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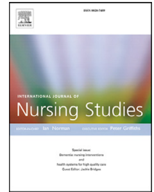

What is nursing work? A meta-narrative review and integrated framework

Jennifer Jackson[a,*], Janet E. ANDERSON[b], Jill MABEN[c]

[a] Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care, King's College London, James Clerk Maxwell Building, 57 Waterloo Road, London, SE1 8WA UK
[b] Professor of Quality of Care for Older People, School of Health Sciences, City, University of London, Northampton Square, London EC1V 0HB UK
[c] School of Health Sciences, Faculty of Health and Medical Sciences, University of Surrey, Duke of Kent Building, Guildford, GU2 7XH UK

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ABSTRACT

Background: There is ample evidence that modern nurses are under strain and that interventions to support the nursing workforce have not recognised the complexity inherent in nursing work. Creating a modern model of nursing work may assist nurses in developing workable solutions to professional problems. A new model may also foster cohesion among broad and diverse nursing roles.
Aim: The aim of this meta-narrative review was to investigate how researchers, using different methods and theoretical approaches, have contributed to the understanding of nursing work.
Methods: A meta-narrative review was done to evaluate the trajectory of nursing work research, from 1953 to present. This review progressed through the stages of planning, searching, mapping, appraisal, and synthesis.
Findings: A total of 121 articles were included in this meta-narrative review. These articles revealed five narratives of nursing work, where work is conceptualised as labour. These narratives were physical labour ($n = 14$), emotional ($n = 53$), cognitive ($n = 24$), and organisational ($n = 1$), and combinations of more than one type of labour ($n = 29$ articles). The paradigms identified in the meta-narrative were the positivist, interpretive, critical, and evidence-based paradigms. Each article in the review corresponded with a paradigm and a labour narrative, creating a comprehensive model.
Conclusions: Nursing work can be understood as a model of physical, emotional, cognitive, and organisational labour. These different types of labour may be hidden and taken for granted. Nurses can use this model to articulate what they do and how it supports patient safety. Nurses can also advocate for staffing allocations that consider all types of nursing labour.
Tweetable abstract Nursing work is complex and includes physical, emotional, cognitive, and organisational labour. Staffing needs to take all nursing labour into account.

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What is **already known**

- Nursing work has been studied in many ways, using different paradigms and concepts
- Nursing work is complex and with numerous unrecognised aspects that are difficult to specify and may be overlooked

What this paper adds

- Nursing work is multi-faceted and can be understood as a composite of physical, emotional, cognitive, and organisational labour
- Nurses are required to respond to different types of demands ranging from patient care to health system demands, often simultaneously
- The concept of cognitive labour is synthesised, defined, and added to the understanding of nursing work to recognise that the mental workload of nursing is as complex and skilled as other aspects.

1. Introduction

What is nursing work? This question has been the subject of much debate throughout the history of the profession. Nursing work has been difficult to specify, as it entails numerous unrecog-

* Corresponding author.
E-mail addresses: jennifer.jackson@kcl.ac.uk (J. Jackson), janet.anderson@city.ac.uk (J.E. ANDERSON), j.maben@surrey.ac.uk (J. MABEN).

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nised aspects (Lawler, 1991, Nelson and Gordon, 2006, Perry and Fairbanks, 2015). Key elements of nursing work are misunderstood by both policy makers and the public. A reductionist narrative has prevailed, suggesting nursing work is simple, easy, and can be undertaken by anyone. For example, nurses have been admonished for not being caring enough (Corbin, 2008), but the notion that caring is a nurses' sole purpose is reductionist, especially when caring is not supported in healthcare environments (Maben, 2008, Maben et al., 2009, Smith, 2012). Media narratives about nursing duties being exclusively washing and feeding patients are overly simplistic (Gillett, 2012). Such misunderstanding diminishes the recognition of the vital role of nurses in providing safe high-quality care.

Nurses make up approximately 60% of the healthcare workforce worldwide (World Health Organization, 2019, World Health Organization, 2020). This means that expenditure on the nursing workforce is considerable and is often a target for budget cuts (Clarke (2011). There have been recent attempts in some countries to introduce unregulated or lower skilled roles to replace nurses (Department of Health and Social Care, 2017). These policy changes demonstrate a lack of understanding that the skilled, complex work of nurses cannot be replaced by less educated providers.

Nurses have a unique presence at the bedside in hospitals, 24 hours a day, 365 days a year, which enables therapeutic relationships to be formed (Bridges et al., 2013). These relationships give nurses in-depth knowledge of patients, facilitating patient advocacy (Bridges et al., 2013). Nurses are best placed to notice and interpret changes in patients' conditions and effectively meet their needs and provide care promptly. The time nurses spend at the bedside is crucial to providing quality healthcare (Westbrook et al., 2011). Researchers have demonstrated that replacing nurses with unregulated providers leads to higher patient mortality (Aiken et al., 2011). Nurses' work has been overlooked in studies of labour in healthcare, undermining their contributions (Afolabi et al., 2019).

The time is right to review what is known about the nature of nursing work to clarify how nurses contribute to modern healthcare systems. In turn, a modern model of nursing work can inform health policy and replace stereotyped ideas of nurses' roles in healthcare. This article presents a meta-narrative review of nurses' work. The aim of which was to investigate how researchers have studied what nurses do, using different methods and theoretical approaches. An accurate understanding of nursing work is vital for informing safety and workforce policies.

2. Methods

A meta-narrative review locates evidence in its historical context, providing readers with an overview of the evolution of a topic (Norman and Griffiths, 2014). Drawing on Kuhn (1962), researchers demonstrate how paradigms have influenced shifts within a narrative (Aveyard et al., 2016). Meta-narrative reviews work well for topics beyond a unified set of search terms (Greenhalgh et al., 2005). This is the case in nursing work, where there were a wide variety of relevant concepts, definitions, and terms. The following questions guided the review:

- What has been the historical understanding of nursing work and how has it changed over time?
- What research methods and paradigms were present in this narrative?
- Were there shifts in the meta-narrative of nursing work, and if so, what drove these changes and when?
- What are the implications of this meta-narrative review for understanding nursing work?

