees to satisfy these basic physiological needs facilitates autonomous motivation (Deci, Olafsen, & Ryan, 2017). Personal relationships and their associated social connections outside work were key to bringing about this balance.

The role of the team, management, and leadership were deemed essential to maintaining a sense of wellbeing and there was a demand for strong role models to demonstrate and reinforce the value of maintaining health and wellbeing. The importance of workplace relationships that were team-oriented and built a sense of camaraderie were underpinned by the value of a shared experience and having an opportunity to debrief and unpack experiences together. Colleagues are a crucial source of help and information and have been found to decrease a peer's role ambiguity, conflict and overload, and enhance organisational climate (Chiaburu & Harrison, 2008). The key perceived role of the nurse manager in enabling these nurses wellbeing supports previous research findings where ICU nurse unit managers' relational leadership skills and ability to empower nurses were important strengths (Adams, Chamberlain, & Giles, 2019).

A sense of feeling valued and respected was reinforced by organisations investing in strong supports and resourcing with effective planning for the evolving workforce and workplace. Workforce wellbeing preparedness for mitigating the impact of nursing on wellbeing was expressed as key from studenthood, through to transition and beyond. This preparedness included visibility and promotion of work wellbeing supports and ongoing active assessment of individuals and teams. COVID-19 was seen to have promoted new ways of supporting and promoting ways to wellbeing; however, these were considered inadequate and the stretched resources were evident, impacting on these nurses having a sense of being valued. The dynamic and evolving nature of work, work environments, and work roles has become increasingly apparent during the pandemic. For nurses, pandemic preparedness is fundamental to protecting and promoting health (Al Thobaity & Alshammari, 2020). There are new opportunities to support future pandemic preparedness by addressing both what is going wrong and what is going right with the emerging research, in psychological flexibility and capital, authentic leadership, and workplace wellbeing assessments and programs (e.g., see Holmberg, Kemani, Holmström, Öst, & Wicksell, 2020; Mills et al., 2020).

For the nurses in our study, there was an openness to conceiving new ways of working and supporting each other and themselves in ways to wellbeing when resources were overextended, and organisations were working to establish or maintain a safe working environment during the pandemic. Identifying, designing, and implementing strategies to retain and enable this workforce are paramount. A possible starting point in organisations is to consider their workplace model of wellbeing, or if they do not

have one, what model of wellbeing might best fit, e.g., Five Ways to Wellbeing (Aked, Marks, Cordon, & Thompson, 2008), and the assessment of wellbeing (e.g., Jarden & Jarden, 2016). Wellbeing is a term increasingly seen in both the media and workplaces. Implementing a model of wellbeing and assessing nurse wellbeing are two strategies that may highlight to nurses that organisational values are person-focused, that flourishing individuals and teams are important to the organisation, and in effect, demonstrate alignment between the values organisations state they prioritise and their practice. There are a range of organisational benefits from a flourishing workplace such as productivity, less absenteeism, greater innovation, and improved organisational culture (for a detailed description, see Hart, Cotton, & Scollay, 2015). As a first step, this study highlights the potential value of engaging locally by asking the nurses, 'what creates a great day at our workplace for you?'.

# 6. Limitations

Whilst we have sought to increase trustworthiness of the research by employing reflexivity and used a process of peer review and debriefing, given the sample includes just nine Victorian nurses, generalisability of our research findings is limited. Notwithstanding this limitation, work undertaken in this study provides a foundation for future work focusing on strengthening the conceptualising, measuring and building the work wellbeing of nurses.

# 7. Conclusion

Nurses expressed both positive and negative experiences associated with nursing during COVID-19. For some, the experience was a time of personal insight and development of new ways to wellbeing, but for others a stressor. There were new insights into physically distanced social connection and support, but also an undercurrent of need for physical connection. These new conceptions offer unique insights into enablers and barriers of wellbeing for these nurses with significant opportunities for enhanced future pandemic preparedness. Future work in addressing wellbeing in these preparations is a priority for both workers' health policy and future health workforce retention.

# **Authorship contribution statement**

The first author (R.J.) has contributed to this research inception, management, data collection, analysis, and drafting and editing the manuscript in its entirety. Author N.B. has contributed to data collection, analysis and revising, editing and approving manuscript. Author A.J. has contributed to project conception, analysis and revising, editing and approving manuscript. Authors M.G., T.W., and G.T. have contributed to project conception, revising, editing, and approving the manuscript. Authors M.R., C.C., and K.M. have contributed to participant recruitment, revising, editing and approving the manuscript. All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE\*): (i) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; (ii) drafting the article or revising it critically for important intellectual content.

