Conceptual model for intensive care nurse work wellbeing: A qualitative secondary analysis**Manuscript type:** Original research paper**Keywords:** conceptual model; ICU nurses; knowledge translation; qualitative secondary analysis; wellbeing.**Authors:**

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ABSTRACT

Aims and objectives: Synthesise intensive care nurse perceptions of work wellbeing characteristics and strengtheners to identify opportunities for job crafting and redesign.

Background: There had been little focus on the wellbeing of intensive care nurses until a recent programme of research found work wellbeing to be best described as a collection of elements; a multifaceted construct. Strengtheners of intensive care nurses' work wellbeing were found to extend across individual, relational, and organisational resources. Actions such as simplifying their lives, giving and receiving team support, and accessing employee assistance programmes were just a few of the intensive care nurses' identified strengtheners.

Design: A qualitative secondary analysis.

Methods: Intensive care nurse work wellbeing characteristics and strengtheners were explored using applied thematic analysis and pre-design, open card-sort technique.

Findings: Five facets were identified in the analysis: 1) healthy, 2) authentic, 3) meaningful, 4) connected, and 5) innovative. These five facets were described from a theoretical perspective and illustrated as a conceptual model for intensive care nurse job crafting and redesign.

Conclusions: The proposed conceptual model contributes new knowledge to now be explored in meaningful discussions about intensive care nurse work wellbeing, and empirically investigated in terms of construct validity and theory development. Further, the model provides

practical opportunities to explore individual and collaborative ways to enhance intensive care nurse work wellbeing across a range of levels.

Relevance to clinical practice: Opportunities for job crafting and redesign were identified and presented in a conceptual model of intensive care nurse work wellbeing. This model provides individual nurses, intensive care teams, healthcare organisations, and workers' wellbeing programme and policy developers practical opportunities to explore individual and collaborative ways to enhance intensive care nurse work wellbeing.

INTRODUCTION

Intensive care nurses are exposed to various psychological risks with the potential of psychological harm, such as burnout ^{1,2}, compassion fatigue ³, moral distress ⁴, and bullying ⁵. These harms have been the focus of a large body of international research exploring illbeing or the 'negative side' of wellbeing; ⁶. More recently, global leaders have called for a shift in our gaze from nurse illbeing (as opposed to illness which has a strong focus on physical health) to nurse health and wellbeing ⁷. The emerging field of positive psychology suggests the value in balancing the focus on illbeing with a focus on wellbeing, moving towards approaches related to strengths ⁸, thriving ⁹, flourishing ^{10, 11}, resilience ¹², and optimal functioning ¹³.

BACKGROUND

Wellbeing

The varied theoretical underpinnings of wellbeing have grown from a wide range of perspectives, for example, Maslow's Hierarchy of Needs ¹⁴, Flow Theory ¹⁵, Self-Efficacy Theory (an example of a Social Learning Theory) ^{16, 17}, Bronfenbrenner's Ecological Systems Theory ^{18, 19}, Control Theory ²⁰, Bowlby's Attachment Theory ^{21, 22}, and Self-Determination Theory ²³. Along with these various theories, there are a broad range of definitions of wellbeing ²⁴. For example, "the balance point between an individual's resource pool and the challenges faced" ^{25, p. 230}, "the combination of feeling good and functioning effectively" ^{26, p. 139}, and "subjective bodily and emotional states; how an individual feels; a state of mind distinct from functioning that pertains to behaviours and activities" ^{27, para. 4}.

Models of wellbeing include that of the World Health Organisation WHO; ²⁸, with six proposed categories of concepts for positive psychological health; Ryff ²⁹, with six dimensions of psychological wellbeing (or mental wellbeing; as opposed to wellbeing in more global terms); Ryan and Deci ³⁰ who describe wellbeing as a complex construct related to both optimal experience and optimal functioning; Seligman who suggested wellbeing equates to human flourishing, based on five elements; and Huppert and So ³¹, for whom flourishing is a combination of feeling good and functioning effectively.