The methods for meta-narrative reviews were outlined by Greenhalgh et al. (2005) with the following stages: planning, searching, mapping, appraisal, and synthesis. These stages, as they apply to the current review, are discussed in detail in the following sections.

2.1. Planning stage

During the planning stage, decisions were made about the scope and nature of the review. It was determined that the review would focus on conceptualisations of nurses' work, rather than issues like evaluating the outcomes of the work. Using the term 'work' or 'labour' was deliberate, as this is what nurses were paid for and could inform future workforce policy. This positioning also challenged the view of nurses as angels, whose work is vocational and altruistic, rather than as highly skilled paid workers (Rankin and Campbell (2006). The first empirical study of nursing work in this review, found through citation tracing, was dated 1953. The decision was made to review literature from that point forward.

2.2. Searching stage

Once the scope had been considered, there were two stages in the search strategy for this review. The first stage was database searching, which focused on nursing literature. The databases used were Medline, Embase, CINAHL, JSTOR, and Scopus, identified in collaboration with an expert librarian. English language limiters were used. EndNote software was used as a reference manager. The search terms "nurs* AND work AND labour" were used as keywords. A full report of the search strategy is provided as a supplementary file.

The second stage of the search strategy was identifying and tracing seminal texts that explore nursing work. The techniques for this stage were citation tracking, looking forward for subsequent publications, and using reference lists to work backwards (Aveyard et al., 2016). While the search focussed on nursing literature, an exception was made to include seminal sources from outside nursing that were highly influential, like Dreyfus and Dreyfus (1980), who inspired Benner (1982).

Titles were initially screened for relevance and exclusions were made based on the aims of the review and the inclusion and exclusion criteria (Table 1). The second screening was full text of the articles rather than abstracts, as historical articles did not always include abstracts.

The final search produced 121 articles, outlined in Fig. 1, based on PRISMA guidance (Moher et al., 2009). The last search update was conducted on December 17, 2020.

2.3. Mapping stage

The mapping phase of the review identified different narratives of nursing work within the published literature and the associated paradigms and sub-themes within each narrative. The articles were also arranged chronologically, to assess for any gaps in the narrative.

Physical, emotional, and organisational labour had been previously conceptualised by nursing authors (Allen, 2014, James, 1992). It became evident that an additional category was needed, as seminal work like that of Benner (1982) on learning and skill acquisition occurred outside the narratives of physical, emotional, and organisational labour. A fourth working concept of cognitive labour was therefore adopted as a narrative category. This four-item model of labour narratives proved to be suitable for mapping the articles included in the review. Some articles presented more than one type of labour in the same manuscript. These articles were classified in a 'combined' narrative.

Data were extracted based on guidance from Aveyard et al. (2016) on recommended extraction categories for comparing stud-

Table 1
Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
- English	- Non-English
- Full text available	- Legal decisions, syllabi, conference proceedings, grey literature (e.g., Nursing Times)
- Nursing work or labour: what nurses do, in any setting or with any population	- Labour, where used to refer to giving birth in maternity context
- How nurses spend their time at work	- Workforce- i.e., recruitment, retention, intent to leave, part time vs full time, staffing
	- Cost of wages, industrial action
	- Workplace satisfaction, unless directly linked to labour
	- Non-nursing references

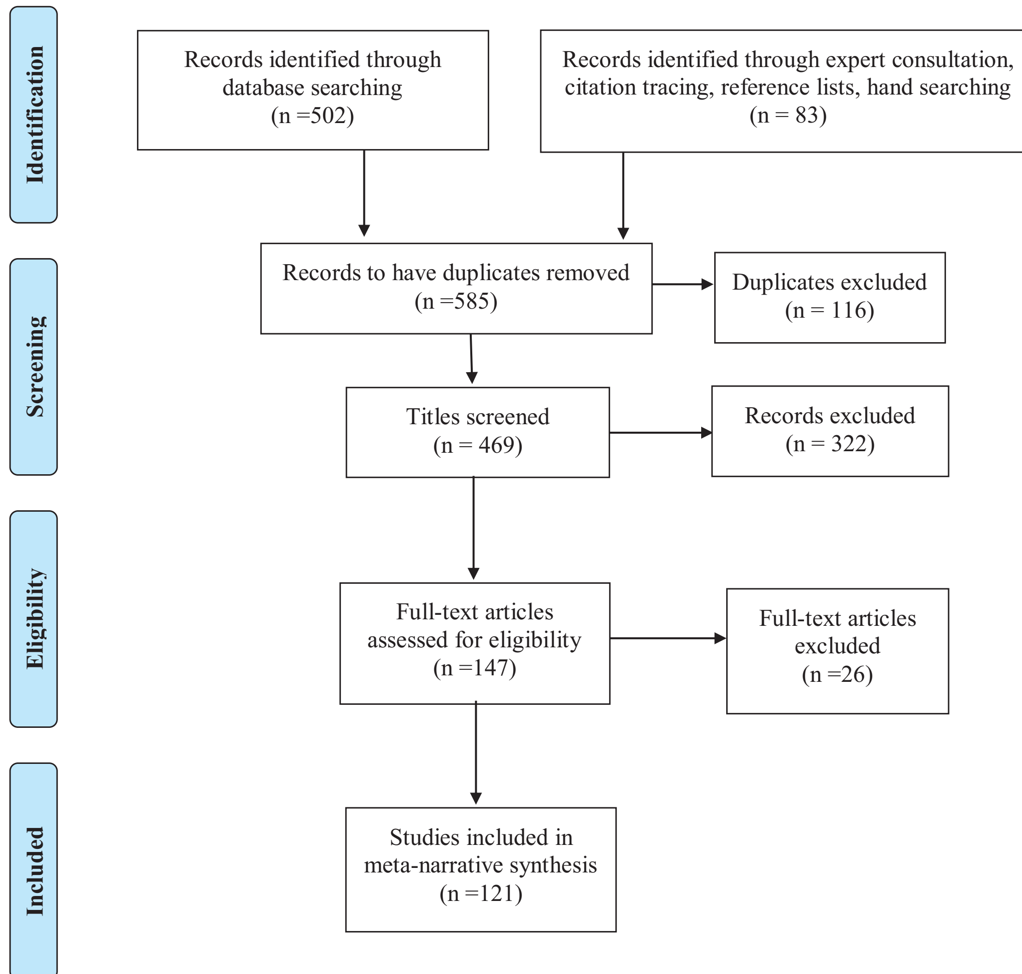

Fig. 1. PRISMA diagram of meta-narrative review.

ies with different methods. These categories were author, year, title, type of record, source, research paradigm, population/method, question or aim, and themes or outcomes.