# **Funding**

This review was funded by the Rosemary Bryant Foundation, South Australia. The Foundation had no involvement in study design; in the collection, analysis, and interpretation of data; in the writing of the report; nor in the decision to submit the article for publication.

# **Ethical statement**

This research was approved by the Melbourne Health Human Research Ethics Committee (HREC/56492/MH-2019; 29 August 2019).

## Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## **Conflicts of interest**

No conflict of interest has been declared by the authors.

# Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.colegn.2021.06.002.

# References

- Adams, A., Chamberlain, D. J., & Giles, T. (2019). The perceived and experienced role of the nurse unit manager in supporting the wellbeing of intensive care unit nurses: An integrative literature review. *Australian Critical Care*, 32(4), 319–329. https://doi.org/10.1016/j.aucc.2018.06.003.
- Aked, J., Marks, N., Cordon, C., & Thompson, S. (2008). Five ways to well-being: The evidence. London: New Economics Foundation.
- Al Thobaity, A., & Alshammari, F (2020). Nurses on the frontline against the COVID-19 pandemic: An integrative review. *Dubai Medical Journal*, *3*(3), 87–92. https://doi.org/10.1159/000509361.
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234. https://doi.org/10.1177/1468794112468475.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597. https://doi.org/10.1080/ 2159676X.2019.1628806.
- Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health, 13*(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846.
- Brunetto, Y., Xerri, M., Shriberg, A., Farr-Wharton, R., Shacklock, K., Newman, S., & Dienger, J. (2013). The impact of workplace relationships on engagement, well-being, commitment and turnover for nurses in Australia and the USA. *Journal of Advanced Nursing*, 69(12), 2786–2799. https://doi.org/10.1111/jan.12165.
- Burns, H., Hamer, B., & Bissell, A. (2020). COVID-19: Implications for the Australian healthcare workforce. Available from PwC Australia: https://www.pwc.com.au/important-problems/business-economic-recovery-coronavirus-covid-19/australian-healthcare-workforce.html Accessed 15 February 2021.
- Chiaburu, D., & Harrison, D. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, 93(5), 1082–1103. https://doi.org/10.1037/0021-9010.93.5.1082.
- Deci, E., Olafsen, A., & Ryan, R. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108.
- Department of Health and Human Services Victoria (2021). Coronavirus (COVID-19) daily update. Available from: https://www.dhhs.vic.gov.au/coronavirus-covid-19-daily-update (accessed date: 03 February 2021)
- Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining well-being. *International Journal of Wellbeing*, 2(3), 222–235. https://doi.org/10.5502/iiw.y2i3.
- Dunning, A., Louch, G., Grange, A., Spilsbury, K., & Johnson, J. (2021). Exploring nurses' experiences of value congruence and the perceived relationship with wellbeing and patient care and safety: a qualitative study. *Journal of Research in Nursing*, 26(1/2), 135–146. https://doi.org/10.1177/1744987120976172.
- Gordon, H., Demerouti, E., Bipp, T., & Le Blanc, P. M. (2015). The Job Demands and Resources Decision Making (JD-R-DM) model. European Journal of Work and Organizational Psychology, 24(1), 44–58. https://doi.org/10.1080/1359432X.2013. 842901.
- Hamling, K., Jarden, R., Jarden, A., & Synard, J. (2020). Epistemological fruit salad: Broadening methodology in positive psychology research to develop contextualised interventions and understandings of well-being. *The Journal of Positive Psychology*, 1–5. https://doi.org/10.1080/17439760.2020.1789708.
- Hart, P., Cotton, P., & Scollay, C. (2015). Flourishing at work: Improving wellbeing and engagement. In Flourishing in life, work and careers: Individual wellbeing and career experiences (pp. 281–312). Northampton, MA, US: Edward Elgar Publishing.