Work wellbeing

More than 60 percent of New Zealanders are employed ³², reflecting similar global rates ³³. The key aspects of working conditions proposed to affect employees can broadly be categorised into job design and physical workplace design ³⁴. Job design is a potential enabler of wellbeing whether related to work demands (physical, cognitive and emotional), job role (clarity and alignment), work hours (shift work, flexibility and overtime), job control (flexibility in meeting the demands of the job), or social support (emotional and informational). The relationship of the job's characteristics with employee motivation, engagement, satisfaction, and performance has previously been described both in theory and various models, for example the Job Characteristics Theory ³⁵, Person-Organisation Fit Theory ³⁶, and the Job Demands-Resources Model ³⁷. Workplace design not only relates to optimal operation, but safety and comfort. Job crafting and redesign are an approach to enhancing workplaces by changing the task or relational boundaries of work to improve working conditions ^{38, 39} with a focus on modifying environmental (as opposed to personal) sources of wellbeing in a pragmatic approach to improve wellbeing ⁴⁰.

RESEARCH OBJECTIVE

In a research programme of mixed methods, two studies sought to conceptualise intensive care nurse work wellbeing and its strengtheners. Firstly, a prototype analysis identified ICU nurses' conceptions of work wellbeing (*Blinded for peer review*). Secondly, an exploratory descriptive study identified strengtheners of ICU nurse work wellbeing (*Blinded for peer review*). The objective of this qualitative secondary analysis was to re-explore these ICU nurse work wellbeing conceptions and strengtheners from a job crafting and redesign perspective^{38, 39}, drawing from their synergistic effect to develop a conceptual model and inform future work wellbeing initiatives, programmes and interventions.

DESIGN AND METHODS

Ethical considerations

This study was a qualitative secondary analysis using data from two parent studies (*Blinded for peer review; Blinded for peer review*). These parent studies were conducted in accordance with the Auckland University of Technology Ethics Committee approval (17/180), reported previously (*Blinded for peer review; Blinded for peer review*). The secondary analysis of qualitative data is recommended as a method of contributing to ethical research by doing justice to participants' contributions⁴¹, and as an effective means of analysis to inform policy decision making⁴².

Sample and setting

The sample for the parent studies were New Zealand ICU nurses. For the prototype analysis, 82 nurses were randomised into three sub-studies (sub-study 1, n = 30; sub-study 2, n = 30; sub-study 3, n = 22) which identified, rated, then tested the characteristics of their work wellbeing. For the strengtheners of work wellbeing, 65 of these nurses responded to online free-text questions. This reflected a largely representative sample of the New Zealand ICU nurse population.

Data analysis

For this secondary analysis, the ICU nurse work wellbeing characteristics and their strengtheners from the parent studies were re-explored using an applied thematic analysis⁴³⁻⁴⁵ and pre-design, open card-sort technique^{46,47}. One researcher (*Blinded for peer review*) categorised and coded the characteristics and strengtheners independently, then three researchers (*Blinded for peer review*) reviewed and resolved any uncertainty in relation to the categorising into themes, labelled as 'facets'. The term 'facets' was not selected lightly, with its definition stemming from many faces or sides, and being a part of something bigger such as a gem⁴⁸. The framework of 'me', 'we', and 'us'⁴⁹ was employed as a conceptual scheme.

FINDINGS

Moving beyond explicit meanings within the data, the broader patterns and significant implications for enhancing ICU nurse work wellbeing highlight five facets of ICU nurse work wellbeing as being: *healthy, authentic, meaningful, connected and innovative*. The facets were named using

adjectives to support them becoming ICU mission statements, such as, 'our ICU is *healthy, authentic, meaningful, connected and innovative*'. These facets scaffold the integration of the empirical and ICU nurse perspectives from the findings of this programme of research. The ICU nurse work wellbeing characteristics (*blinded for peer review*) and their strengtheners (*blinded for peer review*) were re-analysed and sorted according to the five facets, then reported alphabetically (see Table 1).

Insert Table 1 here

Within each of the five facets, all three levels of strengtheners (i.e., 'me', 'we' & 'us' ⁴⁹ were evident, reflecting the opportunity for innovation from individual's building and drawing on personal resources, strengths and power, through to those of the teams and organisations. These five facets are positioned in terms of the theoretical foundations of wellbeing such as Maslow's Hierarchy of Needs ¹⁴, Person-Environment Fit Theory ⁵⁰, Self-Determination Theory ²³ and Flow Theory ⁵¹. For example, for Self-Determination Theory ²³, employees with satisfied basic needs demonstrate autonomous motivation, and for Flow Theory ⁵¹, being in a state of flow results in individuals being happier when engaged in an activity and seeking it out. These five facets are now discussed in further detail.