2.4. Appraisal stage

Articles were assessed for relevance after reading the full text. Any studies that were possible inclusions were set aside and reviewed a second time, after each article had been initially reviewed. The inclusion criteria were refined through this process as needed. For example, articles that discussed unions or similar were excluded at this stage, as it was determined that they did not contribute to the understanding of the nature of nurses' work itself, but rather, its remuneration. The resultant studies were grouped according to their labour narrative: either physical, emotional, cognitive, organisational, or added to the combined category if they did not fit into only one of the four narratives.

Each article was also appraised for its research paradigm, which demonstrated researchers' philosophical assumptions about their subject (Monti and Tingen, 1999, Weaver and Olson, 2006). The paradigms in this review are presented in Table 2. These paradigms were determined by consulting numerous research texts and using stated paradigms from the review's articles.

Table 2
Paradigms in nursing research.

Paradigm	Explanation
Empirical	• An external reality exists, and it can be measured and experienced through the senses (Monti and Tingen, 1999) • Researchers test hypotheses, and establish relationships between variables (Monti and Tingen, 1999) • Primarily quantitative methods (Gillis and Jackson, 2002)
Interpretive	• Reality is interpreted differently by individuals, and can be understood through the eyes of the people that live it (Weaver and Olson, 2006) • Researchers explore individuals' experiences (Weaver and Olson, 2006) • Primarily qualitative methods (Gillis and Jackson, 2002)
Critical	• Reality can be understood and changed through a focus on power and social struggles (Gillis and Jackson, 2002) • Researchers aim to eliminate oppression (Weaver and Olson, 2006) • Methods include participatory action research (Wuest, 1994)
Evidence-based practice	• Improve healthcare through science, using research data to guide practice (Stevens, 2013). • Methods include systematic reviews (Grant and Booth, 2009, Mulrow, 1994, Norman and Griffiths, 2014) • Evidence-based practice differs from the positivist paradigm because evidence-based practice focuses on informing healthcare practice, rather than measuring an objective reality

Some authors explicitly stated which paradigms they used to approach their topics, and others were implicit. For example, authors who did time-motion studies of nurses' tasks were assumed to be using a positivist paradigm, as they described nursing work as external, verifiable, and observable. Each study was labelled with its paradigmatic orientation in the data extraction, so that the influence of paradigms (Kuhn, 1962) could be mapped over time.

2.5. Synthesis stage

The synthesis stage created the meta-narrative framework of nursing work, when article classifications were organised into meaningful groups. The nursing work meta-narrative includes four types of labour: physical, emotional, cognitive, and organisational labour. An additional category is combined narratives, where studies explore multiple labour narratives in one inquiry. The articles were then organised in tables for final analysis.

3. Results

A total of 121 articles are included in this meta-narrative review. These articles represent labour narratives: physical labour ($n = 14$), emotional ($n = 53$), cognitive ($n = 24$), organisational ($n = 1$), and articles that combine labour narratives ($n = 29$ articles). The distribution of articles over time by labour narrative and paradigm is presented in Fig. 2, where each mark represents one paper in the review. EBP refers to the evidence-based practice paradigm.

Fig. 3 also shows how studies of nursing work have increased in number over time. The articles in the nursing work meta-narrative represent the positivist ($n = 16$ articles), interpretive ($n = 42$), critical ($n = 22$), and evidence-based practice paradigms ($n = 41$). Studies before 1990 tend to use the positivist paradigm, with studies in the 1990s and 2000s adopting the interpretive or critical paradigms. The evidence-based practice paradigm saw a proliferation in the 2000s and 2010s. Broadly, there is representation for all paradigms across studies of nursing work. There are also distinctions between each labour narrative; for example, emotional labour is often associated with the interpretive paradigm. In contrast, studies of cognitive labour are almost entirely in evidence-based practice. Within each labour narrative, there are sub-themes reflecting nuances in the literature, illustrated in Table 3.

Table 3
Overview of meta-narrative sub-themes.

Category	Sub-themes
Physical Labour	- Impact of physical labour upon nurses ($n = 3$) - Nurses' sensorium ($n = 3$) - Body work ($n = 7$) - Touch ($n = 1$)
Emotional labour	- Concept development of emotional labour ($n = 5$) - Measuring emotional labour ($n = 6$) - Emotional labour as a gift ($n = 5$) - Emotional labour as central concept ($n = 36$) - Critique of emotional labour (n=1)
Cognitive labour	- Learning while working ($n = 4$) - Thinking, including critical thinking and reasoning ($n = 6$) - Tracking tasks and priorities (stacking) ($n = 5$) - Cognitive load ($n = 9$)
Organisational labour	- Invisible organising work ($n = 1$)
Combined labour	- Assessment of nurses' tasks ($n = 5$) - Modelling nursing work ($n = 3$) - Appraising nurses' roles ($n = 8$) - Nursing work as taboo work ($n = 4$) - Social determinants of nursing work ($n = 9$)

The supplementary files appended with this article present the full text of data extraction for each study in this review, organised by theme.

3.1. Physical labour

The first narrative identified in this review is physical labour, which included 18 articles. Physical labour refers to work that nurses do with their bodies. All four research paradigms are represented in this labour narrative. These themes are explained in the following sections.