- Holmberg, J., Kemani, M., Holmström, L., Öst, L., & Wicksell, R. (2020). Psychological flexibility and its relationship to distress and work engagement among intensive care medical staff. Frontiers in Psychology, 11(3010). https://doi.org/10.3389/ fpsvg.2020.603986.
- Holton, S., Wynter, K., Trueman, M., Bruce, S., Sweeney, S., Crowe, S., ..., & Hitch, D. (2020). Psychological well-being of Australian hospital clinical staff during the COVID-19 pandemic. *Australian Health Review*, 45(3), 297–305. https://doi.org/10.1071/AH20203.
- Hone, L., Jarden, A., Duncan, S., & Schofield, G. (2015). Flourishing in New Zealand workers: Associations with lifestyle behaviors, physical health, psychosocial, and work-related indicators. *Journal of Occupational and Environmental Medicine*, 57(9), 973–983. https://doi.org/10.1097/jom.0000000000000000008.
- Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., L., Z, ..., & He, H. (2020). Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. EClinicalMedicine. https://doi.org/10.1016/j.eclinm.2020.100424.
- Huppert, F. (2009). Psychological well-being: Evidence regarding its causes and consequences. Applied Psychology: Health and Well-Being, 1(2), 137–164.
   International Council of Nurses. (2020). International Council of Nurses Press
- International Council of Nurses. (2020). International Council of Nurses Press Information. Available from: https://www.icn.ch/news/icn-confirms-1500nurses-have-died-covid-19-44-countries-and-estimates-healthcare-worker-covid (accessed date: 23 November 2020)
- Jarden, A., & Jarden, R. (2016). Intensive care nurse conceptions of wellbeing: A prototype analysis. In L. Oades, M. Steger, A. Della-Fave, & J. Passmore (Eds.), The Wiley Blackwell Handbook of the psychology of positivity and strengths-based approaches at work (pp. 415–437). Wiley. https://doi.org/10.1002/9781118977620. ch22.
- Jarden, R., Sandham, M., Siegert, R., & Koziol-McLain, J. (2018). Intensive care nurse conceptions of wellbeing: A prototype analysis. *Nursing in Critical Care*, 23(6), 324–331. https://doi.org/10.1111/nicc.12379.
- Jarden, R. J., Jarden, A., Weiland, T. J., Taylor, G., Brockenshire, N., & Gerdtz, M. (2021). Registered Nurses' experiences of psychological well-being and ill-being in their first year of practice: A qualitative meta-synthesis. Journal of Advanced Nursing, 77(3), 1172-1187. https://doi.org/10.1111/jan.14667.
- Maben, J., & Bridges, J. (2020). Covid-19: Supporting nurses' psychological and mental health. *Journal of Clinical Nursing*, 29, 2742–2750. https://doi.org/10.1111/jocn. 15307
- Mills, J., Ramachenderan, J., Chapman, M., Greenland, R., & Agar, M. (2020). Prioritising workforce wellbeing and resilience: What COVID-19 is reminding us about self-care and staff support. *Palliative Medicine*, 34(9), 1137–1139. https://doi.org/10.1177/0269216320947966.

- Morse, J. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212–1222. https://doi.org/10.1177/ 1049732315588501.
- Ray-Sannerud, B., Leyshon, S., & Vallevik, V. (2015). Introducing routine measurement of healthcare worker's well-being as a leading indicator for proactive safety management systems based on resilience engineering. *Procedia Manufacturing*, 3, 319–326. https://doi.org/10.1016/j.promfg.2015.07.163.
- Rose, J., & Glass, N. (2009). An investigation of emotional wellbeing and its relationship to contemporary nursing practice. *Collegian*, *16*(4), 185–192. https://doi.org/10.1016/j.colegn.2009.08.001.
- Rose, J., & Glass, N. (2009). An Australian investigation of emotional work, emotional well-being and professional practice: An emancipatory inquiry. *Journal of Clinical Nursing*, (9-10), 1405.
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. Research in Nursing and Health, 33(1), 77-84. https://doi.org/10.1002/nur.20362.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care, 19(6), 349–357.
- Waters, L., Algoe, S., Dutton, J., Emmons, R., Fredrickson, B., Heaphy, E., ..., & Steger, M. (2021). Positive psychology in a pandemic: Buffering, bolstering, and building mental health. *The Journal of Positive Psychology*, 1–21. https://doi.org/10.1080/17439760.2021.1871945.
- Wong, A., Olusanya, O., Parulekar, P., & Highfield, J. (2020). Staff wellbeing in times of COVID-19. Journal of the Intensive Care Society, 0(0), 1–7. https://doi.org/10. 1177/1751143720968066.
- World Health Organisation. (2013). WHO Global Plan of Action on Workers' Health (2008-2017): Baseline for Implementation. Available from: http://www.who.int/occupational\_health/publications/global\_plan/en/ (accessed date: 11 September 2016)
- World Health Organisation. (2020). State of the world's nursing 2020: Investing in education, jobs and leadership. World Health Organization, Geneva Available from: https://www.who.int/publications/i/item/nursing-report-2020.
- World Health Organization. (2013). *Mental health action plan 2013-2020*. Geneva: World Health Organization.
- World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020. Retrieved from Geneva:
- Yu, F., Raphael, D., Mackay, L., Smith, M., & King, A. (2019). Personal and work-related factors associated with nurse resilience: A systematic review. *International Journal of Nursing Studies*, 93, 129–140. https://doi.org/10.1016/j.ijnurstu. 2019.02.014.