Healthy

Facet one, *healthy* broadly encompasses being physically and psychologically energised and experiencing balance. This facet's theoretical underpinnings include meeting the basic needs highlighted in Maslow's Theory of Motivation: physiological safety, love, esteem, and self-actualisation ¹⁴. When an individual's needs and values are satisfied, predictors of life satisfaction move from safety

needs, to satisfaction with love and esteem, with some cross-cultural variation in values ⁵². In addition, Self-Determination Theory suggests supporting employees to satisfy these basic physiological needs facilitates autonomous motivation ⁵³.

The ICU nurses' proposed work wellbeing characteristics for the facet of *healthy* ranged from physical and mental health, to rostering and resilience. The nurses' identified strengtheners included access to nutrition and hydration; an environment well suited for working requirements; appropriate attire; financial security; emotional, psychological, physical safety; accessible support systems and personal relationships such as friendships, partners and family. Integrating the ICU nurses' conceptions of work wellbeing characteristics and strengtheners with this theme suggests for ICU nurses, *healthy*, could include workplaces enhancing support for active healthy lifestyles, accessible nutritious and healthy food options, easily adjustable furniture to fit sizes, needs, and preferences and incorporation of nature; whether this is bringing nature in or heading outside. The characteristics and strengtheners underpinning the *healthy* facet are presented in Table 1.

The work wellbeing job crafting and design innovations related to this facet include access to nutrition and hydration; an environment well suited for working requirements; appropriate attire; financial security; emotional, psychological, physical safety; accessible support systems; personal relationships such as friendships, partners and family; workplace relationships such as friendship and mentoring; feeling part of a group; engagement in activities that aligned with their strengths and contribute to a feeling of fulfilment.

Authentic

Facet two, *authentic* broadly encompasses being in the moment, genuine, real, and true to oneself. The ICU nurses' proposed work wellbeing characteristics for the facet of *authentic* ranged from experiencing energy and humour to workplace culture. Examples of the nurses' identified strengtheners included mindfulness and meditation, communication and experiencing respect.

The *authentic* facet's theoretical underpinnings include Authentic Leadership Theory⁵⁴, Flow Theory¹⁵, Self-Determination Theory⁵³, and Person-Environment Fit Theory⁵⁰. Avolio and Gardner⁵⁴ propose authentic leadership influences organisations by supporting people to find meaning in work, building optimism and commitment and transparent trusting relationships. From this state of meaningful work, an individual may become so involved in an activity that they experience a state of flow in which nothing else is noticed. This state of flow results in individuals being happier when engaged in this activity and seeking it out⁵¹. Flow was created with clear goals, intense concentration, a sense of control, perceived balance of skills and challenge, and clear feedback. Flow experiences at work, such as in situations of skill variety and autonomy, positively influence employee wellbeing^{55, 56}. The sense of variety and autonomy may support individuals to feel more comfortable and authentic whilst working, with associated enhanced wellbeing and work outcomes⁵⁷. This authenticity can occur at an individual-level, where there are positive correlations between authenticity and wellbeing⁵⁸, and also at a team-level where an authentic climate mitigates emotional exhaustion⁵⁹. Self-Determination Theory^{23, 53} suggests both autonomy and competence cultivate authenticity. Heppner, Kernis⁶⁰ identified positive correlations between satisfaction of autonomy, competence and relatedness needs and authenticity. Given that acting authentically may at times go against what others see as the best

way forward, according to Peterson and Seligman ⁶¹, authenticity also sits within the character strength of courage.