First, in terms of the impact of physical labour on nurses, there is considerable focus on the harms of physical work. Nurses' physical labour is incredibly demanding, requiring long hours of standing, lifting, and walking long distances (Bogossian et al., 2014, Engels et al., 1994). Nurses' roles place them at high risk for negative physical outcomes. The environmental constraints of hospital settings mean that nurses spend much of their time standing, walking, or in twisted postures (Engels et al., 1994). Consequently, nurses working in this area are at high risk for back injuries, fatigue, and joint strains. Nurses also face negative impacts from 'wet work', where nurses have their hands wet. Nurses experienced significant skin breakdown when they wear gloves for more than two hours per day or wash their hands more than 20 times per day (Caroe et al., 2018). This sub-theme demonstrates the harms nurses can experience through their physical labour.

In the second sub-theme, nurses' sensorium, researchers examined how nurses use their senses for their work (Donetto et al., 2017, Dresser, 2012, Hockey and Allen-Collinson, 2009). Sensory work includes using visual and aural cues, such as observing patients and listening for alarms. Nurses also regulate their responses to sensory information, such as keeping their faces neutral while smelling something unpleasant (Hockey and Allen-Collinson, 2009). Nurses use their senses to inform all aspects of their work.

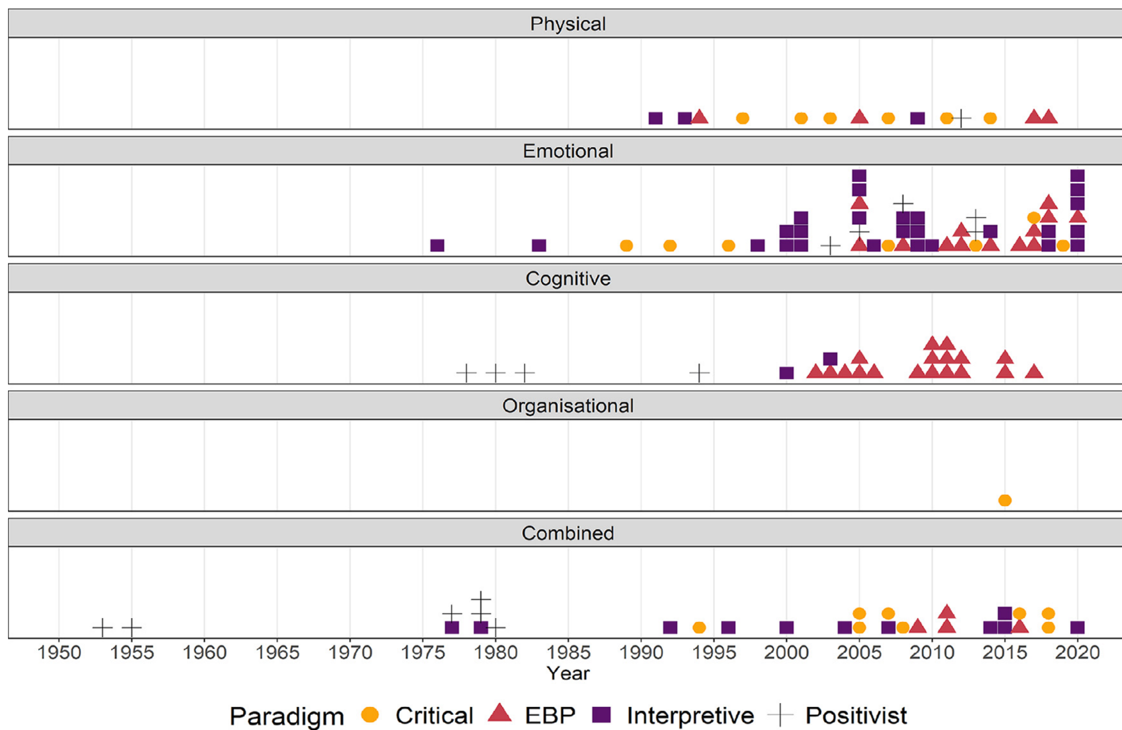

Fig. 2. Articles illustrated by year, labour narrative, and research paradigm.

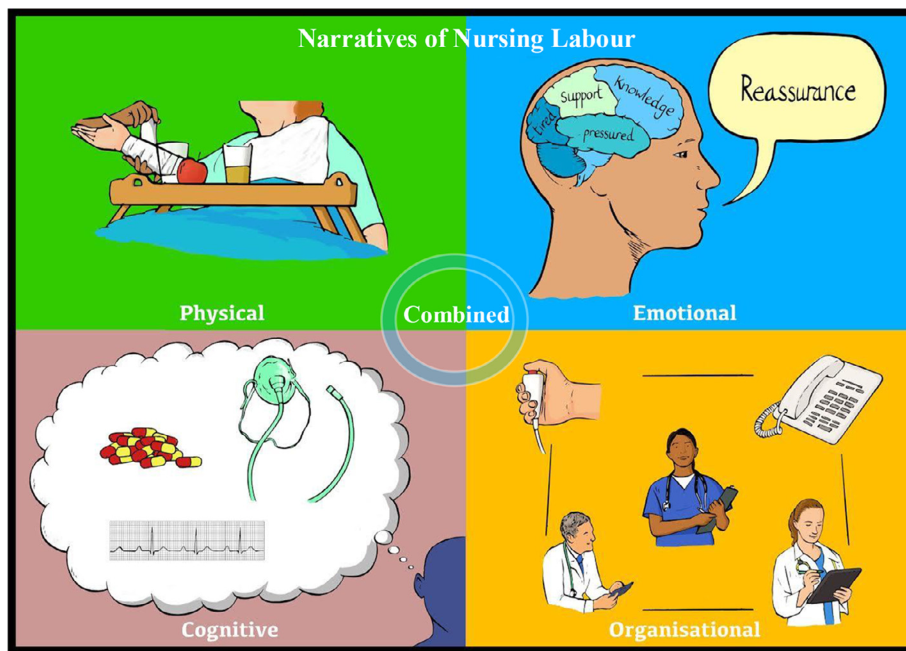

Fig. 3. Meta-narrative of nursing labour.

Third, authors have explored nurses' body work, which is defined as the use and management of one's own body in a working capacity (Gimlin, 2007, Shakespeare, 2003). There are seven articles on body work in nursing (Cohen, 2011, Draper, 2014, Gimlin, 2007, Lawler, 1991, Savage, 1997, Shakespeare, 2003, Van Dongen and Elema, 2010). These articles include perspectives on the social implications of nurses' bodies. For example, Savage (1997) identified how nurses use relaxed postures with patients to promote comfort and a relaxed atmosphere. In contrast, nurses use strong, masculine postures when they speak with physicians. Thus, nurses literally stood up for themselves.

Body work does not only involve the management of nurses' own bodies, but also those of patients, whose bodies become an object of work Gimlin (2007). The literature on body work emphasises that the work nurses do is taken for granted Draper (2014). Written accounts of body work demonstrate its "shadow" when authors use the passive voice (Shakespeare, 2003, p. 48). For example, authors like Goddard (1953) wrote phrases like 'a bed was made', rather than 'the nurse made the bed'. This tone has the ef-

fect of distancing nurses' actions from a task, making nurses' physical labour invisible.

Finally, one study examines touch as an aspect of physical labour (McCann and McKenna, 1993). Touch is defined as the amount of physical contact between nurses and patients (such as contact during bathing) and in reflected in the social hierarchy of hospitals. Some authors argue that the more a professional group touches a patient, the lower their status in healthcare systems (Van Dongen and Elema, 2010). It is notable that nursing work involves a high degree of physical contact, which would, by this view, impact the social standing of the profession. Nurses' physical labour also impacts the perceived value of nurses in healthcare.

3.2. Emotional labour

The emotional labour narrative is the largest in this review, with 53 articles. Most of the studies are from the interpretive paradigm. There are fewer sub-themes in this narrative, as it was a cohesive body of literature.

The first sub-theme in the emotional labour narrative is the development of emotional labour as a concept in nursing. The sociological concept of emotional labour came from Arlie Hochschild (1983), who defines emotional labour as the commodification of managed emotions. The labour occurs when employees induce or suppress their feelings to produce a desired display, creating a feeling in the customer (Hochschild, 1983). James (1989) and Smith (1992) brought the concept of emotional labour to nursing and found that nurses manage their own emotions to create therapeutic environments for patients. The 'labour' was required when nurses needed to project something different than what they felt. A classic example was when nurses felt panicked but projected calm to avoid alarming patients (Smith, 1992). Nurses modify their emotional displays to achieve a goal. The difficulty is that nurses are expected to provide emotional labour, but it is not taught, supported, or recognised as real work (Smith, 1992).

The second sub-theme is measuring emotional labour. These articles included validated measures to assess emotional labour (Brotheridge and Lee, 2003, Brumit and Glenn, 2013, Picardo et al., 2013). Brotheridge and Lee (2003) developed a 15 item self-report questionnaire, which has been translated by other authors (Brumit and Glenn, 2013, Picardo et al., 2013). Brotheridge and Lee (2003) found that surface acting is associated with adverse outcomes for nurses. Recently, there is renewed interest in measuring emotional labour relative to resilience (Delgado et al., 2020, Xu et al., 2020) and work stress (Zaghini et al., 2020). Increased emotional labour, particularly surface acting, is associated with negative outcomes for nurses in these recent studies. There are also gender differences, with male nurses engaging in more surface acting than female nurses (Xu et al., 2020).

The third sub-theme is the perception of emotional labour as a genuine display of compassion or a 'gift' to patients (Adams and Sharp, 2013, Bolton, 2000, Gilbert et al., 2020, Lopez, 2006, McClure and Murphy, 2007). Some authors state that nurses are not always acting out emotions; they also show genuine feelings of care, support, and altruism (Bolton, 2000, Gilbert et al., 2020). Lopez et al. (2010) also discusses how organisational rules for emotional displays were harmful, such as accepting verbal abuse without appearing distressed. In this sub-theme, emotional labour is a genuine act of care, challenging the idea that nurses are restricted to displaying organisationally sanctioned emotions.

The fourth, and central sub-theme in the emotional labour narrative is that emotional labour is central to nurses' work, and helps nurses focus on people, not tasks (Gilbert et al., 2020, Phillips, 1996). Emotional labour helps nurses complete their work (Gray, 2009) and manage relationships with colleagues (Theodosius, 2008, Waddington, 2005). Emotional labour is highlighted as a consistent part of nursing work, central to nurses' identities as caregivers. Despite the emphasis on emotional labour as an essential part of nursing work, it often goes unrecognised and unsupported (Smith, 2012, Smith, 1992, Smith and Gray, 2001). Nursing students struggle to learn emotional labour norms, citing a lack of support for developing positive emotional labour strategies (Foster and McCloughen, 2020, McCloughen et al., 2020). These findings are consistent in most articles about emotional labour. Overall, authors agree that there is not enough recognition of and support for the emotional labour of nurses.

The final sub-theme in this labour narrative is a critique of emotional labour. Traynor (2019) highlights how emotional displays and nurses' values have been prescribed from the outset of the profession. The emphasis on nurses' obligations to care are used to gloss over exploitation of the workforce. Traynor (2019) argues that nurses' emotional labour is exploited for profit. Organisations also use values-based recruitment towards managing nurses' emotional displays (Traynor, 2019). Additionally, Traynor (2019) interrogates the lack of support for emotional labour more severely than other authors, highlighting the fact that emotional labour is expected but not at the expense of organisational efficiency. This paradigm is critiqued as "act like you have care and compassion but above all keep up with the pace of work" (Traynor, 2019, p. 6). This critique is a lone dissenting voice in the emotional labour narrative, as most other studies focus on the importance of emotional labour to nursing.

3.3. Cognitive labour

A new contribution provided by this meta-narrative review is the concept of cognitive labour in nursing work. The positivist and evidence-based paradigms are the most prominent in the cognitive labour narrative.