Integrating the ICU nurses' conceptions of work wellbeing characteristics and strengtheners with this theme suggests that for ICU nurses, *authentic*, could mean 1) workplaces including design features for rest or re-energising in break-out rooms that have both high and low stimulus options for aspects such as lighting, technology and music, 2) opportunities for keeping active at work, and 3) workforce and staffing designed for safe and effective work which might include clear goal setting, freely accessible professional development, support for role variation and opportunities to seek immediate feedback. Leaders and managers might consider authentic strengths-based strategies to support nurses' competence, autonomy, choice and variety. The characteristics and strengtheners underpinning the *authentic* facet are presented in Table 1.

The work wellbeing job crafting and design innovations related to this facet include, for leaders and at a team-level, 1) adopting authentic leadership strategies such as supporting workers choice, variety, autonomy and job challenge, 2) supporting basic needs to be met, 3) giving clear feedback, and 4) listening to and being open to new opportunities proposed by employees who are being authentic to their true self. At an individual level being authentic may include 1) self-advocating for your basic needs, 2) challenging oneself by setting goals, 3) seeking variety, and 4) identifying and having courage to stand by your values to support the development of meaning and authenticity in work.

Meaningful

Facet three, *meaningful* broadly encompasses meaning, purpose and values. The *meaningful* facet is underpinned by Social Information Processing Theory, which suggests coworkers influence job attitudes through cues they give about thoughts and feelings ⁶². Meaning in life is thought to involve one making sense of and integrating experiences to create understanding of ourselves and how we understand and fit within the world around us, and then purpose, or the motivation to actively pursue goals that reflect one's identity ⁶³. Meaningfulness and happiness are positively correlated ⁶⁴ and are both considered core components of a good life and overlap in a number of ways, although at times there are trade-offs between the two ⁶⁵. Meaningfulness is thought to be both a cognitive and an emotional assessment of the purpose and value in one's life ⁶⁴. Many factors contribute similarly to both, such as feeling connected to others and feeling productive, although meaningfulness independently relates to expressing oneself and considering the past, present and future ⁶⁴.

The ICU nurses' proposed work wellbeing characteristics for the facet of *meaningful* ranged from feeling appreciated, being able to care, and having confidence in practice. Examples of the nurses' identified strengtheners included showing appreciation, experiencing teamwork, debriefing, and supportive and encouraging management. Integrating the ICU nurses' conceptions of work wellbeing characteristics and strengtheners with this theme suggests for ICU nurses, *meaningful*, could mean identifying organisational activities to proactively engage, build and share common organisational and specialty purpose, and collaborative approaches to identifying purpose drawing from online forums and team-based activities. Supporting professional development activities through shared identification of professional development needs drawing from strength-based approaches, then support to attend a range of professional development activities using various modalities. Learning and adopting positive

organisational scholarship approaches⁶⁶ to enhance performance during team meetings, handovers, appraisals, debriefing and feedback in which challenges and obstacles are reframed as opportunities and as strength-building experiences that are meaningful. The characteristics and strengtheners underpinning the *meaningful* facet are presented in Table 1.

Perceiving one's work as meaningful, or finding one's 'why', contributes to engagement, organisational commitment and satisfaction⁶⁷. Workers are consistently exposed to the influence of how others appraise their work role, through the cues they convey⁶⁸. Price, McGillis Hall⁶⁹ identified 'making a difference' as a core sub-theme for nurses in making their career choice. As such, the work wellbeing job crafting and design innovations related to this facet include creating environmental spaces and creative opportunities to reinforce meaning, purpose, information sharing and strength-based development.

Connected

Facet four, *connected* broadly encompasses having important connections with others. The *connected* facet's theoretical underpinnings include Attachment Theory⁷⁰, Social Exchange Theory e.g., see⁷¹ and Self-Determination Theory^{23, 53}. Attachment Theory relates to the human tendency to seek and develop relationships with others⁷⁰. Similar attachment dynamics have been identified in organisational relationships as sources of social support and membership⁷². For example, attachment dynamics are related to follower proactivity⁷³ and creative problem solving⁷⁴. Relatedness is a core element of needs satisfaction within Self-Determination Theory, facilitating autonomous motivation, wellbeing and enhanced performance⁵³. Social Exchange Theory for a detailed review see⁷¹ suggests a

series of interdependent social exchanges generate obligations which have the potential to generate high quality relationships in particular circumstances. This theory suggests different workplace exchange relationships benefit multiple stakeholders such as employees who benefit from the exchange of resources, knowledge, and support and thus engage in organisational citizenship-type behaviours ⁷⁵. Furthermore, satisfaction with coworker relationships positively correlates with both job and life satisfaction ⁷⁶.