The first sub-theme is learning while working (Benner, 1982, Burger et al., 2010, Carper, 1978, Dreyfus and Dreyfus, 1980), which refers to developing expertise in clinical practice, rather than the process of nursing education (Benner, 1982, Dreyfus and Dreyfus, 1980). Carper (1978) created a model of nurses' knowledge, describing it as empirical, aesthetic, personal, and moral knowledge. Benner (1982) adapted the work of Dreyfus and Dreyfus (1980) to create the Novice to Expert theory in nursing, which illustrates that nurses develop competencies over time, through continued learning and experience. These authors demonstrated that nursing could be taught in a classroom *and* learned through experience.

Different aspects of nurses' thinking (the second sub-theme) are examined through several concepts, including critical thinking (Kataoka-Yahiro and Saylor, 1994, Scheffer and Rubenfeld, 2000), clinical reasoning (Simmons, 2010), and clinical decision making (Higuchi and Donald, 2002, Johansen and O'Brien, 2016). Although terms such as clinical reasoning, clinical decision-making, clinical judgement, heuristics, problem-solving, and others overlap (Simmons, 2010), there is broad agreement that thinking, however termed, is part of nurses' work.

The third sub-theme in the cognitive labour narrative is 'stacking', which refers to the cognitive load on nurses' working memories due to the long list of tasks and changing priorities nurses must remember (Potter et al., 2004). All five articles in this sub-theme fit within the evidence-based practice paradigm (Patterson et al., 2011, Potter et al., 2004, Potter et al., 2005a, Potter et al., 2005b, Wolf et al., 2006). Potter et al. (2004) uses a cognitive pathway map to identify the demands on nurses' working memories, which overcame limitations of previous observational research techniques that assumed linearity in nurses' work. This method enables investigators to assess how many items nurses would cognitively 'stack', how often they would shift focus, the frequency of their interruptions, and their time spent on

different types of work (Potter et al., 2004, Potter et al., 2005c, Potter et al., 2005a, Wolf et al., 2006). The findings of the stacking articles paint a clear picture of the substantial cognitive work required of nurses. For example, nurses typically hold an average of 15 simultaneous priorities in their working memories (Potter et al. (2005). Nurses shift their attention every 6-7 minutes (Potter et al., 2004, Potter et al., 2005b, Potter et al., 2005c). These findings have implications for errors and omissions in nurses' work if their cognitive stacks are too high (Potter et al. (2005).

The final sub-theme in the cognitive labour narrative is cognitive load. This sub-theme overlaps with ideas of stacking Ebright (2010) and decision-making (Lundgrén-Laine et al., 2011) but is identified separately because articles in this sub-theme also discuss wider issues of cognitive burden and capacity. For example, nurses use a task stacking strategy to accomplish other things while they were waiting for physicians. Nurses prepare supplies for another activity, thus continuing to work as they wait (Ebright et al., 2003). Total cognitive load is also assessed to include interruptions, stacking both tasks and thoughts, and managing constant demands.

Overall, the narrative of cognitive labour has emerged relatively recently in nursing research. This synthesis shows that cognitive labour is a unique concept and a substantial part of nurses' work. The term cognitive labour has not been used as such and is created here to bring together an understanding of the total cognitive work of nurses.

3.4. Organisational labour

The concept of organisational labour was created when Allen (2014) recognised organisational labour as a legitimate part of nursing work. Allen (2014) defines organisational labour as arranging essential activities for a patient, their families, and the organisation, ensuring patient flow through the healthcare system.

Organisational labour is performed mostly by nurses and is generally unrecognised, even by nurses themselves Allen (2014). Organisational labour is seen as 'paperwork' or a bureaucratic exercise that removes nurses from doing their 'real jobs'. However, Allen (2014) argues that organisational labour is among the most important work in the hospital. For example, nurses managed the flow of information across a wide number of people and departments, ensuring safe management of a patient's trajectory through the healthcare system.

Many authors have identified the presence of organisational labour, but not explored it as a legitimate facet of nursing labour, worthy of investigation. Organisational labour is included as part of nursing work by Goddard (1953), Melia (1979a), and James (1992). Hockey (1977a, p. 151) observed that "The nurse's contribution to care may lie, at least in part, in the promotion of a functional synthesis of disjointed endeavours". This quote illustrates how part of nurses' organisational labour is the coordination of a hospital's activities. Potter et al. (2005) found that nurses spend 26% of their time in consultation with other people (nurses, other colleagues, patients, and families), and 23% of their time documenting care. Researchers consistently report that nurses spend more time on arranging and documenting care than interacting with patients (Hendrich et al., 2008, Hendrickson et al., 1990, Hollingsworth et al., 1998, Westbrook et al., 2011). For example, Westbrook et al. (2011) reported that nurses spend 37% of their time with patients, with the reminder of their time being used for professional communication, indirect care, and medication preparation. However, this work is not reported as essential nursing work, but rather a distraction from nurses' other roles. Allen (2014)'s seminal work legitimises organisational labour as a part of nurses' work, identifying its concrete value for patients and the healthcare system.

3.5. Combined narrative of nursing work

In addition to the studies of individual labour narratives, there are also authors who assessed more than one type of labour in a study. These researchers discuss nursing broadly, including more than one labour narrative (e.g., emotional and physical labour). Researchers who studied combined nursing labour focus on providing a comprehensive account of nurses' duties.

First, nursing tasks were quantified (Battisto et al., 2009, Goddard, 1953, Lavander et al., 2016, Moores and Moult, 1979a, Westbrook et al., 2011). Researchers identified nursing work by counting tasks and tracking nurses' movements and the time they devoted to various tasks (Goddard, 1953, Moores and Moult, 1979b, Westbrook et al., 2011). Researchers catalogued physical and organisational labour, as this work was directly observable. These studies reported different aspects of labour together, but did not necessarily account for the complexity of nurses' work.

Second, creating models of nurses' work, either mathematically, or through frameworks, is a focus for some researchers (James, 1992, Moores and Moult, 1979a, Moores and Moult, 1977). Authors attempt to create a model that illustrates the complexity of nursing work, including James (1992, p. 488), who wrote the equation "care = organisation + physical labour + emotional labour". This equation was James's (1992) attempt to use a formula to explain what nurses do. Modelling nursing work is likely an attempt to align nursing work with positivist research approaches.

Third, some authors (Hockey, 1977b, Melia, 1979b, The Standing Nursing and Midwifery Advisory Committee, 1955) appraise nurses' roles and define their work by nurses' broader contributions to healthcare. The Standing Nursing and Midwifery Advisory Committee (1955) stated that previous articles had "…gone too far in an attempt to define in precise terms nursing, technical and domestic duties. There is no such rigidity in the present overall pattern of nursing…" (p. 12). Hockey (1977a) and later Liaschenko and Peter (2004) argued that nurses do not treat a disease, but care for a whole person. Melia (1979a) conceptualised nursing work as complex work in unstable environments, that requires substantial skill. Emotional labour was included in these studies, identifying that nursing work went beyond observable tasks. These debates about whether nursing work could be specified continue throughout the narrative.

Fourth, nursing work is conceptualised as taboo work, where nurses do work that is considered socially unacceptable (Bishop, 2007, Bolton, 2005, Capri and Buckle, 2015, Ray, 2016). Taboo work includes nurses working with women having abortions (Bishop, 2007), miscarriages and gynaecological problems (Bolton, 2005), and with people with intellectual disabilities (Capri and Buckle, 2015). These areas are reported as socially distasteful and consequently, nurses' work with these patients becomes invisible. In these articles, the focus is not on the activities of nurses per se, but rather, the social conditions that render nurses' work taboo and the experiences of working in that climate.

The final sub-theme is social determinants of nursing work and the role of social factors in shaping nursing work. Authors in this theme argue that what constitutes acceptable nursing work is socially and culturally determined (Bogossian et al., 2014, Brennan, 2005, Coburn, 1994, George, 2008, Hart and Warren, 2013, Kowalchuk, 2016, Kowalchuk, 2018, Myny et al., 2011, Quance, 2007). These authors argue that there is no objective definition of nursing work; rather, what is expected of nurses is dictated by gendered social norms (George, 2008, Ray, 2016). Nurses' work reflects social expectations of women's work. Nurses are stereotyped as doing things that are socially acceptable for women, such as care work, and washing and feeding patients. For example, nurses in one article report that they are at the mercy of their male-dominated environment and have to do what men would

not (Myny et al., 2011). In this sub-narrative, nurses do not define the scope of their work. Instead, nurses adapt to what is socially expected of women in a given society. They are also delegated tasks that men refuse to do, limiting nurses' professional autonomy (Ray, 2016). In these studies, it was impossible to define nursing work outside of gendered norms. Nursing work was impacted by the social environment and gendered norms, which determine what is acceptable work in a given context.

4. Discussion

The aim of this review was to explore how researchers have studied nursing work, to create a comprehensive understanding of what nurses do. The following section discusses the findings of the meta-narrative review, the research methods used in these studies, the factors that drove shifts in the meta-narrative, and the implications for modern nursing.

The synthesis of this meta-narrative review's findings is depicted in Fig. 3, which illustrates how four different labour narratives have been studied by researchers. This synthesis suggests that nursing work is multi-faceted and diverse. The studies reviewed clearly show that nursing work is more complex than suggested by any of the narratives alone. A comprehensive understanding of nursing work should draw on all types of nursing labour.

4.1. Building on the historical understanding of nursing work

This new model of nursing work demonstrates aspects of nursing work that have been identified separately by different nurse scholars and brought together in this review. The new model produced here captures different narratives of nursing labour that are equally important and valid parts of nursing work. Having a model of nursing work is important for facilitating discussion and for making visible the undervalued aspects of nursing work.

Researchers have previously created frameworks of nursing work, but few have been comprehensive. Early articles on nursing work (e.g. Goddard, 1953, James, 1992, Melia, 1979b) recognised nursing as complex and having different aspects of labour. James's (1992, p. 488) outline of "care = organisation + physical labour + emotional labour" is the closest model to the findings of this review. Building on James's (1992) model, the findings of this review indicate that cognitive labour should also be considered as a distinct type of nursing labour. The creation of cognitive labour in this review advances these prior conceptualisations.

4.2. Research methods used

The research methods used by authors in this review reflected the era of the research and the choice of their research paradigms. Most of the research on nursing work has involved a combination of observations of practice and interviews with nurses, beginning with Goddard (1953). Nursing research started largely in the positivist paradigm in the 1950–1990s with non-participant observations of tasks and time-motion studies (Fig. 2). In studies in the interpretive and critical paradigms, largely 1990 onward, researchers used participant observation, interviews and narrative methods. In evidence-based practice research from 2000s to present, there continued to be observations and interviews, with some studies categorizing how nurses allocate their time to different tasks (especially in the cognitive labour narrative). There are few trials or experimental designs in this meta-narrative; most research has focused on capturing elements of nursing work descriptively. Future research could include experimental designs to identify factors that influence nursing work patterns, such as decreasing organisational labour or supporting emotional labour.

4.3. Shifts in the meta-narrative of nursing work

Shifts in the meta-narrative were led by increasing researcher interest in nurses' work. The research focus changed from overarching descriptions of nursing work, where work was subdivided into different functions or processes, to studying aspects of the work in depth (Fig. 2). Starting in the 1990s, these labour narratives became increasingly separate, with corresponding changes in the research paradigms. For example, studies of emotional labour largely used the interpretive paradigm, whereas cognitive labour has been conducted almost entirely in the evidence-based practice paradigm.

Shifts in the meta-narrative were also heavily influenced by social factors. Nurses' work has been determined by factors beyond nurses' expertise and official scope of practice. What constitutes nursing work has varied considerably across the timeframe assessed in this review (1953–2020). Authors reported that what was considered legitimate work was impacted by organisational norms (Diefendorff et al., 2011, Lundgrén-Laine et al., 2011), physician preferences (Quance, 2007, Timmons and Tanner, 2005), patient expectations (Elliott, 2017, Stayt, 2009), and social attitudes towards nurses (Capri and Buckle, 2015, Savage, 1997).