The ICU nurses' proposed work wellbeing characteristics for the facet of *connected* ranged from professional communication, to relationships, and to teamwork. Examples of the nurses' identified strengtheners included a positive and team-oriented culture, peer support and mentoring, team building exercises and social activities. Integrating the ICU nurses' conceptions of work wellbeing characteristics and strengtheners with this theme suggests for ICU nurses, *connected*, could mean supporting and facilitating online social group connections, accessible team communication strategies. These might include the use of online and social media-based tools, and accessible and varied formal and informal regular and frequent social activities for engagement, networking and collaboration. Identifying creative opportunities to proactively engage colleagues in collaborative problem identification and problem-solving strategies could include the use of online forums, teams and competitions. The characteristics and strengtheners underpinning the *connected* facet are presented in Table 1.

Opportunities to enhance connections include social media for networking, organising, and bridging social capital ⁷⁷. Colleagues are also a key source of help and information, which reduces a

peer's role ambiguity, conflict and overload and enhances organisational climate ⁷⁸. As such, the work wellbeing job crafting and design innovations related to this facet incorporate the three levels of 'me', 'we' and 'us' in the creation of spaces and opportunities for informal collaboration and socialisation during work breaks, personal expression and sharing ideas ('me' & 'we'), and informal zones to enhance connection with personal and organisational values ('me', 'we' & 'us').

Innovative

Facet five, *innovative* broadly encompasses innovation, flexibility, adaptability, creativity, motivation and curiosity. The *innovative* facet's theoretical underpinnings include Self-Determination Theory ^{23, 53}, Strength Theory ⁷⁹ and Sen's ⁸⁰ Capability Approach. Self-Determination Theory relates to motivation, and suggests both performance and wellbeing are affected by motivation for job activities ⁵³. This motivation can be intrinsically or extrinsically controlled. Individuals are more likely to be intrinsically motivated when they have a sense of ownership, choice, autonomy (culture-dependent), have clear feedback and support ⁵³. Strength Theory builds on the Greek philosophers exploration of 'what is the good of a person', examining character and virtue ⁶¹. Sen's Capability Approach considers the balance between freedoms and equality, centralising the importance of equalising human capability. Capability is considered the potential to achieve outcomes, described by Sen ⁸⁰ as "functionings" (p. 53), which have close links to subjective wellbeing ⁸¹. This Capability Approach, as an evaluative framework for wellbeing, has been considered in the development of New Zealand policy. For example, the economic development strategy ⁸² of the New Zealand Government's Treasury, and

also the collaborative and integrated organisational quality improvement strategies for Auckland District Health Boards ⁸³.

The ICU nurses' proposed work wellbeing characteristics for the facet of *innovative* included support and workplace culture. Examples of the nurses' identified strengtheners included work variety and challenge, autonomy, professional development opportunities and safe fair workloads. Integrating the ICU nurses' conceptions of work wellbeing characteristics and strengtheners with this theme suggests for ICU nurses, *innovative*, could mean being proactive, embracing change, and focusing towards the future, the adoption of self-rostering and self-allocation, designing ICU's and systems to facilitate collegial support whether this is enhanced visibility or using technological innovations such as social media and online forums to improve change and communication. The characteristics and strengtheners of the *innovative* facet are presented in Table 1.

Key components of the *innovative* facet include innovation, creativity and curiosity. Creativity is correlated with subjective wellbeing ⁸⁴, and trait and daily curiosity support the development and persistence of wellbeing ^{85, 86}. As such, the work wellbeing job crafting and design innovations related to this facet include the promotion of choice, control and space for curiosity, creativity and innovation, and environmental design for personalisation, support and transparency.

DISCUSSION

The five facets of ICU nurse work wellbeing (healthy, authentic, meaningful, connected, and innovative) identified in this research synthesis provided the foundation for a conceptual model of ICU

nurse work wellbeing (Figure 1). The five facets highlighted work wellbeing might be best described as a collection of elements, as opposed to meeting an 'all-or-none' criteria. Future testing of this model may determine whether this finding is also true for these facets.

Insert Figure 1 here

The ICU nurse work wellbeing model is also illustrated in a variety of formats based on the 'me, we, us' framework in Figure 1. The three different formats (me, we, us) support the future use and testing of the model. For example, building and evaluating new ways of approaching appraisals, preceptoring and mentoring at the individual ('me') level; or team meetings, debriefings and educational activities at the team ('we') level; or at wider organisational, professional body and state level meetings at the 'us' level. Future exploration of this model might include participatory action research with groups of potential users of future interpretations of the conceptual model, to determine data and insights from the potentially synergistic interaction of participants.

Further exploration of the conceptual model may include 1) generating hypotheses regarding how it may be operationalised, 2) exploring measurement, and then 3) testing the magnitude and direction of relationships between facets thereby 4) enabling further theory development. The conceptual model illustrated in Figure 1 provides a basis for ICU nurses and their workplaces to begin, or continue, to explore their potential for the heliotropic opportunities for enhancing their working life, both independently and collaboratively.

This research highlights the opportunity for all nurses to influence the workplace culture, including their reportedly most valued elements of work wellbeing, namely, respecting and feeling respected, valuing and feeling valued, and supporting and feeling supported. These drivers of work wellbeing transcend all levels, from the individual, to the, team, organisation, society and profession. Importantly, individual nurses have a great opportunity shape their workplace, drawing from strengths-based approaches to afford new opportunities in how we think about, and work with others, whether this is in everyday or challenging situations, alone, with peers, managers or leaders.

Strengths and limitations

This secondary analysis has the strength of drawing together two related studies to develop new knowledge. However, there is the potential for existing researcher bias to be amplified through the secondary analysis and integration of findings from the original studies^{87,88}. This was mitigated by: 1) the analysis being conducted by the same research team who collected and analysed the original data, 2) clear methods for the interpretation of data, 3) revisiting of raw data to ensure accuracy in interpretation, and 4) peer review from researchers with ICU nursing, non-ICU nursing, and psychology backgrounds.

Implications and recommendations for practice

The present research has contributed toward shifting the focus from illbeing toward intensive care nurse wellbeing. Intensive care nurse work wellbeing has been delineated, identifying the core facets of work wellbeing needed to inform future research. The ICU nurses' conceptions of work

wellbeing and its strengtheners can now be incorporated in strategic and evidence-informed work wellbeing measures and programmes. One example is the recently proposed the New Zealand Treasury's Wellbeing Budget ⁸⁹ which provides a unique opportunity to use the conceptual model to engage in meaningful conversations with policy developers; asking important questions about each of the proposed facets and how this and future national and international budgets might be an enabler or barrier to ICU nurse work wellbeing. The proposed starting point is a systematic review to identify and appraise the existing measures of work wellbeing such as that described in the protocol of [*blinded for peer review* ⁹⁰]. For ICUs, opportunities for job crafting and redesign were identified and presented in a conceptual model of intensive care nurse work wellbeing. This model provides individual nurses, intensive care teams, healthcare organisations, and workers' wellbeing programme and policy developers practical opportunities to explore individual and collaborative ways to enhance intensive care nurse work wellbeing.

CONCLUSIONS

This research synthesis has illustrated the synergistic effect of a programme of research by drawing together two studies to highlight the five facets of ICU nurse work wellbeing: 1) healthy, 2) authentic, 3) meaningful, 4) connected and 5) innovative. Opportunities for job crafting and redesign were identified and presented in a conceptual model of ICU nurse work wellbeing. This model contributes new knowledge to now be explored and empirically investigated in terms of construct validity and theory development. Further, the model provides individual nurses, ICU teams, healthcare

organisations, and workers' wellbeing programme and policy developers practical opportunities to explore individual and collaborative ways to enhance ICU nurse work wellbeing.

What is already known

- 1) Rather than there being a definition of ICU nurse work wellbeing with specific elements that meet an 'all-or-none' criteria, work wellbeing may be better described as a collection of elements, a rich and multifaceted construct, with some elements more central and important than others.
- 2) Intensive care nurses are cognisant of a wide range of both relational and organisational systems strengtheners.