Despite these shifts, the emotional labour narrative remains remarkably cohesive. The findings that nurses are expected to perform emotional labour, but are not supported to do so, have been replicated extensively in the narrative. This may signal a consensus about the status of emotional labour in nursing and highlight the need to advance the narrative through innovative research.

4.4. Implications of this review

4.4.1. Complexity is inherent in nursing work

The findings of this meta-narrative review demonstrate that, in caring for patients and addressing demands from other sources, a nurse's work involves aspects of all the four identified labour narratives. By reconceptualising nursing work as physical, emotional, cognitive, and organisational labour, it is possible to appreciate the complexity and broad scope of work that nurses do. While nursing work continues to be misrepresented as one-dimensional, and largely centered around patient care (Gillett, 2012), the researchers investigating nursing work shows that it is complex and multi-faceted.

Recognising this complexity may have benefits for nurses. Job crafting, a process that enables nurses to create work that both meets the needs of the organisation and reflects personal preferences, accounted for 57% of the variance found in nurses' work engagement (Baghdadi et al., 2020). Supporting nurses to customise their work across different types of labour may be a strategy to support workforce outcomes for nurses. This would require acknowledging that nurses' work includes different types of labour, and nurses may have preferences for how they focus their work.

4.4.2. Multiple sources of demand

A central issue in this meta-narrative is, where does demand for nurses' work come from? Goddard (1953) divided nursing work into work that is required for all patients and work that is specific to a patient because of an illness, using the terms basic and technical respectively. Goddard's (1953) view persisted until Allen (2014) demonstrated how nurses manage priorities within a team and an organisation, *in addition to the needs of patients.* For example, Timmons and Tanner (2005, p. 88) found that nurses' work in the operating theatre focused on "keeping surgeons happy and not upsetting surgeons". These nurses faced considerable demand in their work that was not related to patient care. Nurses also spend a notable amount of time preparing for activities and

cleaning up afterwards (Engels et al., 1994). Nurses' work includes many elements, but these responsibilities are not always recognised by policy makers or the public.

In addition to identifying the nursing labour narratives, a key finding of this review is that nurses are required to respond to different types of demands, often simultaneously. The model created from this meta-narrative review reflects the reality that nurses' work involves tasks that are not patient directed and which are necessary for the healthcare system (Fig. 3). For example, nurses' organisational labour may include arranging for supplies to be delivered to a ward, or to check a fridge temperature. These acts are not necessarily related to an individual patient's care; rather, they sustain work across the whole system. This has implications for staffing models that determine nursing ratios based solely on patient census and acuity data, but which miss the additional nursing work that is essential for the healthcare system.

4.4.3. Creating the concept "Cognitive labour"

Cognitive labour in nursing was synthesised as a separate labour narrative in this review (Fig. 3). While physical, emotional, and organisational labour all had distinct definitions developed by researchers, authors studying cognitive labour did not have an agreed definition, and there were a range of related topics investigated. It is important to unite research on cognitive labour, to demonstrate that the mental workload of nursing is as complex and skilled as other aspects of nursing work. Cognitive labour is defined as the total mental work of nurses, including elements like learning (Benner, 1982), critical thinking (Kataoka-Yahiro and Saylor, 1994), and stacking (Patterson et al., 2011). These aspects of cognitive labour require significant cognitive skill and knowledge. Cognitive labour also provides terminology to discuss the effort required for this type of work, and the burden it creates. This new concept is an important way to represent the work of nurses.

Despite the considerable expertise of nurses, there is still questioning from policy makers about the need for tertiary education in nursing (Chapman and Martin, 2013, Gillett, 2012). Articulating the role of cognitive labour in nursing work may strengthen the arguments for the need for nursing to remain a university-educated profession (Aranda and Brown, 2006, Gillett, 2012). Proposals from policy makers to substitute nurses with Nursing Associates (Department of Health and Social Care, 2017), or similar roles demonstrates a lack of understanding of nurses' cognitive labour. Removing or replacing Registered Nurses in healthcare environments leads to poorer patient outcomes, including increased patient mortality (Aiken et al., 2011, Aiken et al., 2008, Aiken et al., 2002, Ausserhofer et al., 2014, Rafferty et al., 2007). The model of nurses' labour created in this review can be used to explain hidden aspects of nursing work to policy makers and the public, reinforcing the justification for a highly educated nursing workforce.

4.5. Limitations

A noted limitation of this review is that the search terms were necessarily broad, as is the practice with meta-narrative reviews (Greenhalgh et al., 2005). Subsequently, not all relevant articles may have been included. There were also many earlier references that were available as books, rather than digitized journal articles, and it is possible that sources of this nature may have been missed. While the literature search was extensive, there may be sources that were not included.

The paradigms used in nursing research continue to be debated, and the authors acknowledge that there may be differing views on the precise definition of the paradigms reported in this article (Table 2). There are also important work-related debates about wages, industrial action, and workplace satisfaction that were beyond the scope of this review. These topics may assist in contextualising the findings of this review in future work.

This meta-narrative review is also limited by the fact that the findings may not reflect nursing work internationally. While literature was included from low- and middle-income countries in this review (Capri and Buckle, 2015, Kowalchuk, 2016, Kowalchuk, 2018, Ray, 2016, and others), the majority of the studies were conducted in high-income countries. This limits the generalisability of these findings.

5. Conclusion

Nursing work is responsive to patients' needs and it also sustains health systems. The nursing work meta-narrative is influenced by social factors, such as what is considered acceptable nursing work. A comprehensive view of nursing work, as developed in this review, could help support research on workforce interventions like adequate staffing.

Nursing work is complex with numerous unrecognised aspects that are difficult to specify. This review has developed a useful model for representing nursing work to people outside of the profession, such as policy makers and the public. It is important to appreciate the breadth of nursing work and its demands, to plan workforce policies and defend nurses against implicit judgements about nursing work. Nurses can argue for tertiary education and adequate resources based on the complexity of their work, and their need for appropriate recognition and monetary compensation. Physical, emotional, cognitive, and organisational labour thus provides a framework to articulate the challenge and complexity of modern nursing work.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijnurstu.2021.103944.

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