What this paper adds

- 1) Opportunities for job crafting and redesign were identified and presented in a conceptual model of ICU nurse work wellbeing. This model has five facets: 1) healthy, 2) authentic, 3) meaningful, 4) connected and 5) innovative, and contributes new knowledge to now be explored and empirically investigated in terms of construct validity and theory development.
- 2) The model provides individual nurses, ICU teams, healthcare organisations, and workers' wellbeing programme and policy developers practical opportunities to explore individual and collaborative ways to enhance ICU nurse work wellbeing.

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Figure 1. Conceptual model of five facets of ICU nurse work wellbeing with proposed 'me', 'we' and 'us' variations.

Table 1. Facets of ICU nurse work wellbeing based on characteristics and strengtheners.

Facets	ICU nurse identified work wellbeing characteristics	ICU nurse identified work wellbeing strengtheners
Healthy	Energy Physical health Work-life balance Mental health Rostering Paid fairly Income security Resilience	Work-life balance ^{AP} Exercise ^A Hobbies & personal leisure activity ^A Keep healthy ^A Outside visits ^A Part-time ^{AP} Reduce night-shifts ^{AP} Relationship outside work - support & communication ^A Rest ^A Self-care ^{AP} Journaling ^A Yoga ^A Social activities away from work & work colleagues ^A Stay home when unwell ^A Access nutritional food & drink at work ^A Ask staff what they want & need ^A Breaks - on-time & supported ^A Counselling ^A Courses to promote wellbeing ^P Employee Assistance Programme ^A Leave - appropriate & accessible ^{AP} Multi-Employer Collective Agreement - aligned with ^A Pay - fair ^P No extra or on-call shifts or education on days off or staying late ^{AP} Perks - cheap gym membership & discounts ^A

Facets	ICU nurse identified work wellbeing characteristics	ICU nurse identified work wellbeing strengtheners
		Rostering - self, safe, fair, flexible, good ^{AP} Vaccinations - free & accessible ^A
Authentic	Energy Humour Work-life balance Workplace culture	Mindfulness ^{AP} Breathing exercises ^A Compassion - towards selves and others ^{AP} Meditation & imagery ^A Time out ^A Detachment from situation ^A Communication - open & good ^{AP} No mobile phone use during work ^P Respect ^P Speak up when overwhelmed ^A Leadership - good & respectful & trustworthy & approachable & regular catch-ups & supportive ^{AP} Zero tolerance of bullying ^{AP}
Meaningful	Work safety Caring Appreciated Workload Leadership Job satisfaction Happiness Nurse-patient relationships Confidence in practice	Feeling fulfilled ^P Show appreciation ^{AP} Teamwork ^P Annual appraisals ^A Appreciation ^P Debriefing - formal & informal & work-based & non-work-based ^{AP} Environment - safe & nice & appropriate & comfortable ^P Feedback - regular, encouraging, positive, receptive to ^{AP} Health and safety team - active ^A Management - approachable & supportive & good with integrity & fair & encouraging & resources well managed ^{AP}

Facets	ICU nurse identified work wellbeing characteristics	ICU nurse identified work wellbeing strengtheners
Connected	Teamwork Professional communication Professional relationships	Colleagues - nice & friendly ^P Culture - positive & team & open ^{AP} Friendly & welcoming to others ^A Relationships - positive & encouraging ^P Social activities with colleagues and or social club ^{AP} Mentoring ^{AP} Peer support ^{AP} Psychologist ^{AP} Valuing & recognition of service ^{AP} Supervision - access & during work time ^{AP} Team building exercises ^{AP}
Innovative	Support Workplace culture	Positive attitude ^A Senior staff - approachable & supportive ^A Team communication ^{AP} Work variety & challenge ^P Autonomy ^{AP} Professional development - time & opportunity & supporting ^{AP} Safe staffing ^{AP} Workload - safe & fair & achievable & realistic ^{AP}

Note. This table reports re-analysed data including ICU nurse identified work wellbeing characteristics *(blinded for peer review)* and strengtheners *(blinded for peer review)*; superscript 'A' denotes an actual strengthener, superscript 'P' denotes a potential strengthener.

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